

Bombay Natural History Society

142st ANNUAL REPORT AND ACCOUNTS
FOR THE YEAR

1st APRIL 2025 to 31st March 2026



CERTIFICATE

This is to certify that this report is in compliance of the rules of the Society's registration Act, Bombay Public trust Act and all other relevant acts like the Foreign Contribution Regulations Act 1976, Income Tax Act, CSR Act etc.

Director
BNHS

142nd ANNUAL REPORT AND ACCOUNTS FOR THE YEAR 1st APRIL 2025 to 31st MARCH 2026

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Bombay Natural History Society

Hornbill House, Shaheed Bhagat Singh Road, Mumbai 400001

Email: info@bnhs.org; web: www.bnhs.org

Vulture Conservation Breeding Centre (VCBC), Rani, Assam

Funder: The Royal Society for the Protection of Birds (RSPB), UK, and The Forest Department of Assam

Team members:

Centre Manager: Dr. Sachin Ranade (Deputy Director, BNHS)

Research & Field Biologists: Mr. Aniket Pawar, Mr. Sthita Pragyan Mallik, Ms. Aneena L.,
Mr. Ghanashyam Gogoi, Mr. Gitartha Borah

Veterinarian: Dr. Krishna Mohan Chutia

Technical & Administrative Support: Mr. Jayanta Rabha (Office Assistant)

Vulture Keepers & Field Assistants: Mr. Dhiraja Rabha (Driver cum Keeper),

Mr. Basanta Rabha (Vulture Keeper), Mr. Dilip Rabha (Vulture Keeper),

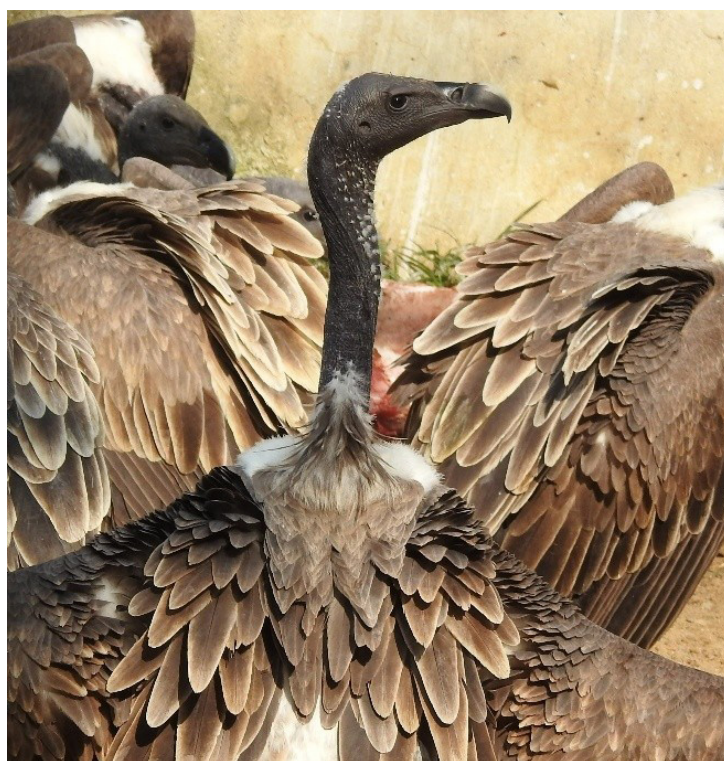
Mr. Pranab Deori (Vulture Keeper-Night Watchman), Mr. Pradip Rabha (Vulture Keeper-Night Watchman),

Mr. Hiren Majumdar Vulture (Keeper), Mr. Hemanta Buragohain (Field Assistant),

Mr. Karuna Rabha (Field Assistant, Release), Mr. Akash Rajuwar (Field Assistant, Release),

Mr. Timan Singh (Vulture Keeper) Mr. AmarJyoti Das (Driver)

Location: Jorasal Reserve Forest, Rani Range, East Kamrup Forest Division, Kamrup District, Assam (20 km off NH-17, 40 km from Guwahati)



Project highlights:

- Housed 181 vultures (124 White-rumped and 57 Slender-billed) at the Vulture Conservation Breeding Centre (VCBC), Rani. recorded successful breeding across 19 of 24 pairs, naturally fledging out 14 White-rumped and 5 Slender-billed vultures in the colony aviaries during the winter season.
- Initiated the reintroduction programme in Assam by establishing pre-release aviaries in Kamrup and Biswanath districts; successfully soft-released 10 sub-adult White-rumped vultures tagged with PTT and GSM satellite transmitters in March 2026, with birds tracking locally and moving toward natural colonies like Mahamaya, Kokrajhar.

- Expanded in-situ surveillance across 27 districts of Assam and 4 districts of Meghalaya (including the Northwest Garo Hills zone) to secure vulture's natural foraging and breeding landscapes.
- Conducted undercover and open pharmacy surveys indicating that vulture-safe drugs comprised 89% of available veterinary stocks (with banned drugs at 11% and zero instances of ketoprofen detected).
- Collected and screened 200 cattle carcass liver samples using HPLC; confirmed zero presence of banned veterinary NSAIDs (diclofenac, aceclofenac, ketoprofen, and nimesulide), with only three samples showing trace residues of approved safe drugs.
- Monitored active nesting colonies at Dimow (Sivasagar district; 15 Slender-billed and 15 White-rumped nests, 80% active) and Mahamaya (Kokrajhar district; 22 White-rumped nests, 75% active with recorded nestlings).
- Hosted technical training visits for frontline forest staff from Mizoram, Tripura, Jharkhand, and Himachal Pradesh, while six university students completed structured research internships at the center.
- Reached 254 veterinarians and paravets across 9 veterinary meetings, trained forest personnel across 12 sessions, mobilized 12,000 students via 151 school/college events, conducted 43 village leadership meetings, and engaged 50 schools for International Vulture Awareness Day 2025.

Summary for the period:

The Vulture Conservation Breeding Programme started in Assam in 2007 in collaboration with the Assam Forest Department. Currently, the Vulture Conservation Breeding Centre (VCBC) houses 181 vultures: 124 White-rumped Vultures and 57 Slender-billed Vultures. In addition, 14 White-rumped and 5 Slender-billed vultures hatched naturally in the colony aviaries this year. Routine activities focused on veterinary care, including ringing, blood sample collection, health check-ups, and post-mortem examinations. Husbandry and maintenance routines ensured the aviaries remained suitable for the vultures' health, providing regular food and water alongside specialized care for breeding stock.

This year, we initiated the reintroduction programme, establishing release aviaries in the Kamrup and Biswanath districts of Assam. Ten White-rumped Vultures fitted with PTT and GSM satellite tags were released in March 2026.

The VCBC plays an instrumental role in training and public awareness. This year, six students completed their internships, and exposure visits were conducted for forest staff from Mizoram, Tripura, Jharkhand, and Himachal Pradesh.

The Vulture Safe Zone (VSZ) programme covers 27 districts in Assam and four adjoining districts in Meghalaya. As an *in situ* conservation initiative, it focuses on the well-being of vultures in their natural habitat. An undercover pharmacy survey was conducted to evaluate the availability of non-steroidal anti-inflammatory drugs (NSAIDs) in local markets. The findings showed that vulture-safe drugs accounted for 89% of available stock, while unsafe drugs comprised 11%. Notably, ketoprofen was not recorded during this survey.

Wild vulture colonies were monitored across Dimow (Sivasagar district), Mahamaya (Kokrajhar district), Lakhimpur, and Dibrugarh districts. At Dimow, 15 Slender-billed Vulture nests and 15 White-rumped Vulture nests were marked and routinely monitored; 80% of these nests remained active, with fledging expected by May–June 2026. At Mahamaya, a White-rumped Vulture colony with 22 nests was monitored. As of March 2026, 75% of the nests were active, with parents and nestlings documented throughout the colony.

Under the awareness and advocacy drive, multiple outreach initiatives were conducted:

- **9 meetings** engaging over 254 veterinarians and paravets
- **12 meetings** for forest personnel
- **151 school and college programmes** reaching approximately 12,000 students
- **43 community meetings** engaging village elders and local leaders

Publications:

1. Ranade, S. & H. Bajpai (2026): Coprophagy in Egyptian Vulture *Neophron percnopterus* (Accipitriformes: Accipitridae) at Jorbeer carcass dump, Rajasthan. *Journal of Threatened Taxa* 18(7): 29360–29363.
2. Ranade, S. (2026): Decline in winter visiting Common Kestrel *Falco tinnunculus* (Falconiformes: Falconidae) at Rani, Assam 2011–2024. *Journal of Threatened Taxa* 18(7): 29357–29359
3. Ranade, S. (2026): Photographic record of Ruddy Mongoose from Melghat Tiger Reserve, Maharashtra. *Small Mammal Mail* #458, In: *Zoo's Print* 41(4): 42–43.
4. Mallord JW, Ranade S, Bhusal KP, Alam ABMS, Chaudhry MJ, Chakraborty SS, Subbaiah B, Bohra DL, DubeA, Shringarpure R, Chaudhary IP, Joshi AB, Rana DB, Thakuri DC, Dangaura HL, Azmiri KZ, Ahmed S, Zakir T, Ahmed S, Fatima H, Rahim A, Murn C, Bowden CGR, Green RE (2025): The continued threat of toxic NSAIDs to Critically Endangered Gyps vultures in South Asia. *Bird Conservation International*, 35, e38, 1–12
5. Umrigar, K., Ranade, S & H Bajpai (2025): The story of Jatayu Saving India's Vultures BNHS & Forest Department of Haryana pp.1-46
6. Ranade, S. (2025): Dust-bathing by a Kashmir Rock Agama, *Laudakia tuberculata* (Gray 1827), in Haryana, India. *Reptiles & Amphibians* 32(1):e23001
7. Christopher G. R. Bowden, Sachin Ranade, A. B. M. Sarowar Alam, M. J. I. Chaudhry, Ankit B. Joshi, Sakib Ahmed, Mary E. Davies¹, John W. Mallord (2025): The concept and criteria for declaring a Vulture Safe Zone in South Asia. *Vulture News* 89 pp22-35

Way ahead:

We plan to maintain the breeding population of White-rumped and Slender-billed vultures so that every year we can reintroduce a flock of vultures to wilderness. The released vultures would form the self-sustainable population in the wild. To ensure the safety of wild and reintroduced vultures, the pharmacy surveys, liver sampling and advocacy-awareness drives will be continued.

Vulture Conservation Breeding Centre (JCBC), Pinjore, Haryana

Funder: MoEF&CC under the CSS scheme

Team members:

Centre Manager: Dr Arshvarinder Singh Virk

Research & Field Biologists: Mr Hemant Bajpai, Research Biologist and
Arindam Aditya, Conservation Biologist

Veterinarian: Dr Arshvarinder Singh Virk

Technical & Administrative Support: Mr Balakram Sharma, Administrative Assistant and
Niranjan Dalai, Administrative Officer

Vulture Keepers & Field Assistants:

Mr Lalit Kumar, Technical Assistant, Mr Jai Kishan Sharma, Supervisor, Mr Tek Chand, Vulture Keeper,
Mr Ravi Sharma, Vulture Keeper, Mr Manohar Singh, Vulture Keeper, Mr Ved Prakash, Vulture Keeper,
Mr Devi Dutt, Vulture Keeper, Mr Yuvraj Singh, Vulture Keeper, Mr Prakash Chand, Night Watchman,
Mr Sukhdev, Night Watchman, Mr Md. Mansoor, Vulture Keeper cum Night Watchman and
Mr Rajnish Sharma, Driver cum Vulture Keeper

Location: The centre is located at village Jodhpur on the edge of the Bir Shikargaha Wildlife Sanctuary, which is about 8 Km off National Highway-22 from Pinjore on Mallah Road.



Project highlights:

- Housed 356 *Gyps* vultures (215 Indian, 75 White-rumped, and 66 Slender-billed Vultures)—the highest count recorded globally in a conservation breeding facility; 40 breeding pairs produced 52 eggs and fledged 35 chicks (67.3% hatchability, 87.5% overall breeding success), taking lifetime facility production past 470 nestlings.
- Collected 15 first-clutch eggs for artificial incubation and hand-reared 11 chicks under controlled protocols; sustained rigorous health monitoring, bio-security, and NSAID-free feeding regimes across all aviaries.
- Successfully completed safety testing of paracetamol in Himalayan Griffons and resident *Gyps* vultures, confirming no adverse clinical or physiological effects under experimental exposure and establishing it as a safe alternative to toxic NSAIDs.
- Transferred 10 Indian Vultures to Nehru Zoological Park (Hyderabad) for genetic management, and 34 captive-bred vultures (20 Indian, 14 White-rumped) to Maharashtra for soft-release across Pench, Tadoba-Andhari, and Melghat Tiger Reserves.
- Monitored 25 captive-bred White-rumped vultures via GSM-GPS across five northern states, confirming long-distance dispersal up to 200 km and social/foraging integration with wild vulture guilds, while identifying powerline electrocution as the primary non-toxic mortality factor (zero NSAID deaths recorded).
- Monitored regional feeding sites (recording monthly peaks of 351 Egyptian Vultures and 37 White-rumped Vultures) and discovered a previously unrecorded wild White-rumped Vulture breeding colony with two active nests near Bari Bhun Padahan in Sirmaur district, Himachal Pradesh.
- Surveyed 59 pharmacies across 21 districts in four states; while meloxicam was the predominant drug, formulations containing diclofenac, aceclofenac, nimesulide, and flunixin were detected across 47 outlets, identifying persistent threats to wild populations.

- Conducted 74 physical/virtual advocacy meetings sensitizing over 10,000 multi-departmental stakeholders; delivered 30 training workshops reaching 1,200+ participants (including 70+ veterinarians, 460+ forest personnel, and 900+ students/teachers), and hosted specialized inter-agency enforcement webinars.

Summary for the Period:

The Jatayu Conservation Breeding Centre (JCBC), Pinjore – a collaborative initiative of the Haryana Forest & Wildlife Department and the Bombay Natural History Society – continues to play a pivotal role in the recovery of India's three Critically Endangered resident *Gyps* vultures: the Indian Vulture (*Gyps indicus*), the White-rumped Vulture (*Gyps bengalensis*), and the Slender-billed Vulture (*Gyps tenuirostris*). Supported under the Ministry of Environment, Forest and Climate Change (MoEF&CC) Centrally Sponsored Scheme, the programme integrates conservation breeding with reintroduction into the wild.

Key figure	2025-26 achievement / status
Captive population	356 vultures: 215 Indian, 75 White-rumped and 66 Slender-billed Vultures
Breeding	40 breeding pairs; 52 eggs; 35 chicks; 67.3% hatchability; 87.5% breeding success
Cumulative production	More than 470 vulture nestlings produced since breeding became established
Artificial incubation	15 first-clutch eggs incubated; 10 chicks hatched; 11 chicks' hand-reared
Conservation transfers	10 Indian Vultures to Nehru Zoological Park; 34 captive-bred vultures to Maharashtra for release
Post-release monitoring	25 White-rumped Vultures tracked; movements up to about 200 km; several birds integrated with wild vultures
Field conservation	59 pharmacies surveyed in 21 districts; new White-rumped Vulture colony with 2 active nests found in Sirmaur, Himachal Pradesh

The breeding programme remained highly productive, supported by double-clutching, artificial incubation, hand-rearing, and meticulous husbandry designed to minimize human imprinting. Annual clinical examinations, haematology, serum biochemistry, and disease surveillance confirmed that the flock remained in sound health. JCBC also strengthened the national conservation breeding network by transferring 10 Indian Vultures to Nehru Zoological Park, Hyderabad. Furthermore, it supported reintroduction efforts in central India by providing 20 Indian Vultures and 14 White-rumped Vultures for release across the Pench, Tadoba-Andhari, and Melghat Tiger Reserves.

Post-release monitoring of the 25 White-rumped Vultures released from Pinjore in December 2024 revealed wide-ranging dispersal across Haryana, Punjab, Himachal Pradesh, Uttarakhand, and Uttar Pradesh. Several birds were observed feeding, perching, and soaring alongside wild vultures, demonstrating encouraging behavioural integration. Monitoring also identified critical threats – most notably electrocution linked to power infrastructure – though no mortalities were attributed to NSAID toxicity. Additionally, GPS tracking and targeted field surveys led to the discovery of a previously undocumented White-rumped Vulture nesting colony near Bari Bhun Padahan in Sirmaur district, where two active nests were documented.

The Vulture Safe Zone (VSZ) programme combined road transects, carcass-dump monitoring, nesting surveys, food-availability assessments, and covert pharmacy surveys. Although meloxicam remained the most commonly available veterinary NSAID, harmful and banned formulations continued to be detected, underscoring the urgent need for sustained enforcement and targeted awareness.

Outreach and advocacy efforts achieved significant reach:

- Over 30 awareness and training workshops directly engaged more than 1,200 participants, including veterinarians, forest personnel, students, teachers, and local communities.
- 47 virtual and 27 in-person meetings sensitized over 10,000 key stakeholders.

Together, these initiatives reinforce JCBC Pinjore's standing as a leading national model bridging *ex situ* breeding, wild reintroduction, scientific research, and landscape-level threat mitigation.

Publications:

Jatayu Conservation Breeding Centre (2026): *Annual report 2025–2026*. Jatayu Conservation Breeding Centre, Pinjore, Haryana, pp. 1–80. Submitted to Haryana forest Department.

Bombay Natural History Society & Haryana Forest Department (2026): *The story of Jatayu: Saving India's vultures*. Bombay Natural History Society, pp. 1–64. Release during International Vulture Awareness Program 2026.

Forest and Wildlife Department, Haryana, & Bombay Natural History Society (2026): *Jatayu: Conservation Breeding Centre (Updated edition)*. Forest and Wildlife Department, Haryana & Bombay Natural History Society, pp. 1–46. Release during International Vulture Awareness Program 2026

Jatayu Conservation Breeding Centre (2026): *Conservation breeding programme (CBP) – Progress report 2025–2026*. Jatayu Conservation Breeding Centre, Pinjore, Haryana, Submitted to CZA pp. 1–16. Progress report submitted to CZA.

Way ahead

The programme will focus on strengthening conservation efforts for White-rumped and Slender-billed Vultures by increasing breeding populations to meet targeted founder-stock requirements and continuing the annual release of captive-bred birds. GPS-GSM tagging and post-release monitoring will be expanded to assess movement, survival and adaptation. Collaboration with power utilities will be strengthened to reduce electrocution risks, while safe feeding sites and reliable carcass availability will be promoted. Continued NSAID safety testing and advocacy for vulture-safe veterinary drugs will remain priorities. Vulture Safe Zone activities

Vulture Safe Zone Advocacy & Awareness Programme

Project Duration: April 2025 – March 2026

Team members: Alka Dubey

Location: Uttar Pradesh, Bihar, Rajasthan

Project Highlights:

Management Outcomes

- Uttar Pradesh: 77 advocacy interactions with the Forest, Animal Husbandry and Food & Drug Administration departments, supported by three state-level webinars.
- Bihar: 18 advocacy interactions.
- Rajasthan: 15 advocacy interactions.
- 5,000+ stakeholders were sensitized through targeted advocacy and awareness activities, supported by media outreach and digital communication.
- Government engagement contributed to advisories, directives and stronger inter-departmental coordination for implementation of vulture conservation measures and enforcement of restrictions on harmful veterinary drugs.
- Five vulture species were recorded in the proposed VSZ, with continued presence and a reported stable population trend compared with the previous survey period.

Strategic Conservation Impact

Advocacy focused strongly on reducing the threat posed by diclofenac, aceclofenac, ketoprofen and nimesulide, while promoting safer veterinary alternatives such as meloxicam and tolfenamic acid. The programme has contributed to the long-term reduction in the prevalence of several harmful NSAIDs and strengthened institutional responsiveness.

Critical Risk & Management Priority

The principal unresolved threat remains vulture-toxic veterinary drug exposure, particularly the



continued availability/use of aceclofenac and nimesulide and the limited uptake of safer alternatives. The report specifically identifies aceclofenac as a critical concern because it metabolizes into diclofenac, while safer alternatives have yet to achieve widespread veterinary adoption.

Summary for the Period:

During the reporting period, the Vulture Safe Zone (VSZ) programme in Uttar Pradesh, Bihar and Rajasthan made significant progress in strengthening advocacy, awareness, institutional coordination and stakeholder engagement for vulture conservation. Despite limited dedicated resources, the programme maintained continuous engagement through virtual meetings, telephonic consultations, webinars and targeted stakeholder interactions, enabling conservation messaging and policy advocacy to reach multiple administrative levels across the three states. In Uttar Pradesh, extensive advocacy was undertaken with the Forest Department, Animal Husbandry Department and Food & Drug Administration (FDA), including 77 reported advocacy interactions, along with three state-level webinars. In Bihar, 18 virtual/telephonic interactions were conducted, while 15 interactions were undertaken in Rajasthan. These engagements strengthened coordination among government departments and supported implementation of vulture conservation measures.

A major focus of the programme was advocacy against the veterinary use of vulture-toxic NSAIDs, particularly diclofenac, aceclofenac, ketoprofen and nimesulide, while promoting safer alternatives such as meloxicam and tolfenamic acid. Continued engagement contributed to greater awareness among government officials, veterinary stakeholders, pharmacists and other relevant groups and supported regulatory implementation at district and state levels. More than 5,000 individuals/stakeholders were sensitized through targeted advocacy and awareness activities, predominantly through online platforms. Regular media outreach and newspaper coverage further extended the conservation message.

Way ahead:

The next phase will prioritize stronger regulatory enforcement, accelerated adoption of vulture-safe veterinary drugs, systematic field monitoring, community-level implementation, and deeper convergence among Forest, Animal Husbandry and Drug Control authorities.

Vulture Conservation Breeding Centre (VCBC), Bhopal, Madhya Pradesh

Project Duration: 2025-2026

Supported by: Madhya Pradesh Forest Department

Partner Institutions: Madhya Pradesh Forest Department, Van Vihar National Park & Zoo, Postal Department (Indore GPO)

Team Members

Centre Manager: Dr. Arockianathan Samson, **Research Biologist:** Mr. Sanjay Parihar

Centre Supervisor: Mr. Raphick Uddin, **Vulture Attender Cum Night Watchman:** Mr. Nishanth Sen

Driver: Mr. Dharam Singh Evney

Location: Bhopal, Madhya Pradesh



Project highlights:

- Maintained 99 vultures at the centre, comprising 51 Indian/Long-billed Vultures (*Gyps indicus*) and 37 White-rumped Vultures (*Gyps bengalensis*), alongside rescued individuals of Eurasian Griffon, Himalayan Vulture, Egyptian Vulture, and Cinereous Vulture.
- Recorded nine successful natural hatchings (three Indian Vultures and six White-rumped Vultures) and successfully hatched eight out of 12 artificially incubated eggs (five White-rumped and three Indian Vultures), establishing artificial incubation and double-clutching capacity.
- Successfully rehabilitated and released six vultures at Halali Dam in collaboration with the Madhya Pradesh Forest Department and Van Vihar National Park & Zoo, comprising four Indian Vultures and two Cinereous Vultures (including one recovering from a leg injury), deploying GPS transmitters for post-release tracking.
- Maintained specialized aviary infrastructure, including three colony aviaries, two holding aviaries, hospital, nursery, and quarantine aviaries, a hematology laboratory, CCTV surveillance room, and a dedicated incubation centre, supported by twice-weekly NSAID-free feeding and regular health monitoring.
- Released a Special Postal Cancellation on vulture conservation in collaboration with the Postal Department at Indore GPO; organized a Gaushala livestock-management workshop on safe drugs (meloxicam) vs. diclofenac; and engaged over 200 participants during Wildlife Week through the 'Flight to Freedom: Vulture Rescue and Rehabilitation' symposium, exhibitions, and educational outreach.

Summary for the period:

Established as a joint initiative of the Bombay Natural History Society (BNHS) and the Madhya Pradesh Forest Department, VCBC Bhopal functions to build viable insurance populations and produce birds for future reintroduction of the critically endangered White-rumped Vulture and Indian/Long-billed Vulture. During the reporting cycle, the centre housed 99 vultures and advanced breeding output through natural incubation (one hatchlings) and artificial incubation protocols (eight hatchlings). In addition to routine husbandry, enclosure maintenance, and hematological health assessments, the centre actively undertook rescue and rehabilitation operations, successfully releasing six GPS-tagged vultures at Halali Dam. Collaborative public outreach, stakeholder workshops, and veterinary drug awareness campaigns further supported in-situ threat mitigation and species recovery.

Publications:

- 1) Bajpai, H., Kumar, R., & Samson, A. (2026). A rare case of brown plumage aberration in the Himalayan Vulture (*Gyps himalayensis*) from Haryana, India. *Raptor Journal*, 20.
- 2) Samson, A. , Bajpai, H., Beulahbah, J., & Princy, J. L. (2025). Observation on leucism in Northern Palm Squirrel (*Funambulus pennantii*) in Bhopal, Madhya Pradesh, Central India. *Proceedings of the Mordovia State Nature Reserve*, 37, 229–232. <https://doi.org/10.24412/cl-31646-2686-7117-2025-37-229-232>

Way ahead:

Increase captive breeding productivity and scale artificial incubation and double-clutching to produce at least 15 young annually. Propose the strategic release of two White-rumped Vultures and eight Long-billed Vultures at Halali Dam (Raisen District), while initiating Vulture Safe Zone (VSZ) activities across a 100-km radius around the release site. Continue wild vulture rescue and rehabilitation, genetic evaluation of prospective breeding stock, and targeted awareness campaigns addressing diclofenac and other toxic veterinary NSAIDs.

Bird Ringing and Monitoring of Migratory Birds along the Central Asian Flyway & Development of State CAF Action Plan, and Promotion of Associated Extension Education & Outreach Activities in the State of Bihar

Project Duration: 5 years (2020–2025) + 2-year extension (2025–2027)

Supported by: Department of Environment, Forest and Climate Change (DEF&CC), Government of Bihar

Team members

Principle Investigator: Dr P. Sathiyaselvam (Deputy Director, BNHS)

Research & Field Biologists: Ms Khushboo Rani, Ms Vertika Patel, Mr Abilash R.,
Ms Ambika Rajoria, Mr Abhay Rai, and Mr Susmit Bole

Technical & Administrative Support: Md. Asik, Samsul Vajdar, Manish Kumar

Location: Six selected study sites in Bihar: Vikramshila Gangetic Dolphin Sanctuary (VGDS), Nagi-Nakti Dam Bird Sanctuary, Kanwar Lake, Baraila Lake, Kusheshwar Asthan, and Gogabeel Community Reserve. (Additional sites covered during surveys include Sundarvan and Ghatora Lake).

Summary for the Period: The project concluded its initial five-year phase in March 2025 and received a two-year extension through March 2027. During the reporting cycle, field activities were executed over three months across designated wetlands to evaluate avifaunal diversity, population trends, and habitat integrity. Scientific initiatives centered on bird ringing, satellite tracking, nest monitoring of sandbar-nesting riverine species, and assessing anthropogenic pressures. The team also provided technical expertise to the State Forest Department for the Asian Waterbird Census, Bhagalpur Bird Atlas, and Central Asian Flyway State Action Plan development.

Publications:

- Sathiyaselvam, P., K. Rani, V. Patel, R. Abilash, A. Rai, S. Bole, K. Rithe, S. Debata (2025): Ringing and Monitoring of Migratory Birds along the Central Asian Flyway & Development of State Action Plan, and Promotion of associated extension, education, and outreach activities in the state of Bihar. Report 2020–2025.



- Asian Waterbird Census (2025): Annual Report, Bihar State Bird Count. Submitted to Department of Environment, Forest and Climate Change (DEF&CC) by BNHS Bird Ringing and Monitoring Station, Bhagalpur Forest Division, Bihar.
- Bhagalpur Bird Atlas, Second Phase-2025. Submitted to DEF&CC by BNHS Bird Ringing and Monitoring Station, Bhagalpur, Bihar.
- Sathiyaselvam, P., K. Rani, V. Patel, R. Abilash, A. Rajoria, K. Rithe (2025): Ringing and Monitoring of Migratory Birds along the Central Asian Flyway & Development of State Action Plan, and Promotion of associated extension, education, and outreach activities in the state of Bihar. Site-wise Ringing Report 2020–2025.
- Sathiyaselvam, P., K. Rani, V. Patel, R. Abilash, S. Bole, A. Rai, K. Rithe (2025): Sandbar nesting waterbirds of Vikramshila Gangetic Dolphin Sanctuary, Bihar, submitted to Department of Environment, Forest and Climate Change (DEF&CC) by Bird Ringing and Monitoring Station, Bihar, jointly by DEF&CC and BNHS.

Way Ahead: Strengthen and expand the Bhagalpur Bird Ringing and Monitoring Station across Bihar. Advance Central Asian Flyway movement studies through ring-recovery and telemetry datasets, expand frontline staff and stakeholder training, sustain riverine nesting bird monitoring, and deliver data-driven management inputs for state wetlands. Research, Monitoring and Conservation of Sarus Crane *Antigone antigone* in Vidarbha, Maharashtra.

Research, Monitoring and Conservation of Sarus Crane *Antigone antigone* in Vidarbha, Maharashtra

Project Duration: Three Years (2023-2026)

Supported by: Maharashtra Forest Department

Team members

Principle Investigator: Dr P. Sathiyaselvam

Advisor: Mr Kishor Rithe

Research & Field Biologists: Mr Akhash, Mr Mukund Dhurve, and Mr Ramesware Neware

Location: Gondia, Bhandara, and Chandrapur Districts, Maharashtra (Specific nesting and monitoring clusters located around Dasgaon, Ghatemni, Dhapewada, and Birsī villages in Gondia District).



Summary for the Period: The Sarus Crane (*Antigone antigone*), the world's tallest flying bird, is an obligate wetland-dependent species primarily utilizing eastern Vidarbha's paddy ecosystems for monsoon nesting. During the 2025–2026 period, targeted ecological surveys and community-based interventions were undertaken across Gondia, Bhandara, and Chandrapur districts. The initiative evaluated Sarus population parameters, located breeding territories, initiated GSM-GPS telemetry and ringing to study movement ecology, and assessed critical landscape-level threats. Close engagement with agrarian communities was maintained to mitigate conflict and build local support for crane conservation across human-dominated wetlands.

Publications: Sensitivity mapping for conservation of Sarus Crane in Gondia District, Maharashtra (

Way Ahead: Sustain active nest monitoring and evaluate breeding success across the landscape during 2026–2027. Expand the GSM-GPS telemetry program to investigate seasonal spatial dynamics and habitat use. Prioritize the identification and mitigation of high-risk power transmission lines in prime crane territories to reduce electrocution mortalities. Scale up community engagement networks, promote Sarus-friendly agricultural practices, and undertake targeted wetland restoration and habitat management to improve and maintain suitable crane habitats. Maintain systematic threat surveillance across Vidarbha's wetland systems. In addition, undertake the planned All India Sarus Crane Survey to strengthen nationwide population assessment, distribution mapping, and long-term monitoring of Sarus Crane populations. ■

Elucidating the Status of Migratory Waterbirds in Ornithologically Important Wetlands in Maharashtra; Central Asian Flyway Perspective

Project Duration: 5 years (2021–2026)

Supported by: Mangrove Foundation, Government of Maharashtra

Team members

Principle Investigator: Dr P. Sathiyaselvam

Research & Field Biologists: Mr Abhinav Nair, Mr Nikhil Ghadigaonkar, Mr Mohijit Podder, Ms Gayatri ER and Mr Ganesh Pallela.

Technical & Administrative Support: Sunil Bhavsar (driver), Saras Kumar Behera (field assistant), Sivakumar Balasamy, and A. Kannadasan (trappers)

Location: Six selected wetlands in Maharashtra: Nandur-Madhmeshwar Wildlife Sanctuary, Jayakwadi Bird Sanctuary, Ujani Reservoir, Gangapur Wetland, Hatnur Reservoir, and Visapur Dam.



Summary for the Period: The project evaluates migratory waterbird dynamics across six key wetland ecosystems in Maharashtra to inform Central Asian Flyway conservation priorities. From October 2025 to March 2026, standardized total count vantage surveys were completed across all sites to track abundance trends, species distribution shifts, and wetland conditions. In addition to monitoring, the project delivered field training for members and frontline staff, coordinated AWC 2026 surveys, submitted research reports on stopover ecology, and provided scientific facilitation for the proposed Ramsar designation of Jayakwadi Bird Sanctuary.

Publications

- Sathiyaselvam, P., A. Nair, N. Ghadigaonkar, M. Podder P. Ganesh, & K. Rithe (2025): Elucidating the Status of Migratory Waterbirds in Ornithologically Important Wetlands of Maharashtra; Central Asian Flyway Perspective. Annual Report July 2024 – June 2025. Submitted to Mangrove and Marine Biodiversity Conservation Foundation of Maharashtra.
- Nair, Abhinav, Nikhil Ghadigaonkar, N.S. Asha, Ganesh Pallela & P. Sathiyaselvam (2025): First record of Grey Heron *Ardea cinerea* (Linnaeus 1758) nesting at Nandur-Madhmeshwar Wildlife Sanctuary, Maharashtra, India. J. Bombay Nat. Hist.Soc. 122(3). doi: 10.17087/jbnhs/2025/v122/171107.
- Nair, Abhinav, Ganesh Pallela & P. Sathiyaselvam (2025): Observation of Third appendage in a Fledgeling of Black-winged Stilt *Himantopus himantopus*. J. Bombay Nat. Hist.Soc. 122(2). doi: 10.17087/jbnhs/2025/v122/171051.
- Nair, Abhinav, Nikhil Ghadigaonkar, Ganesh Pallela & P. Sathiyaselvam (2025): Predation of Streak-throated Swallow *Petrochelidon fluvicola* by Red-necked Falcon *Falco chiquera* at Nandur-Madhmeshwar Wildlife Sanctuary. J. Bombay Nat. Hist.Soc. 122(2). doi: 10.17087/jbnhs/2025/v122/171055.

Way ahead: Convene a stakeholder conference to synthesize and disseminate survey findings generated from September 2021 to March 2026. Submit management recommendations to the Maharashtra Forest Department to address critical habitat degradation drivers. Undertake spatial vegetation mapping with an emphasis on invasive flora proliferation and its ecological impacts on waterbird congregations. Pursue project tenure extension to conclude all proposed scientific objectives.

Building a Surveillance Model for Detecting Zoonotic Spill-over in Increased Bird-Human Interaction Setting Using the One Health Approach: A Study at Selected Bird Sanctuaries and Wetlands

Project Duration: 3 Years (2025-2027)

Supported by: Indian Council of Medical Research (ICMR), Government of India

Team members

Principle Investigator: Dr P. Sathiyaselvam

Research & Field Biologists: Mr S. Sivakumar, Dr Himadri Sekhar Mondal, Ms Deepa Sharma, Mr Abhinav Nair, Mr Ganesh Pallela, and Mr Shivdatt Mishra

Technical & Administrative Support: Mr Md. Arif, Mr Md. Aslam, Mr Lal Mohamed, Mr Saras Kumar Behera, Mr Md. Babul, Mr Balashore Thapa, and Mr Aniket Bhise

Location: Combined across two states:

Sikkim: Kitam Bird Sanctuary, Sidkeong Tulku Bird Park, Himalayan Zoological Park, Pangolakha (including Phedang Tso), and Fambong Lho Wildlife Sanctuary.

Maharashtra: Ujani Reservoir (Bhigwan), Veer Dam, Mayani Bird Conservation Reserve, and Visapur Dam.

Summary for the Period: Zoonotic diseases pose growing public health concerns globally, yet nationwide surveillance frameworks across human-wildlife interfaces remain limited. Undertaken with the



Indian Council of Medical Research (ICMR) using a One Health framework, this study establishes a sentinel surveillance model for zoonotic spill-over among bird sanctuary workers and individuals in close proximity to avian populations. BNHS is mandated to conduct biological sampling—including cloacal/tracheal swabs, blood sera, and ectoparasites—across high-interaction wetlands and sanctuaries in Sikkim and Maharashtra. In FY 2025–2026, systematic trapping and screening identified 23 pathogen-positive cases across both landscapes while maintaining rigorous sample transit protocols.

Way Forward: Intensive sampling will be conducted during the financial year 2026-2027. Targeted to collect 850 wild bird samples during the current financial year.

Publications: Sathiyaselvam P., S. Swaminathan H. Mondal, A. Nair, D. Sharma, A. Chowdhury, N. Ghadigaonkar, M. Podder, Gayathri. E. R, & S. Mishra building a surveillance model for detecting zoonotic spillover in increased bird-human interaction settings using the one health approach: A study at selected bird sanctuaries and wetlands. July 2025 – June 2026. Submitted to Indian Council for Medical Research.

Way ahead: Conduct intensive biological sampling during the 2026–2027 financial year, targeting the collection of specimens from 850 wild birds across the designated study sites to strengthen the pathogen surveillance framework.

BNHS Bird Migration Study Centre (BMSC), Point Calimere, Tamil Nadu – Activities

Project Duration: Not Applicable

Supported by: Various Donors

Team members

Principle Investigator: Dr P. Sathiyaselvam (Deputy Director)

Scientist In-charge: Mr S. Sivakumar (Assistant Director)

Research & Field Biologists: Mr Paul Antony B and Ms Rose Francis (Senior Research Fellows)

Technical & Administrative Support: Mr B. Vinothkannan (Office Assistant) and Mr G. Manimaran (Driver)

Location: Point Calimere, Tamil Nadu.

Summary for the Period: Operating within the ecologically sensitive Point Calimere Wetland Complex—a key crossroads for the Central Asian and East Asian–Australasian Flyways—the BNHS Bird Migration Study Centre (BMSC) advanced its research, ecological monitoring, capacity-building, and conservation education mandates during 2025–2026. Core undertakings encompassed the School Bird Club Project, structured field ornithology certificate courses, bird ringing demonstrations, synchronized census drives, and multi-tiered stakeholder training involving frontline forest staff, researchers, students, and local communities.

Publications:

- Sivakumar, S., Paul Antony, B., Rose Francis & P. Sathiyaselvam (2026): Establishing school bird clubs to create environment awareness and cadre building. Annual report (2025-2026). Bombay Natural History Society, Mumbai. Pp. 32.
- Sathiyaselvam, P., S. Sivakumar, Paul Antony, B. & Rose Francis (2006): Bird migration study through bird ringing in Point Calimere, Tamil Nadu. Report (2025-2026) submitted to the Tamil Nadu Forest Department. Bombay Natural History Society, Mumbai. Pp. 10.
- Sivakumar, S, Paul Antony B., Sarang Mishrikotkar & Rose Francis (2026): Biodiversity assessment of Tata Motors' JLR site at Panapakkam, Ranipet district, Tamil Nadu, Final Report submitted to Tata Motors. Bombay Natural History Society, Mumbai. Pp 108.

Way ahead: Organize eight batches of the 3-day Field Ornithology Course between October 2026 and January 2027. Subject to final approval, execute a three-season biodiversity assessment survey at Sriharikota during 2026–2027. Implement essential station maintenance and infrastructure enhancement works at the Centre.



Conducting a National Symposium on Wetland Conservation and Sustainable Tourism and Coffee with Corporates

Supported by: Government of Andhra Pradesh

Team members

Principle Investigator: Dr P. Sathiyaselvam

Research & Field Biologists: Dr Himadri Mondal and Khushboo Rani

Location: Krea University, Sri City, Pulicat Lake, Andhra Pradesh.

Summary for the Period: As part of the Flamingo Festival 2026, the Andhra Pradesh Forest Department and BNHS organized a two-day multi-stakeholder platform on 10–11 January 2026 at Krea University, Sri City, focused on Pulicat Lake's ecological integrity and governance. The initiative comprised a National Symposium addressing hydrological connectivity, waterbird monitoring, policy, and community stewardship, alongside the "Coffee with Corporates" forum to mobilize sustainable CSR/ESG funding for landscape-scale conservation. The events highlighted adaptive management, standardized census data integration, and collaborative pathways for the long-term conservation of the Pulicat lagoon ecosystem.

Publications

Sathiyaselvam, P., Himadri S.M. & Khushboo Rani (2026): Conducting a National Symposium on Wetland Conservation and Sustainable Tourism and Coffee with Corporates, Submitted to the Forest Department, Andhra Pradesh and the District Administration Sullurpet, Andhra Pradesh

Way ahead: Translate recommendations from the symposium and corporate dialogues into structured action plans for ecological monitoring, hydrological modelling, and community-based ecotourism at Pulicat Lake. BNHS will continue providing technical and scientific support to the Forest Department to reinforce long-term waterbird monitoring and advance international recognition for the wetland landscape.



Capacity Enhancement Workshop to Strengthen BirdLife Partnership's Ability to Implement Migratory Bird Conservation in the Central Asian Flyway

Project Date: March 9–14, 2026

Supported by: BirdLife International

Team members

Dr P. Sathiyaselvam, Ms Khushboo Rani, Mr Sivakumar, and Dr Himadri Sekhar Mondal

Key Dignitaries & Speakers: Shri Sushil Kumar Awasthi, IFS (DG of Forests & Special Secretary, MoEFCC); Dr Clement Ben, IFS (IG of Forests - Wildlife, MoEFCC); Shri Anand Mohan, IFS (CEO, National CAMPA); Mr Rajeev Mital (DG, NMCG); Mr Praveensingh Pardeshi (President, BNHS); Mr Kishor Rithe (Director, BNHS); Mr Vinayagan Dharmarajah (Regional Director, BirdLife Asia)

Location: New Delhi (Field demonstrations conducted at Sultanpur National Park and Bird Sanctuary, Haryana)



Summary for the Period: Organized by BNHS in collaboration with BirdLife International from March 9–13, 2026, in New Delhi, this regional capacity-building initiative brought together key conservation partners across 13 countries in the Central Asian Flyway. The workshop focused on operationalizing ecosystem assessment tools (TESSA), mainstreaming nature-based solutions, reconciling renewable energy infrastructure with avian safety, and curbing illegal bird taking. The event also facilitated the signing of a three-year conservation initiative for endangered riverine birds on the Mahanadi River and featured high-level addresses from leaders across MoEF&CC, the National Mission for Clean Ganga, CAMPA, BNHS, and BirdLife Asia.

Publications:

Sathiyaselvam, P., Khushboo Rani, Sivakumar S. & Himadri S.M. (2026) Capacity Enhancement Workshop to Strengthen BirdLife Partnership's Ability to Implement Migratory Bird Conservation in the Central Asian Flyway, submitted to the BirdLife International, UK.

Way Ahead: Strengthen regional transboundary cooperation across CAF partner organizations to implement field-level conservation interventions. Deploy TESSA and nature-based solutions tools to safeguard priority flyway wetlands, scale advanced bird tracking and tagging techniques, integrate bird-sensitive mitigation protocols into energy infrastructure, and roll out community-led monitoring along the Mahanadi River basin under the newly executed MoU.

Marine Megafauna Spotting Mobile App Development (Jalchar)

Project Duration: Long Term

Supported by: Mangrove and Marine Biodiversity Conservation Foundation (MMBCF),
Mangrove Cell, Maharashtra

Team members: App based project

Principle Investigator: Dr Tejal Vijapure

Research & Field Biologists: Seahorse and MTHL marine team involved in the outreach

Technical and Administrative support: Technical support by Harrier Information Systems Pvt Ltd.

Location: Western coastline (with targeted field outreach in Malvan and Ratnagiri, Maharashtra) and expanded nationwide to riverine basins across India.

Project Highlights:

- **Citizen-Science Application Rollout:** Maintained and expanded 'Jalchar', a mobile platform designed for coastal fishers and riverine communities to record marine strandings, bycatch events, and megafauna sightings.
- **Scope Expansion to Riverine Taxa:** Broadened application architecture from marine monitoring to incorporate freshwater flagship species, including Gangetic Dolphins, Gharials, and Mugger Crocodiles.
- **User Engagement & Sightings:** Registered 271 active users between launch (15 October 2024) and March 2026, receiving 8 verified submissions including confirmed records of Olive Ridley Turtles, Masked Boobies, and Honeycomb Whiptail.
- **Community Capacity Building:** Conducted a Marine Megafauna Stranding Workshop on 4 November 2025 at Malvan, alongside continuous on-ground outreach drives engaging fishing communities across Ratnagiri, Maharashtra.

Status/Summary for the Period:

Jalchar is a BNHS citizen-science mobile application engineered to empower fishers and riverine stakeholders to monitor and report strandings, bycatch occurrences, and megafauna encounters across Indian waters. Originally initiated for the western seaboard, the tool's taxonomic scope was expanded during the reporting cycle to document vulnerable riverine fauna. From its launch on October 15, 2024 through March 2026, the platform mobilized 271 users and documented critical opportunistic sightings while driving grassroots conservation engagement through field workshops and fisherfolk interactions in coastal Maharashtra.



Publications:

Vijapure, T., Rajanna D., Pitale, R; Sathiyaselvam, P; Rithe, K (2026). Marine Megafauna Spotting Mobile App Development (Jalchar) (2026). Report (2024 to 2026). Submitted to Mangrove and Marine Biodiversity Conservation Foundation of Maharashtra. Pp 1-12.

Way Ahead:

Continuous outreach of the App along the coastal regions of Maharashtra

Understanding the Distribution and Population Trend of Invasive Charru Mussels in Mumbai Seascape

(Project no. 517)

Project Duration: January 25-March 2027

Supported by:

Mangrove and Marine Biodiversity Conservation Foundation (MMBCF),
Mangrove Cell, Maharashtra

Team members:

Principle Investigator: Dr. Tejal Vijapure

Research & Field Biologists: Kangkana Pal and Kongala Maheswari

Technical and Administrative support: -

Location: Airoli, Mumbai, Maharashtra

Project Highlights:

- Executed systematic rapid coastal, shoreline, and jetty surveys across 13 coastal and 4 estuarine locations in Thane, Mumbai, and Raigad to assess spatial occupancy and seasonal presence patterns of the invasive Charru mussel (*Mytella strigata*).
- Identified severe, high-density assemblages across intertidal and subtidal zones in Thane Creek and Panvel Creek, with heavy macrofouling recorded on bridge pilings at Vashi and Belapur; comparable bioinvasions were confirmed at Gorai Creek and Sewri Mudflat.
- Observed distinct colour morphs with marked shell pigmentation variation across regional populations, while shell length measurements demonstrated spatial variability in population structure and growth dynamics.
- Undertook macrobenthic ecological evaluations across 261 associated samples and collected 258 sediment samples alongside environmental abiotic variables across all survey sites.
- Presented a scientific poster detailing the first confirmed bioinvasion records of *Mytella strigata* in Maharashtra at the World Ocean Science Congress 2026 (CSIR-NIO, Goa).

Status/Summary for the Period:

The American Charru mussel (*Mytella strigata*) is an aggressive invasive bivalve that poses substantial ecological and economic risks to intertidal biodiversity and coastal infrastructure through rapid biofouling. During 2025–2026, the project carried out comprehensive surveys covering 17 coastal and estuarine sites across Thane, Mumbai, and Raigad districts to map bioinvasion vectors and seasonal presence patterns. Findings established extensive mussel carpets and severe structural fouling across Thane Creek, Panvel Creek, Gorai Creek, and Sewri, alongside notable shell length and colormorph variability. Concurrently, laboratory and field assessments advanced across 261 macrobenthic samples and 258 sediment cores to evaluate community-level impacts, with project activities formally extended through September 2026.

Publications:

Poster / Conference Proceeding: Pal, K., Parab, B., Sakpal, A., Sahoo, P., Basak, K., Kongala, M., Pitale, R., Vijapure, T., & Sathiyaselvam, P. (2026). *First record of the bioinvasion of American charru mussel (Mytella strigata) from Maharashtra, India*. Poster presented at the World Ocean Science Congress (WOSC), CSIR–National Institute of Oceanography (NIO), Goa, February 2026.

Way Ahead:

The social impact assessment of the fisher community is underway to evaluate the direct community-level impacts of the bioinvasion and assess the market value of the mussel. The integrated assessment of charru mussel distribution and its socio-economic impacts will provide a scientific basis for developing an effective conservation and management plan.

**Mass scale production and sea ranching of vulnerable Indian seahorse
(*Hippocampus kuda*) Bleeker, 1852, in the west coast
(Ratnagiri and Sindhudurg district), Maharashtra**

Project Duration: 5 Years (2024–2029)

Supported by: Mangrove and Marine Biodiversity Conservation Foundation of Maharashtra

Team members:

Principle Investigator: Dr Tejal Vijapure (Scientist 'D')

Research & Field Biologists: Ms Jessica Barman (Research Associate II),
Mr Suyash Patil (Research Associate I)

Technical and Administrative support: Mr. Prathamesh Nachankar (Field Assistant) and Mr. Sairaj More (Driver)

Location: Ratnagiri and Sindhudurg Districts, Maharashtra (*Field surveys covered Dharan, Tarkarli, Kolamb Creek, and Achara Creek in Sindhudurg; Sakhartar Creek and Pandhara Samundar in Ratnagiri*).

Project Highlights:

- **Field Station & Aquaculture Infrastructure:** Established a dedicated field station Ratnagiri, featuring an operational captive care facility for seahorses and live-feed stock culture units for amphipods.
- **Hatchery Planning & Site Finalization:** Finalized a government-owned site at Pandhara Samundar, Ratnagiri, for joint hatchery construction with the Mangrove Foundation; completed architectural blueprints incorporating breeding, live-feed cultivation, and administrative infrastructure.
- **Seagrass Meadow Mapping:** Executed multi-season diving and intertidal surveys to map critical seagrass beds across Dharan, Tarkarli, Kolamb Creek, Achara Creek (Sindhudurg), and Sakhartar Creek (Ratnagiri) to identify prospective sea-ranching release zones.



- **Fisheries & Bycatch Surveillance:** Conducted structured fisher interview surveys documenting seahorse habitat associations (mangrove zones, estuaries, sandy/rocky substrates) and gear interactions (gill, stake, and dol nets), confirming three bycatch incidents during the reporting cycle.
- **Capacity Building:** Participated in technical training programs, workshops, and scientific symposia to enhance mariculture and captive breeding methodologies.

Status/Summary for the Period:

The project addresses population declines of the vulnerable Indian seahorse (*Hippocampus kuda*) along the Konkan coast through captive propagation and planned sea-ranching interventions. Covering the initial implementation phase from December 2024 to March 2026, the team completed baseline field station setup, live-feed aquaculture infrastructure, and architectural layouts for a dedicated hatchery at Pandhara Samundar, Ratnagiri. Ecological diving and intertidal surveys mapped vital seagrass nurseries across Ratnagiri and Sindhudurg districts, while continuous fisher interactions provided essential baseline data on accidental bycatch and local habitat use, completing the project's foundational phase.

Publications:

Vijapure, T., Barman, J., Patil, S., Nachankar, P., Murugan, A., Rithe, K. (2026). Mass scale production and sea ranching of vulnerable Indian seahorse *Hippocampus kuda* (Bleeker, 1852), in the west coast (Ratnagiri and Sindhudurg district), Maharashtra. First year report (December 2024- March 2026). Submitted to Mangrove and Marine Biodiversity Conservation Foundation of Maharashtra, pp. 1-41

Way Ahead:

Undertook the rescue, captive care and release of five seahorses accidentally caught in fishing nets, with continued rescue operations planned to support further cases in the future. Secure statutory clearance permissions and initiate construction of the seahorse hatchery facility at Pandhara Samundar. scale community awareness campaigns with local fishing fleets across Ratnagiri and Sindhudurg districts throughout the project lifecycle.

Monitoring and Mitigating the Impacts of Mumbai Trans-Harbour Link on Flamingos and Other Avifauna and Formulating a Conservation Blueprint for the Sewri-Nhava Seascapes

Project Duration: September 2017- September 2027

Supported by:

Mangrove and Marine Biodiversity Conservation Foundation (MMBCF), Mangrove Cell, Maharashtra

Team members:

Principle Investigator: Dr P. Sathiyaselvam

Co-Principle Investigator: Dr Tejal Vijapure (Marine)

Research & Field Biologists:

Sashank Sankpal (SPF-Ornithology), Atish Manna(JPF-Ornithology), Atharva Sakpal(JPF-Marine),
Prabir Sahoo(JPF-Marine), Harita V Nair(JPF-Marine), Kaushiki Basak(JPF-Marine),
Bhumika Ghosal(JPF-Marine), Jodhikumaran.B(JPF-Ornithology), Balavignesh.S.S(JPF-Ornithology), Jayawant
More (Driver), Jayawant Pawar (Driver), Md. Sikandar(Trapper), Manoj Sahani (Trapper),
Md. Aashik (Trapper), Shribrij Prajapati (Driver), Bhautik Sondarva(JPF-Ornithology),
Kangkana Pal (JPF-Marine), Kongala Maheshwari(JPF-Marine)

Location: Mumbai, Thane, Raigad, and Navi Mumbai, Maharashtra (focusing on Thane Creek and the Sewri–Nhava seascape)



Project Highlights:

- **Waterbird & Raptor Diversity:** Recorded 58 species of waterbirds and raptors across monthly surveys in Thane Creek, comprising 39 migratory shorebird species and 19 resident species. Documented a peak congregation of 102,553 migratory shorebirds in March 2026.
- **Lesser Flamingo:** Observed a peak count of 61,109 individuals in April 2025 (demographic breakdown: 94.37% adults, 5.34% subadults, and 0.20% juveniles).
- **Greater Flamingo:** Estimated 15,242 individuals in May 2025 (demographic breakdown: 75.17% adults, 23.31% subadults, and 1.51% juveniles).
- Recorded 14,102 Lesser Flamingos at the construction site during April 2025, with local numbers demonstrating a gradual post-April increase, while no Greater Flamingos were detected within the direct construction zone.
- Executed research spanning local and transboundary movement ecology, shorebird behavioural responses to infrastructure disturbance, benthic diversity and distribution, and eco-toxicological parameters.
- **Marine studies:** Thane Creek was assessed for the three marine groups, namely macrobenthos, phytoplankton and zooplankton

Status/Summary for the Period:

- The project evaluates avifaunal population trends and potential ecological disturbances associated with the Mumbai Trans-Harbour Link (MTHL) across the Sewri–Nhava marine landscape. Regular monthly ornithological monitoring between March 2025 and April 2026 across Thane Creek documented 58 bird species, tracking substantial congregations exceeding 100,000 migratory shorebirds at peak season. The study established demographic baselines for both Lesser and Greater Flamingos, evaluated flock distribution across operational and adjacent bridge construction zones, and monitored the diversity of intertidal benthic communities alongside eco-toxicological factors to inform a long-term conservation blueprint for the Mumbai–Navi Mumbai coastal corridor.

- **Marine Studies:**

Thane Creek mudflats were explored to understand the abundance and diversity of macrofauna inhabiting these muddy shorelines.

- 37 transects (covering 3 zones × 5 vertical strata) surveyed to estimate the diversity of the lesser-known invertebrates from the intertidal areas of Thane Creek each month.
- Altogether, 4260 macro-faunal samples were collected from the intertidal zone from April 2025-March 2026 and 204 samples from the sub-tidal zone.
- From the wetlands adjacent to Thane Creek, i.e., NRI (NRI complex), BPS (Bhandup Pumping Station), and TSC (Training Ship Chanakya), a total of 44 macrobenthic samples were collected.
- Phytoplankton and Zooplankton samples were also collected from the study area every month. A total of 48 samples A total of 48 phytoplankton and 48 zooplankton samples ere collected for the entire study period to assess plankton community dynamics.
- Texture Sediment (444 samples) and sediment heavy metal (185 samples) were collected.
- Biological heavy metal samples (171 samples) collected to analyze heavy metal content in live specimens in Thane creek.
- Polychaete diversity analysis is underway where the taxa is identified to the family level

This data will help in understanding the accumulation of heavy metals in the sediment and their transfer through the food chain in the mudflat ecosystem, eventually being taken up by waders and flamingos as part of their diet.

Publications:

Vijapure, T., S. Sankpal, K. Dalvi, A. Manna, A Sakpal, P. Sahoo, S.O. Visruth, K. Maheshwari, H. Nair, K. Pal, R. Khot, R. Pitale, P. Sathiyaselvam, & K. Rithe (2025): Monitoring and mitigating the impacts of Mumbai Trans-Harbour Link on flamingos and other avifauna and formulating a conservation blueprint for the Sewri–Nhava seascape. Annual report (September 2024 to May 2025). Submitted to Mangrove and Marine Biodiversity Conservation Foundation of Maharashtra. pp 1-66.

Way Ahead: Continued field activities for Ornithology and Marine components of the project to collect relevant scientific data.

Reinitiating Bird Migration Studies at Keoladeo National Park and Expanding to Other Selected Sites in Rajasthan

Project Duration: Nov 2026 to Oct 2027

Supported by: SITA, BNHS Internal Funds;

Team members:

Principle Investigator: Parveen Shaikh (Scientist 'D')

Research & Field Biologists: Omkar Joshi (Senior Project Fellow)

Location: Keoladeo National Park (Bharatpur), Chambal River and Sambhar Lake, Rajasthan

Project Highlights:

- Revived systematic bird migration and ringing research at Keoladeo National Park after an interruption of more than 30 years.
- Established a permanent bird ringing station at Keoladeo National Park for long-term Central Asian Flyway (CAF) monitoring.
- Successfully ringed 462 birds across 66 species, including 433 birds across 61 species in Keoladeo National Park (predominantly Bluethroat, 62 individuals).
- Recorded 7 bird recaptures demonstrating local site fidelity.
- Conducted pilot ringing at Chambal River (16 birds belonging to eight species ringed) and Sambhar Lake (13 belonging to three species birds ringed).



Summary for the Period April 2025–March 2026:

Commencing in November 2025, this initiative re-establishes BNHS's legacy of migration tracking at Keoladeo National Park. Operating across key wetland and woodland habitats (including Rescue Centre, Shanti Kutir, Bhaisa Mori Road, Keoladeo Mandir, Python Point, and K-Block), the station established standard ringing protocols. Exploratory ringing at Sambhar Lake and the Chambal River extended spatial coverage across Rajasthan's flyway nodes. A technical capacity-building training was conducted during Wildlife Week for 32 local guides and forest personnel to support local resighting networks. Additional funding secured for strengthening outreach and awareness associated with the Programme from Exotic Heritage Group.

Publications: Joshi. O & P.A. Shaikh (2026): Reinitiating bird migration studies at Keoladeo National Park and expanding to other selected sites of Rajasthan. *Update Report* submitted to SITA. Pp 17

Way Ahead: Continue seasonal ringing operations across migratory arrival and departure cycles and integrate data streams directly into the national avifauna dashboard.

“Guardians of the Skimmer”-Conserving riverine birds through community participation

Project Duration: 2 year (from March 2023 to March 2025),

Supported by: The Habitat Trust Grant

Team members:

Principle Investigator: Parveen Shaikh (Scientist 'D')

Research & Field Biologists: Omkar Joshi (Senior Project Fellow), Satya Siddharth Das (Project Biologist)
Mukesh Kumar (Field Driver)

Location: National Chambal Sanctuary (Madhya Pradesh, Uttar Pradesh and Rajasthan)

Project Highlights:

- The project entered its final phase during 2025, with continued dissemination of outcomes and consolidation of conservation achievements.
- The community-led Nest Guardian Programme developed under the project continued to serve as a successful model for protecting Indian Skimmer nesting colonies in the National Chambal Sanctuary.
- The final Utilisation Certificate (UC) was submitted to The Habitat Trust in January 2026.



Status / Summary for the Period April 2025–March 2026:

The programme focuses on the safeguarding of critically endangered sandbar-nesting avifauna facing threats from seasonal reservoir water releases, egg predation, livestock trampling, and sand mining. Through the Nest Guardian framework, local community members were deployed directly onto nesting islands to install predator fencing and maintain round-the-clock watches.

Publications:

Project technical outcomes presented at the Student Conference on Conservation Science (SCCS), University of Cambridge (April 2025).

Final Technical Reports accepted by The Habitat Trust and BirdLife International.

Way Ahead: Following the successful closure of the project in March 2026, the community-led Nest Guardian model will be carried forward through the ongoing GIC Re project (extended till July 2026) and the National Mission for Clean Ganga project, which extends community-based nest protection to Prayagraj and Bijnor. Outcomes and lessons learned will continue to be shared to support the protection of Indian Skimmer nesting colonies in other river stretches.

‘Helping skimmers skim’: Expand protection and establish a community-based monitoring and conservation model for Indian Skimmer and Black-bellied Tern at the River Mahanadi, India

Project Duration: 1 year (June 2023 to December 2024)

Supported by: BirdLife International

Team members:

Principle Investigator: Parveen Shaikh

Research & Field Biologists: Satya Siddharth Das (Project Biologist)

Location: River Mahanadi, Odisha

Project Highlights:

- Continued monitoring of Indian Skimmer and Black-bellied Tern breeding colonies along the lower Mahanadi River between January and July 2024 and 2025.
- Both the years the field season commenced in early January, with monitoring of nesting colonies across mid-channel islands between Kantilo and Cuttack.

- Approximately 400 adult Indian Skimmers were recorded during these breeding season across the lower Mahanadi River.

Summary for the Period:

Monitoring of Indian Skimmer and Black-bellied Tern breeding colonies continued along the lower Mahanadi River from January to July 2025, covering nesting colonies in lower Mahanadi. Inundation of the nesting sites remained the key threat to the breeding colonies, although egg poaching was completely controlled in 2025 and no incidences were recorded. The final project report was submitted to and accepted by BirdLife International, and the experience gained under the project led to the development of a new three-year BirdLife International project for continued conservation action in the Mahanadi River system.

Publications:

Shaikh, P., & Siddharth, S. (2025). *'Helping Skimmers Skim': Expand protection and establish a community-based monitoring and conservation model for Indian Skimmer and Black-bellied Tern at the River Mahanadi, India*. Final Report, September 2025. Bombay Natural History Society, Mumbai.

Way ahead

Conservation action will continue under the new BirdLife International project for the Mahanadi river system (2026 to 2028), which builds on the outcomes and experience of this project.

'Securing & Protecting breeding habitat of Indian Skimmer and conservation through community participation in Chambal, Madhya Pradesh, India

Project Duration: 1 year (July 2024 to Sep 2025)

Supported by: General Insurance Corporation of India GIC

Team members:

Principle Investigator: Parveen Shaikh (Scientist 'D')

Research & Field Biologists: Omkar Joshi (Senior Project Fellow), Satya Siddharth Das (Project Biologist)

Technical and Administrative support: Mukesh Kumar (Field Driver)

Location: River Chambal, Madhya Pradesh

Project Highlights:

- Continued implementation of the Nest Guardian Programme through deployment of trained local community members at key nesting islands.
- Recorded Indian Skimmer nesting at 24 sites along the Chambal River during the 2025 breeding season.
- Successful breeding was recorded at 15 nesting sites through regular monitoring and protection measures.
- Implemented nest protection measures including fencing and round-the-clock monitoring at vulnerable nesting islands.
- Continued ringing, colour-flagging and monitoring of Indian Skimmer and associated riverine birds.
- Got the project extended till July 2026

Summary for the Period:

The Nest Guardian Programme continued through the deployment of trained local community members at key nesting islands along the Chambal River. During the 2025 breeding season, more than 500 chicks hatched successfully. The project was extended till July 2026.

Way ahead

Continue the Nest Guardian Programme, nest protection and monitoring, and ringing and colour-flagging at key nesting islands along the Chambal River during the extension period till July 2026.

Safeguarding Breeding Habitats of Indian Skimmer and Sympatric Birds through Monitoring and Community Participation in the Ganga Basin

Project Duration: 2 years (Jan 2026 to Dec 2027)

Supported by: National Mission for Clean Ganga (NMCG)

Team members:

Principle Investigator: Parveen Shaikh

Research & Field Biologists: Deval Kadam (Project Scientist, Chambal), Rajdeep Sarkar (Junior Project Fellow, Prayagraj), Satya Siddharth Das (Project Biologist)

Technical and Administrative support: Mukesh Kumar (Field Driver)

Location: River Chambal, Upper Ganga, Prayagraj and Lower Ganga

Project Highlights:

- The project was formally launched on 13 January 2026 at the Wildlife Institute of India, Dehradun, by the Hon'ble Union Minister for Jal Shakti.
- Systematic baseline surveys were initiated across Chambal, Prayagraj, Bijnor-Narora and Lower Ganga stretches for identification of nesting habitats of Indian Skimmer and other sandbar-nesting birds.
- During the surveys, more than 1,000 Indian Skimmers were recorded in Chambal, approximately 250 birds at Prayagraj and around 150 birds between Bijnor and Narora.
- More than 20 nesting sites were identified in Chambal, while active nesting sites were also documented in Prayagraj, Bijnor and the Vikramshila Gangetic Dolphin Sanctuary stretch of Lower Ganga.
- Community-based nest protection was initiated through deployment of local community members for monitoring and protection of nesting sites across Chambal, Prayagraj and Bijnor.
- Initiated recruitment of project staff and strengthened field monitoring, avifauna dashboard integration and long-term conservation planning across project landscapes.

Summary for the Period:

The project was formally launched in January 2026. The aim is to scale up the monitoring and conservation of sandbar nesting birds on the River Ganga. Systematic baseline surveys were initiated across the Chambal, Prayagraj, Bijnor-Narora and Lower Ganga stretches to identify nesting habitats of Indian Skimmer and other sandbar-nesting birds.

Way ahead

Continue baseline surveys and community-based nest protection across the Chambal, Prayagraj, Bijnor-Narora and Lower Ganga stretches, complete recruitment of project staff, and integrate monitoring data into the avifauna dashboard to support long-term conservation planning through the project period (till December 2027).

Strengthening Community-led Conservation of Indian Skimmer and Black-bellied Tern in the Mahanadi River System

Project Duration: 2026–2028

Supported by: BirdLife International

Team members:

Principle Investigator: Parveen Shaikh

Research & Field Biologists: Satya Siddharth Das (Project Biologist) and community assistants

Location: River Mahanadi, Odisha

Project Highlights:

- Secured a new three-year BirdLife International grant in March 2026 for continued conservation of Indian Skimmer and Black-bellied Tern in the Mahanadi river system.
- The project agreement was signed during the Capacity Enhancement Workshop to Strengthen BirdLife Partnership's Ability to Implement Migratory Bird Conservation in the Central Asian Flyway held in New Delhi.
- Initiated surveys and preparatory field activities in March 2026 to assess the status of Indian Skimmer and Black-bellied Tern populations and nesting sites.
- Developed plans for strengthening community-led monitoring and stakeholder engagement along key stretches of the Mahanadi River.
- Strengthened collaboration with fisherfolk communities and government agencies to improve conservation support for riverine birds and nesting habitats.
- The project aims to address major threats including nest flooding, habitat disturbance and declining breeding success of riverine birds through long-term monitoring and community participation.

Summary for the Period: The project agreement for a new three-year BirdLife International project on the Mahanadi River was signed in March 2026. The three-year programme mainly aims to address the water regulation threat to skimmers by engaging multiple stakeholders, such as the irrigation department, forest department and local community, in planning the conservation plan. The project will also initiate detailed monitoring of the upstream nesting colonies and threat mapping. Surveys and preparatory field activities began in March 2026 to assess the status of Indian Skimmer and Black-bellied Tern populations and nesting sites.

Way ahead

Strengthen community-led monitoring and stakeholder engagement along key stretches of the Mahanadi River, continue collaboration with fisherfolk communities and government agencies, and address threats such as nest flooding, habitat disturbance and declining breeding success through long-term monitoring and community participation.

Ujani Wetland Eco-Restoration Climate Resilient and Fisheries Development

Project Duration: Long term

Supported by: Cipla Foundation

Team members

Principle Investigator: Dr Unmesh Katwate

Research & Field Biologists: Ms Devi Waingankar, Mr Mayank Sharma, Mr Mahesh Mane

Technical and Administrative support: Mr Balaji Survase

Key stakeholders of the project:

1. Mr. Bharat Mallav – Community representative and Chairman of Tanvi Fisheries and Ambika Fisheries Cooperative Society, Bhigwan
2. Bhigwan Krishi Utpanna Bazar Samiti, commonly known as APMC (Agricultural Produce Market Committee)
3. Water Resource Department, Govt. of Maharashtra
4. Fisheries Department, Govt. of Maharashtra
5. Forest Department, Govt. of Maharashtra
6. Maharashtra Tourism Department, Govt. of Maharashtra
7. Police department, Govt. of Maharashtra
8. District Magistrate and Collector Office, Solapur, Govt. of Maharashtra
9. District Magistrate and Collector Office, Pune, Govt. of Maharashtra
10. District Magistrate and Collector Office, Ahilya Nagar, Govt. of Maharashtra

Location: Ujani Reservoir and the Bhima River basin - Bhigwan, Pune District, Maharashtra (Surveys covered Bhigwan, Madanwadi, Palasdev, Kalthan, Takali, Wangi, Kedgaon, Sonwadi, and adjoining reservoir areas).

Project Highlights:

- **Aquatic Diversity & Limnological Assessments:** Documented 37 native and 6 invasive fish species through fish landing and market surveys; completed SONAR hydro-acoustic surveys at 12 locations, bathymetric assessments, water quality monitoring, and Length–Weight Relationship (LWR) studies.
- **Avifauna Monitoring:** Recorded 92 bird species and 2,795 bird observations across the Bhigwan wetland landscape, tracking Central Asian Flyway migratory birds and evaluating bird–fish trophic interactions.
- **Invasive Species Eradication & Mapping:** Coordinated with the Fisheries Department to seize and destroy ~9.4 tonnes of invasive African Catfish from illegal aquaculture operations; deployed drone/UAV and Landsat imagery to map infestations of Water Hyacinth, *Ipomoea*, Tilapia, and Suckermouth Catfish.
- **Native Fish Breeding & Stock Enhancement:** Collected native species (*Hypselobarbus kolus* and *Labeo kawrus*) for conservation breeding; collaborated with the Fisheries Department to release 1.22 crore fingerlings of major carps (Rohu, Catla, Mrigal) into Ujani Reservoir.
- **Capacity Building & Community Engagement:** Conducted two workshops in December 2025 training over 85 fishers and nature guides on invasive fish management, native fish conservation, citizen-science bird monitoring (eBird, Merlin), and eco-tourism livelihoods; formed community groups across key landing centers.

Summary for the Period:

Supported by the Cipla Foundation and implemented by BNHS from August 2025 to March 2026, the project addresses ecosystem degradation in the Bhigwan–Ujani wetland complex by restoring native fish diversity, curbing biological invasions, and enhancing local livelihood resilience. Core undertakings integrated biometric fish assessments, hydro-acoustic bathymetry, wetland avifaunal monitoring, and spatial mapping of invasive macrophytes. Substantial management interventions included the destruction of 9.4 tonnes of



illegally farmed African Catfish, mass stocking of 1.22 crore carp fingerlings, and technical training for 85 fishers and bird guides. Inter-agency alignment with fisheries, forestry, and water resource bodies established an institutional baseline for climate-resilient wetland management despite challenges involving water-level fluctuations and socioeconomic reliance on exotic fish species.

Publications:

Katwate, U., D. Waingankar & C. Katwate (2026): A preliminary report of ichthyofaunal and avifaunal diversity of Ujani Wetland. Grant report submitted to Cipla Foundation. Bombay Natural History Society, Mumbai, India, 7-43 pp.

Katwate, U. (2025): Invasive African catfish in India - ecological threats and health risks a brief review for policymakers, environmentalists and the public, BNHS Blogs - <https://blog.bnhs.org/invasive-african-catfish-in-india-ecological-threats-and-health-risks-a-brief-review-for-policymakers-environmentalists-and-the-public/>

DTE (2026): Maharashtra's Ujani Reservoir sees 12.2 million native fish release, Down to Earth. <https://www.downtoearth.org.in/wildlife-biodiversity/maharashtras-ujani-reservoir-sees-122-million-native-fish-release>

Bose, M. (2025): Maharashtra fisheries department takes action against illegal catfish farming in Ujani, seizes 2.4 tonne fish, Deccan Herald. <https://www.deccanherald.com/india/maharashtra/maharashtra-fisheries-department-takes-action-against-illegal-catfish-farming-in-ujani-seizes-24-tonne-fish-3814142>

Way Ahead:

For the 2026–27 Financial Year, the Bombay Natural History Society (BNHS) is scaling up its interventions at Ujani Reservoir under the Wetland Eco-Restoration and Fisheries Development Program. Our initiative integrates invasive species control, native biodiversity recovery, and climate-resilient livelihood models for local fishing communities.

Securing Habitat for the Great Indian Bustard – Rajasthan

Project Duration: September 2024 – March 2027

Supported by: ICICI Foundation

Team Members:

Principal Investigator: Dr Sujit Narwade, Deputy Director, BNHS

Research, conservation & Field team s: Dr Neelkanth Bora, Mr Vinay Sharma, Mr Pankaj Bishnoi, Mr Sachin Bishnoi

Location: Khetolai & Chandani, Pokhran, Rajasthan

Collaboration – Station HQ, Pokhran Field Firing Range (PFFR), Indian Army; Bishnoi community; Gram Panchayat Khetolai.

Project Highlights:

- Successfully erected large predator-proof exclosures covering 28 hectares at Khetolai and 12 hectares at Chandani to secure safe breeding and foraging refuges from predation pressures.
- Actively monitored and controlled the regeneration of the invasive woody weed *Neltuma juliflora* to restore native desert grassland ecology.
- Mobilized local Bishnoi communities to balance livestock grazing regimes with habitat protection, training local youth as certified 'Godawan Mitras' for enclosure surveillance and community conservation education.
- Partnered with Canine Control Care (CCC, Pune), the Khetolai Gram Panchayat, and the Indian Army to sterilize approximately 1,000 free-ranging dogs, significantly mitigating canine predation on bustards and native wildlife.

Summary for the Period:

The project addresses severe population and habitat declines of the critically endangered Great Indian Bustard (*Ardeotis nigriceps*) within the Thar Desert landscape of Pokhran, Rajasthan. Supported by the ICICI Foundation and active through the reporting cycle, interventions focused on establishing functional predator-proof enclosures totaling 40 hectares across Khetolai and Chandani, eradicating invasive *Neltuma juliflora* to promote native grassland recovery, and curbing feral dog predation through a targeted 1,000-canine sterilization campaign. Central to the program is participatory conservation with local Bishnoi pastoralists and



trained youth 'Godawan Mitras' to sustain community-led monitoring and grazing management.

Publications:

Bustard team (2025): Eco-tourism for Livelihood Creation: Empowering Conservation Leadership in Arid and Semi-arid Regions of Rajasthan. Internal report submitted by the BNHS to ICICI Foundation. Published by BNHS. Pp. 13.

Sahani, V.K., V. Sharma, N. Bora, P. Bishnoi, S.S. Narwade, K. Rithe (2025): Securing a Critical Habitat for India's Bird on the verge of Extinction; A Step Towards Protecting the Great Indian Bustard in the Arid Region of Rajasthan through Community Support. Pp. 33.

Narwade, S.S., P. Bishnoi and N. Bora S. Bishnoi (2026): Securing a critical habitat for saving India's bird on the verge of extinction A step towards protecting the Great Indian Bustard in the arid region of Rajasthan through community support. Pp. 12

Awareness material prepared; reports submitted to ICICI Foundation

Way Ahead:

Expand the spatial coverage of predator-proof enclosures, reinforce and scale the Godawan Mitra community monitoring network, and integrate sustainable landscape-level grazing management frameworks.

Grassland-Based Livelihoods and GIB Conservation – Chanani, Pokhran

Project Duration: 2024 – 2027

Supported by: GICRe Foundation

Team Members:

Principal Investigator: Dr Sujit Narwade

Research & Field Biologists: Dr Neelkanth Bora, Mr Pankaj Bishnoi

Location: Chanani, Pokhran, Rajasthan; **Collaboration** – Gram Panchayat Odhaniya

Project Highlights:

- Initiated construction of a dedicated field research station and residential base camp facility equipped to support long-term field research operations and living quarters for project personnel.
- Created dedicated water bodies to provide essential hydration sources for both wild fauna and local pastoral livestock.
- Developing an underground water storage tank system to collect and harvest rainwater for habitat restoration and field operations.
- Initiated community grassland-based livelihood activities, including community fodder management support.



Summary for the Period:

The project focuses on linking sustainable grassland-based livelihoods with the conservation of the critically endangered Great Indian Bustard (*Ardeotis nigriceps*) within the Chanani landscape of Pokhran, Rajasthan. Supported by the GICRe Foundation across 2024–2027, foundational project activities during the reporting period centred on setting up on-ground research infrastructure, establishing a field station, developing rainwater harvesting systems, and creating water resources to sustain local wildlife and domestic herds while rolling out community-level livelihood interventions.

Publications:

Progress reports submitted to GICRe.

Narwade S.S., P. Bishnoi, N. Bora & K. Rithe (2025): Saving the Great Indian Bustard (GIB) from extinction through grassland-based livelihoods to locals in Rajasthan's arid region. Pp 24

Way Ahead:

Operationalize the conservation field research station, and scale community-based eco-tourism initiatives linked with grassland conservation.

Saving the Lesser Florican – Ajmer Agro Pastoral Landscape

Supported by: SITA Inc.

Project Duration: 2024 – 2026

Team Members:

Principal Investigator: Dr Sujit Narwade

Research & Field Biologists: Mr Sachin Bishnoi, Ms Sanchi Shrivastav, Mr Vinay Sharma

Community Engagement: Kharmor Mitra Network volunteers

Location: Ajmer, Rajasthan

Collaboration – Gram Panchayat Shaokliya, Baheda, Kalyanpura

Project Highlights:

- Advocated sustainable farming practices such as delayed harvesting regimes and reduced chemical pesticide application to minimize disturbance and ensure safe foraging and breeding habitats for floricans.



- Scaled up the community-based Kharmor Mitra volunteer network to strengthen local monitoring of bird populations and safeguard core habitats.
- Organized educational sessions in rural schools and Gram Panchayats to sensitize students and local villagers on biodiversity importance, challenges faced by the species, and habitat stewardship.
- Established practical demonstration plots showcasing sustainable agro-pastoral techniques that reconcile agricultural productivity with wildlife and habitat conservation.

Summary for the period:

Highly sensitive to agricultural transformations, the Lesser Florican (*Sypheotides indicus*) is the focal species of this conservation project, supported by SITA Inc. During the reporting cycle, confirmed florican sightings were recorded while adaptive habitat management measures remained active. Key interventions centred on promoting wildlife-friendly agricultural practices, setting up demonstration plots, engaging farming communities, and deploying trained local Kharmor Mitra volunteers to monitor breeding areas and ensure coexistence between agricultural production and species protection

Publications:

Reports submitted to SITA Inc.; outreach material developed.

Narwade, S.S., S. Shrivastav, S. Bishnoi, N. Bora, and R. Pawar (2025): Dancer of the Monsoon: The Lesser Florican's Tale, Published by Bombay Natural History Society. Pp- 36.

Way ahead:

Strengthen economic incentive mechanisms for participating farmers and expand the network and geographic reach of sustainable agro-pastoral demonstration plots.

Biodiversity Heritage Site Proposal – Ajmer

Project Duration: 2025 – 2027

Supported by: Rajasthan State Biodiversity Board (RSBB)

Team Members:

Principal Investigator: Dr Sujit Narwade

Research & Field Biologists: Mr Sachin Bishnoi, Ms Sanchi Shrivastav, Mr Vinay Sharma

Location: Ajmer, Rajasthan

Collaboration – Gram Panchayat Shokaliya, Bandanwada, Kalyanpura, District Administration, Ajmer



Project highlights:

- Formulated and finalized proposals for notifying critical grassland habitats in Shokaliya and Ajmer as Biodiversity Heritage Sites under Section 37 of the Biological Diversity Act, 2002.
- Established inter-agency coordination with the Rajasthan Forest Department, local administrative bodies, and Biodiversity Management Committees (BMCs) to protect fragile agro-pastoral ecosystems.
- Documented the continued viability of traditional rain-fed farming systems supporting endangered wildlife, confirming sightings of adult male Lesser Floricans (*Sypheotides indicus*) at Kalyanpura during the 2025 monsoon season.
- Collated comprehensive baseline inventories for PBR development, including local floral checklists, bird diversity records, traditional farming implements, and site profile annexures.
- Engaged local communities to establish community reserves and leveraged National Green Tribunal (NGT) interventions to safeguard semi-arid grasslands from land-use conversion, mining, and infrastructure threats.

Summary for the period:

The Lesser Florican, India's smallest bustard, is experiencing severe population declines driven by agricultural intensification, chemical pesticide exposure, invasive flora, high-voltage power transmission lines, and free-ranging dog predation. Supported by the Rajasthan State Biodiversity Board (RSBB), this initiative works to secure core breeding landscapes in Ajmer and Shokaliya through formal declaration as Biodiversity Heritage Sites. During the reporting period, draft BHS dossiers and People's Biodiversity Register datasets were compiled alongside ecological surveys that verified active monsoon breeding habitats. However, local governance challenges – notably electoral uncertainties surrounding Gram Panchayats – temporarily affected village-level outreach and BMC operations, underscoring the need for sustained institutional intervention to secure these grasslands.

Publications:

Progress report submitted to State Board.

Narwade, S., S. Shrivastav, R. Pawar, V. Sharma, S. Bishnoi & K. Rithe (2026): To designate the first Biodiversity Heritage Site (BHS) to protect the critically endangered bird, the Lesser Florican, in the Ajmer-Kekri area of Rajasthan. Progress Report – I (July 2025 to May 2026). Submitted by the Bombay Natural History Society (BNHS) to the Rajasthan State Biodiversity Board (RSBB). Pp 88.

Way ahead:

Secure the formal statutory gazette notification of Shokaliya and Ajmer as Biodiversity Heritage Sites. Expand grassland habitat restoration, and implement community-led stewardship frameworks to safeguard Lesser Florican breeding territories.

Stubble Burning and Avian Ecology – Punjab

Project Duration: 2025 – ongoing

Supported by: The Nature Conservancy (TNC)

Team Members:

Principal Investigator: Dr Sujit Narwade

Research & Field Biologists: Mr Rahul Nandi, Mr Vinay Sharma, Mr Neelkanth Bora, Mr Pankaj Bishnoi, Mr Sachin Bishnoi, and Mr Rajesh Parmar

Technical Support: Data entry staff and project drivers

Location: Punjab (includes Malwa, Doaba, Terai, and western Punjab, including Ramsar sites Keshopur–Miani and Kanjili)

Collaboration - EcoSikh



Project highlights:

- Conducted surveys across 55 sites before and after stubble burning; chi-square analysis confirmed statistically significant shifts in avian community composition –wetland species and commensal birds (parakeets, bank mynas) surged post-harvest, while waders, insectivores, and raptors registered significant declines due to food-web depletion and habitat simplification.
- Assessed avian diversity during the preparatory phase of paddy cultivation across rice–wheat belts, maize plots, and cash crop systems in Malwa, Doaba, Terai, and western Punjab.
- Highlighted the ecological role of remnant wetlands and waterlogged agro-habitats as critical dry-season refuges, documenting breeding colonies of Cattle Egrets, Woolly-necked Storks, Painted Storks, and Knob-billed Ducks amid intensive agriculture.
- Documented degraded vegetation matrices dominated by disturbance-tolerant grasses (*Cynodon dactylon*, *Panicum* spp.), invasive herbs, and exotic monoculture plantations, with semi-natural floral communities restricted to isolated pockets.
- Formulated science-based recommendations emphasizing wetland habitat preservation, scaling sustainable alternatives to crop residue burning, restoring native grass/legume cover, and fostering community stewardship.

Summary for the period:

Supported by The Nature Conservancy (TNC), this baseline research initiative evaluates how intensive rice–wheat agricultural regimes and seasonal crop residue (stubble) burning influence avian community dynamics across Punjab. Progress achieved during the reporting period includes completing multi-season ecological surveys, clearing regulatory compliances, and submitting the February 2026 comprehensive progress report. Findings establish that while agro-wetlands and peri-urban zones temporarily absorb displaced bird populations post-harvest, the pervasive practice of stubble burning significantly degrades agro-grassland biodiversity, depletes invertebrate food supplies, and accelerates local habitat homogenization.

Publications:

Progress report to TNC.

Narwade, S., Bora, N., Bishnoi, P., Bishnoi, S., Parmar, R., Shaikh, T., V. Sharma and K. Rithe (2026). *A baseline study to understand the probable impact of stubble burning on birds in Punjab*. Report submitted by BNHS to TNC.

Way ahead:

Finalize and submit the final project report to TNC, and develop frameworks integrating Nature-based Solutions (NbS) with agricultural policy to mitigate stubble burning impacts on avian diversity and agro-ecosystems.

Monitoring Lesser Florican – Madhya Pradesh

Project Duration: 2025–2028

Supported by: Madhya Pradesh Forest Department

Team Members:

Principal Investigator: Dr Sujit Narwade

Research & Field Biologists: Ms Sanchi Shrivastav, Mr Tahir Shaikh, Mr Rajesh Parmar, and
Mr Rushikesh Pawar

Location: Ratlam, Western Madhya Pradesh (Survey areas – Sailana Wildlife Sanctuary, Sardarpur, Petlawad, Jeeran Range in Neemuch District, Cheeta Kheda, and Gandhi Sagar)

Project highlights:

- Confirmed the presence of a female Lesser Florican (*Sypheotides indicus*) within Sailana Wildlife Sanctuary during multi-season surveys conducted between September 2025 and July 2026, verifying the continued irregular persistence of the species in its historical breeding grounds.
- Completed baseline assessments across four seasonal cycles documenting habitat conditions, grassland fragmentation, and regional biodiversity matrices across Western Madhya Pradesh.
- Formulated a formal proposal for declaring a 572.7-hectare Lesser Florican Conservation Reserve in the Jeeran Range (Neemuch District) to protect crucial, currently unprotected breeding habitat and preserve landscape connectivity between Madhya Pradesh, Rajasthan, and Gujarat.



- Documented acute pressures driving local population declines and mortality, particularly high-voltage power transmission lines and linear infrastructure, invasive plant proliferation, overgrazing, agricultural intensification, and free-ranging dogs.
- Developed strategic recommendations including establishing demonstration sites for Florican-friendly agriculture, restoring village commons, pilot habitat restoration plots, invasive plant eradication, and developing a Nature Interpretation Centre.

Summary for the period:

Supported by the Madhya Pradesh Forest Department, this initiative focuses on the critically endangered Lesser Florican across its historical strongholds in Western Madhya Pradesh (Sailana, Sardarpur, Petlawad, and Jeeran). During the reporting period, the project established a seasonal ecological baseline and confirmed breeding-season presence at Sailana. Emphasizing a shift from isolated protected-area management to landscape-scale stewardship, the project drafted a comprehensive progress report, advanced ongoing statistical analyses, and formulated policy inputs for new protected reserves and multi-agency partnerships involving BNHS, the Forest Department, WII, and local agrarian communities.

Publications:

Interim report submitted to Madhya Pradesh Forest Department.

Pawar, R., S. Shrivastav, T. Shaikh, S. Narwade & K. Rithe (2026). Saving Critically Endangered Lesser Florican from Possible Extinction by Intensive Surveys and In-situ Conservation Approach in Madhya Pradesh: Progress Report Submitted by the BNHS to the Office of CWLW, MP. 82 pp.

Way ahead:

Expand seasonal monitoring to additional prospective breeding sites across the landscape, pursue formal declaration of the proposed 572.7 ha Jeeran Conservation Reserve, integrate seasonal grassland fire management protocols, and establish collaborative Florican-friendly farming pilot plots with local communities.

Brahmaputra Floodplain Grassland Birds – Assam & Arunachal Pradesh

Project Duration: 2022–2027

Supported by: BirdLife International

Team Members:

Principal Investigator: Dr Sujit Narwade

Research & Field Biologists: Rahul Nandi, Akash Rajuvar, and Arindam Sinha

Location: Assam and Arunachal Pradesh

Project highlights:

- Surveys conducted between 2017 and 2025 confirmed that Bengal Florican (*Houbaropsis bengalensis*) presence, lekking activity, and territorial fidelity strongly depend on grass height, open visibility, and disturbance timing; suppressing grazing during the February–May breeding season supports lekking fidelity, whereas even light grazing pressure prompts territory abandonment.
- Identified invasive woody vegetation – including *Bombax ceiba*, *Chromolaena odorata*, and *Mikania micrantha* – as key drivers converting open grasslands into shrublands, severely reducing critical open display and breeding habitats.
- Documented a fragmented yet persistent population of approximately 200–250 Bengal Floricans across Assam and Arunachal Pradesh between 2022 and 2025, confirming the region as the primary global stronghold of the species.
- Recorded small, localized colonies of the endangered Finn's Weaver (*Ploceus megarhynchus*) across Manas, Orang, and Kaziranga, noting conservation challenges following its 2023 uplisting to Schedule I of the Wildlife (Protection) Act.



- Mobilized over 30 birdwatchers through citizen-science programs, increasing local conservation awareness to nearly 70% by 2025; established successful community-led habitat management models at Amarpur Chapori, Nizamghat, and Koklabari Agriculture Farm to suppress invasives and maintain open grassland matrices.
- Formulated strategies to delineate riverine island (*chapori*)-based Florican Habitat Units, implement rotational grazing regimes, and schedule state- and national-level consultation workshops in 2026 to develop comprehensive grassland bird conservation guidelines.

Summary for the period:

Supported by BirdLife International, this long-term initiative focuses on conserving the critically endangered Bengal Florican and its associated avifaunal community across the Brahmaputra floodplain grasslands of Assam and Arunachal Pradesh. Despite constraints leading to limited fieldwork during the reporting period, community-based awareness and monitoring campaigns continued actively. Field assessments quantified key anthropogenic threats, including agricultural expansion, overgrazing, infrastructure pressures, hunting, and industrial incidents such as the 2020 Baghjan blowout while demonstrating that participatory stewardship, seasonal grazing restrictions, and ecotourism linkages provide viable models for floodplain grassland bird conservation.

Publications:

Final report to BirdLife International

Sinha, A., Narwade, S., A. Rajuwar, B. Chakdar, R. Bhargav & K. Rithe (2025). Conserving globally threatened grassland birds with special emphasis on Bengal Florican *Houbaropsis bengalensis* in Brahmaputra Floodplains, India. Final Report Submitted by Bombay Natural History Society to BirdLife International. Pp. 65.

Way ahead: Resume field surveys across key floodplain grasslands, and organize national and state-level policy workshops in 2026 to formulate standardized conservation guidelines.

Ankasamudra Bird Conservation Reserve – Karnataka

Project Duration: 2025

Supported by: Inhouse & Benevity crowdfunding

Team Members

Principal Investigator: Dr Sujit Narwade

Research & Field Biologists: H. Ramesh, Haarmisha Parmar

Technical Support: Deepak Rajanna

Location: Ankasamudra Bird Conservation Reserve & Tungabhadra backwaters, Karnataka

Collaboration – GreenHBH (Green Hagaribomahalli)

Project highlights:

- Monitored the Ankasamudra–Tungabhadra wetland network (declared a Ramsar Site in 2024) along the Central Asian Flyway, documenting peak winter congregations exceeding 100,000 birds, including major colonial breeding assemblages of Spot-billed Pelicans and Asian Openbills, alongside migratory waterfowl (Garganey, Northern Shoveler, Eurasian Wigeon).
- Recorded 179 bird species and nearly 100,000 individuals across Ankasamudra and satellite wetlands, mapping dynamic sandbar, mudflat, and shallow water habitats utilized by flamingos, pratincoles, terns, and rare congregations of Greylag Geese and Demoiselle Cranes.
- Ringed individuals representing 92 bird species to evaluate migratory connectivity and local site fidelity, including the first banding of Knob-billed Ducks under a satellite telemetry initiative.
- Installed bird flight diverters on hazardous powerlines to reduce electrocution risks, constructed artificial nesting islands for pelicans, and formulated control strategies against invasive aquatic vegetation and predatory invasive catfish.
- Collaborated with Green HBH, local Panchayats, and the Karnataka Forest Department to conduct community awareness drives, citizen-led water-quality monitoring, and school nature education programs.

Summary for the period:

Supported by internal funds and Benevity crowdfunding, the project conducts systematic avian surveillance and habitat management across the Ramsar-designated Ankasamudra Bird Conservation Reserve



and the Tungabhadra reservoir backwaters. During the reporting cycle, intensive monitoring and AWC 2026 surveys affirmed the landscape's international importance for over 100,000 migratory and resident waterbirds. While certain taxa (such as Glossy Ibis) showed population increases, declines among wintering ducks and terrestrial specialists like the Indian Courser highlighted mounting pressures from reservoir fluctuations, agrochemical runoff, tree die-offs, and powerline infrastructure. Interventions integrated active bird banding (92 species), flight diverter installations, nesting island management, and multi-stakeholder stewardship to guide long-term adaptive conservation.

Publications:

Interim reports; outreach material

Narwade, S.S., H. Ramesh, R. Pawar, P. Sathiyaselvam, Ananda Babu, V. Ittigi and K. Rithe (2026). Progress report submitted by the BNHS to the Karnataka Forest Department. Pp. 74.

Way ahead:

Expand bird tagging program and strengthen outreach campaigns with local schools.

Grassland Restoration & Avian Rewilding – TATR, Maharashtra

Project Duration: 2025 – ongoing

Supported by: TATR Foundation

Team Members:

Principal Investigator: Dr Sujit Narwade

Research & Field Biologists: Rushikesh Pawar, Ashish Patil, and Tahir Shaikh

Key Technical Collaborator: Dr. G.D. Muratkar

Location: Tadoba Andhari Tiger Reserve (TATR), Chandrapur District, Maharashtra (Surveys areas – meadow complexes across Palasgaon, Khatoda, Jamni, Pandharponi, Navegaon, Botezari, Kolsa, and Devada)

Project highlights:

- Evaluated restored grassland matrices across ~1,001 hectares developed following village relocations (2006–2022) under technical guidance by Dr G.D. Muratkar, establishing the first systematic baseline evaluating meadow suitability for grassland bird communities.
- Documented diverse avifaunal assemblages with key indicator species of open and grassland ecosystems, including Yellow-wattled Lapwing, Eurasian Stone-curlew, Jungle Bush Quail, Painted Sandgrouse, and White-eyed Buzzard.



- Established direct correlations between grass structure, soil moisture, and arthropod prey density, recording significantly higher insect biomass within protected enclosures and wetland-adjacent grasslands.
- Re-evaluated historical Lesser Florican (*Sypheotides indicus*) occurrence records at Devada to identify core habitats, and safe micro-sites for prospective rewilding and release.
- Conducted capacity-building workshops for TATR frontline forest personnel in grassland bird identification, monitoring techniques, and integrating meadow protocols into the Tiger Conservation Plan (TCP).

Summary for the period:

Supported by the TATR Foundation, this collaborative initiative between BNHS and Tadoba–Andhari Tiger Reserve investigates the ecological succession and wildlife value of indigenous meadows created on vacated village sites in the core Critical Tiger Habitat. During the reporting cycle, baseline assessments across eight major meadow complexes established that active restoration interventions – such as invasive species eradication, ungulate exclosure fencing, native grass planting (*Apluda*, *Eragrostis*, *Sehima*), and legume enrichment – have enhanced structural heterogeneity and insect prey availability. The August 2026 progress report established an empirical baseline tracking vegetation succession, herbivore grazing, and bird guild colonization to guide multi-taxa conservation and pilot rewilding of the critically endangered Lesser Florican.

Publications:

Technical reports to TATR Foundation.

Narwade S. S., R. Pawar, V. K. Sahni, T. Shaikh, S. Dande and K. Rithe (2026). Integrated Grassland Restoration and Avian Rewilding in Tadoba-Andhari Tiger Reserve (TATR): A Pilot for Lesser Florican Recovery, Grassland Stewardship and Avian Rewilding. Progress report jointly published by BNHS and Maharashtra Forest Department. Pp 128.

Way ahead:

Implement structured monthly rotational monitoring across ~1,001 hectares of meadows using permanent vegetation plots and photo-monitoring stations. Scale the native grass planting.

Conservation of Lesser Florican – Bidar, Karnataka

Project Status / Duration: Concluded July 2026

Supported by: Karnataka Forest Department

Team Members:

Principal Investigator: Dr Sujit Narwade

Research & Field Biologists: Rushikesh Pawar

Location: Bidar, Karnataka

Project highlights:

- Conducted targeted monitoring of the endangered Lesser Florican (*Sypheotides indicus*) to gather ecological data on local population trends, breeding behaviour, and habitat use patterns.
- Implemented site-specific ecological restoration across degraded semi-arid grasslands compromised by agricultural expansion and incompatible land-use practices.
- Delivered education and community outreach programs to sensitize local villages and landowners regarding florican conservation and sustainable landscape management.
- Formulated plans for establishing a local Nature Interpretation Centre dedicated to grassland ecology, biodiversity education, and community-driven wildlife conservation.



Summary for the period:

Supported by the Karnataka Forest Department, this project focused on securing remnant grassland patches for the Lesser Florican in the Bidar landscape. Through a combination of population surveillance, targeted grassland restoration, and local stakeholder awareness, the initiative sought to counter habitat loss from agricultural encroachment and lay the groundwork for community-supported habitat protection. The project successfully completed its planned scope of work and formally concluded in July 2026.

Biodiversity Management Plan for the CURAJ Campus, to develop a proposal for recognition as an Other Effective Conservation Measure (OECM)

Project Duration: 2025 – ongoing

Supported by: Self-funded

Team Members:

Principal Investigator: Dr Sujit Narwade

Research & Field Biologists: Vinay Sharma, Rahul Nandi

Location: Central University of Rajasthan (CURAJ) Campus, Bandar Sindri, Ajmer District, Rajasthan

Collaboration – Environment Department of CURAJ

Project highlights:

- Formulated a comprehensive Biodiversity Management Plan in partnership with CURAJ to establish the university campus as a formally recognized Other Effective Area-Based Conservation Measure (OECM).
- Documented floral and faunal richness within semi-arid scrub and grassland matrices, encompassing over 184 bird species, 117 insect species, 15 mammal species, 8 reptile species, and 7 amphibian species.
- Recorded globally threatened species utilizing campus habitats, including sightings or occurrences of Steppe Eagle, Ferruginous Duck, and wide-ranging bustards such as the Lesser Florican and Great Indian Bustard.



- Assessed campus wetland retention ponds, scrublands, and ongoing green practices (solar energy, STP, vermicomposting), while evaluating restoration opportunities for abandoned mining areas and monitoring the encroachment of invasive alien plants (*Prosopis juliflora*, *Lantana camara*).
- Designed a multi-stakeholder Biodiversity Management Committee that includes CURAJ faculty, students, BNHS scientists, the State Forest Department, and local community representatives to oversee campus-level habitat governance.

Summary for the period:

This collaborative initiative between BNHS and the Central University of Rajasthan (CURAJ) develops science-based management pathways to secure OECM designation for an academic campus. During 2026 field assessments, the team mapped key ecological assets, identified degraded zones requiring active intervention, and integrated existing environmental utilities (biogas, wastewater treatment) into biodiversity planning. The plan sets up phased actions to document seasonal biodiversity, rehabilitate abandoned quarry sites, restore campus ponds, launch campus citizen-science modules, and establish a Nature Interpretation Centre, positioning the University as a vital contributor to non-protected area conservation.

Publications

Narwade S, P. Kamble, T. Meena, V. Sharma, T. Shaikh (2026). Biodiversity Management Plan for the CURAJ Campus, to develop a proposal for recognition as an Other Effective Conservation Measure (OECM). Published jointly by CURAJ and BNHS Pp. 50.

Estimation of NSAIDs in livestock carcasses and vulture monitoring at Jorbeer Conservation Reserve, Bikaner, Rajasthan

Project Duration: 2025 – ongoing

Supported by: BNHS

Team Members:

Principal Investigator: Dr Sujit Narwade

Research & Field Biologists: Vinay Sharma, Rahul Nandi

Location: Jorbeer Conservation Reserve (Bikaner) and Central University of Rajasthan / CURAJ (Ajmer), Rajasthan



Project highlights:

- Standardized High-Performance Liquid Chromatography with UV detection (HPLC–UV) protocols for detecting veterinary diclofenac and other toxic Non-Steroidal Anti-Inflammatory Drugs (NSAIDs) in livestock carcass tissues, collaborating with the National Research Centre on Equines (NRCE) and the Department of Environmental Sciences, CURAJ.
- Carried out weekly monitoring across six distinct blocks of Jorbeer Conservation Reserve, recording six vulture species: Egyptian Vulture, Eurasian Griffon, Himalayan Griffon, Cinereous Vulture, and Indian Vulture, alongside high densities of Steppe Eagles.
- Conducted a dedicated two-day census on January 22–23, 2026, documenting 16 scavenging raptor and bird species; Egyptian Vultures constituted nearly two-thirds of recorded individuals, with total counts showing clear temporal feeding peaks in the mornings and evenings around the primary carcass disposal grounds (Shannon diversity index = 1.10).
- Completed a concurrent free-ranging dog census recording 278 individuals, dominated by pups indicating rapid demographic proliferation; identified canine overpopulation as an escalating driver of direct feeding competition, carcass depletion, and potential disease transmission to endangered scavenging birds.

Summary for the period:

Supported by internal BNHS institutional funding, the project combines laboratory-based toxicological surveillance with population monitoring of scavenging guilds at the critical carcass dump landscape of Jorbeer Conservation Reserve in Bikaner. During the reporting cycle, efforts focused on refining HPLC–UV chromatographic resolution for detecting veterinary NSAIDs in livestock tissues in partnership with NRCE and CURAJ. Concurrently, regular block counts and a synchronized two-day vulture census affirmed the reserve's significance as a wintering and resident haven for six vulture species – dominated by Egyptian and Griffon vultures – while highlighting the conservation challenges posed by feral dog expansion and the ongoing threat of carcass contamination.

Way ahead:

Complete chromatographic validation and finalize HPLC laboratory test results for NSAID residues across collected livestock tissue samples.

EIACP Resource Partner on Avian Ecology under the Ministry of Environment, Forest and Climate Change

Project Duration: Long Term

Supported by: Ministry of Environment, Forest and Climate Change

Team members: Dr. Sujit Narwade (Project Coordinator), Mr. Nandkishor Dudhe (Senior Programme Officer), Ms. Natasha Girkar (Information Officer), Mr. Niraj Patel (IT Officer), and Mr. Yogesh Dhamnaskar (Data Entry Operator).

Project Highlights

Database additions

- Regularly maintained and updated the DRC portal, adding 2,242 avian ecology references during 2025–2026.
- Launched the 'Vulture Data Collection App' as a new digital tool for logging and analyzing vulture sightings and spatial ecological datasets.
- Launched 'Birdle', an interactive educational mobile application to promote bird identification and avian awareness.
- Submitted 12 monthly reports and 4 quarterly reports under the statutory EIACP reporting framework.

Publications

- **Periodicals:** Published three issues of the *BUCEROS* newsletter focusing on avian ecology and conservation themes.
- **Awareness Posters & Infographics:** Released thematic educational posters covering:
 - Painted Stork
 - Greater Flamingo
 - Lesser Flamingo
 - 'Ducks, Geese & Swans of Maharashtra – Part-I'
 - Woodpeckers of Maharashtra
 - Sparrows of India
 - 'Support Efforts for Sparrow Conservation'



Promotional Activities

- **Mission LiFE Initiatives:** Promoted plastic pollution awareness, wetland protection, and sustainable lifestyle practices, including an online photography competition on eco-friendly Ganesh idols and decorations during Ganesh Chaturthi 2025.
- **Public Exhibitions & National Fairs:** Deployed interactive awareness stalls and showcases at:
 - Global Wildlife Fair 2025
 - State Level Pakshimitra Sammellan
 - Indian Society of Landscape Architects (ISOLA) exhibition at Jio World Convention Centre, Mumbai (demonstrated the *Birdle* app and promoted BNHS membership)
 - National exhibitions and Van Melas at New Delhi, Kota, and Jaipur
 - Thane Municipal Corporation World Environment Day celebration (June 2025)
- **National Representation:** Participated in the EIACP National Evaluation Workshops (MoEFCC), the All India Coordinators' Meet (New Delhi), the Symposium on *India 2047 – Building a Climate Resilient Future*, and the National Workshop on *Wildlife Management in India – Visioning Ahead*.
- Celebrated World Environment Day, Hariyali Saptah, Wildlife Week, Bird Week, International Day of Forests, and World Ozone Day via nationwide quizzes, photo competitions, webinars, exhibitions, and tree plantation drives (including the “एक पेड़ माँ के नाम” campaign).

Collaborative Projects

- **Joint Outreach with SACON-EIACP:** Co-hosted bird identification and wetland ecology workshops at Maharshi Dayanand College, Mumbai, during Wildlife Week.
- **National Natural History Museum, Bhopal:** Jointly organized an online educational webinar on bird migration ecology and tracking methodologies.
- **Asian Waterbird Census (AWC) 2026:** Partnered with citizen science networks to organize AWC coordination meetings, bird counts, and public wetland monitoring drives.

Courses

- Field training course on 'Bird Identification and Basic Ornithology' conducted at Kihim, Raigad, covering avian identification keys, migration ecology, and digital eBird logging.
- Structured orientation and guided sessions on avian ecology, museum collections, and EIACP activities for visiting schools and colleges at BNHS Hornbill House, Mumbai.
- Nature trails and biodiversity modules under the *Seva Parva* initiative at BNHS Nature Reserve, Mumbai.

Summary

Operating as the EIACP Resource Partner on Avian Ecology under the Ministry of Environment, Forest and Climate Change, the centre executed nationwide environmental education, avian database enhancement, capacity building, and citizen-science programs from April 2025 to March 2026. Highlights included publishing three issues of *BUCEROS*, releasing seven thematic bird conservation posters, deploying two custom mobile applications (*Birdle* and *Vulture Data Collection App*), and integrating 2,242 new references into the DRC portal. Outreach centered on Mission LiFE priorities, nature trails under the *Seva Parva* initiative at BNHS Nature Reserve, field training sessions in basic ornithology, birdwatching walks (Bhandup Pumping Station, TS Chanakya), and extensive representation across high-level national symposia and public exhibitions.

Ecological Restoration of Kihim Talav

Project Duration: 2025–26

Partner Institutions: Transweigh (International) Pvt. Ltd., Mangrove Cell (Maharashtra Forest Department), Raigad District Administration, Zilla Parishad Raigad, NMIMS, and local educational institutions

Supported by: Transweigh (International) Pvt. Ltd.

Team members: Mr Nandkishor Dudhe (Project In-Charge) and Mr Rohan Chavan (Project Associate)

Location: Kihim Village, Alibag Taluka, Raigad District, Maharashtra (*Surveys and activities also covered Kamath, Akshi Beach, and Satirje*)

Project Highlights:

- Unified lake restoration, mangrove habitat protection, developed the Dr Sálim Ali Nature Interpretation Centre (NIC), and integrated environmental outreach into a cohesive village-scale conservation framework.
- Completed ecological layout planning, baseline biodiversity documentation, and KML mapping in collaboration with the Mangrove Cell (Forest Department); successfully resolved technical delays to finalize the e-tender for fencing and site development, submitting the dossier for final execution approval.
- Collaborated with NMIMS to conduct community resource-dependence surveys in Kihim and Kamath; completed Asian Waterbird Census (AWC) counts at Akshi Beach (January 8, 2026) and Kihim Beach (January 9, 2025).
- Delivered three capacity-building workshops on bird identification and ecotourism (reaching college students and NSS residential campers), organized 11 school awareness programs, and recognized local volunteers through the Naturalist Training Programme.
- Dr Salim Ali Nature Interpretation Centre (NIC): The Dr Sálim Ali Nature Interpretation Centre (NIC) at Kihim is being developed to promote environmental education, biodiversity conservation and eco-tourism. During the reporting period, BNHS maintained regular coordination with the Zilla Parishad, Forest Department and District Administration to facilitate the completion and transfer of the Centre. The transfer process has progressed, but construction and administrative activities have been delayed due to funding constraints, pending documentation and land-record issues. BNHS will continue coordinating with the concerned authorities to resolve these issues and facilitate the completion and operationalization of the NIC.



- **Kihim Lake (Bhileshwar Lake) Restoration:** The Kihim Lake Restoration has undergone a series of administrative discussions, field-level coordination efforts, and official communications involving BNHS, the Water Department, Zilla Parishad, and the District Administration. Although initial delays were encountered due to funding constraints and procedural requirements, recent developments, particularly the initiation of the preliminary site survey, indicate positive progress. Chondi Gram Panchayat has received funding from Rashtriya Chemicals and Fertilizers Limited for the restoration of Lake.

Status/Summary for the Period

Originally initiated in 2023 as a lake rejuvenation project in partnership with Transweigh (International) Pvt. Ltd., the initiative expanded in 2025–2026 into the comprehensive 'Ecological Development of Kihim Village' program. Supported by the establishment of a BNHS regional project office in July 2025, operations spanned four key verticals: administrative advocacy for Bhileshwar Lake restoration, site preparation and tendering for the Kihim Mangrove Park with the Mangrove Cell, inter-agency legal facilitation to operationalize the Dr. Salim Ali Nature Interpretation Centre, and widespread community-based outreach. Although confronted with budgetary constraints, administrative delays, and land record regularizations, consistent inter-departmental coordination across the District Administration, Zilla Parishad, and Forest Department sustained steady progress toward long-term ecological restoration and community stewardship in coastal Raigad.

Way Ahead: e.g. activities—such as finalizing the NIC 7/12 land transfer, contractor execution of mangrove park fencing, and securing Zilla Parishad lake restoration budgetary sanction

PUBLICATIONS

Team: Vibhuti Dedhia, Assistant Director, Publications

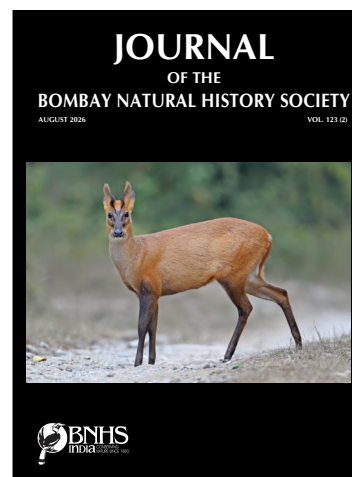
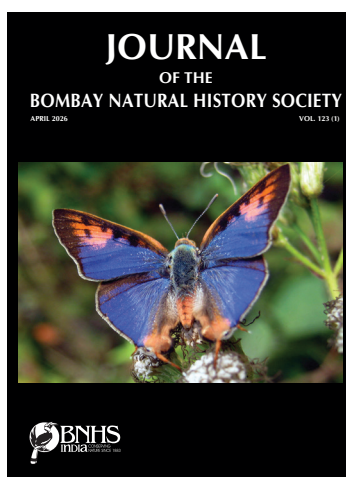
Sonali Vadhavkar, Publications Officer

Gopi Naidu, Consultant Designer, Sanchita Kadge, Assistant Designer

The Department continued its commitment to the dissemination of scientific knowledge and the promotion of biodiversity conservation in India. Throughout the reporting period, the Publications team actively developed and published new content, provided editorial and design support across the Society's other Departments.

Journal of the Bombay Natural History Society:

Published since 1886 the *Journal of the Bombay Natural History Society (JBNHS)* is the earliest publication of the Society. It remains one of the most respected and long-standing repository of knowledge in the domains of natural history, biodiversity, and conservation science. It serves as an essential resource for students, researchers, and conservationists across the Indian subcontinent and adjoining countries.

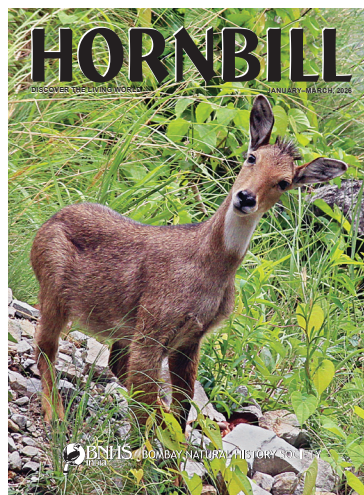
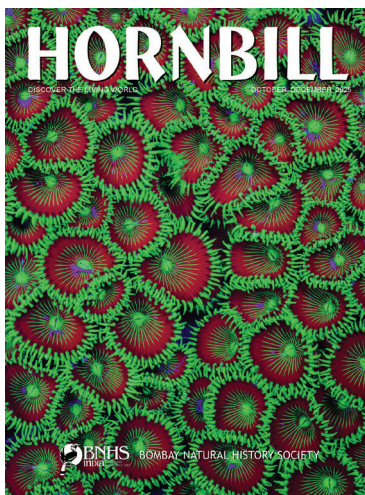


- a. During the period April 2025-March 2026, 17 Main, 2 New Descriptions, 1 Book Review, and 39 Miscellaneous Notes for Vol. 122(1–3) and 123(1) were edited, designed, and first published online on the *JBNHS* website.
- b. A total of 51 papers were later redesigned, proof read and published in the print copy of Vol 122 (1), (2), & (3) (between January and December 2025 of which 16 are main articles, 2 new descriptions, 33 miscellaneous notes, and one book review.
- c. Print copy of Vol 122(1), (2), & (3) were sent to press, printed, and delivered to the Membership Department for dispatch to subscribers.
- d. 7 papers Vol. 123 were first published online between January and March 2026.
- e. The Department continued to coordinate peer reviews, update databases, and manage technical queries with the support of Informatics Publishing Pvt. Ltd.

Hornbill:

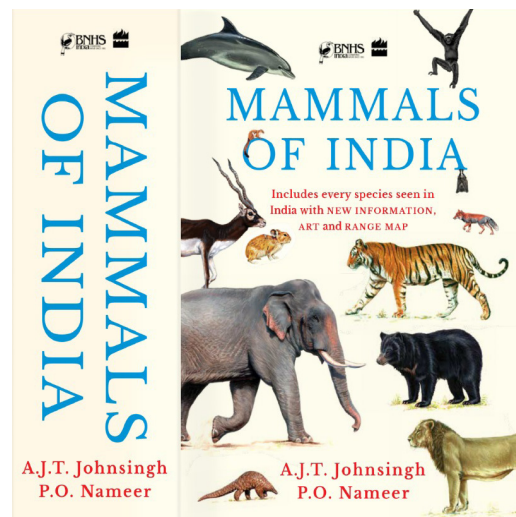
Launched in 1976 to commemorate Dr Sálím Ali's 80th birthday, *Hornbill* remains a key communication tool for BNHS members. It presents conservation and natural history stories in accessible, non-technical language, and serves as a platform for members to share their observations and insights.

- a. During the period April 2025-March 2026, four issues of the *Hornbill* – April-June, Jul-Sep & Oct-Dec 2025, and Jan-Mar 2026 were published.
- b. The print and digital copy of all the four issues were delivered to the Membership Dept for distribution to members.



Books:

Digitization: The Department has undertaken the task of digitizing select titles of the Society that cannot be reprinted through contemporary methods. In the reporting year, we have undertaken the digitization of the 'Handbook of the Birds of India and Pakistan'. During the period 2025-2026, scanning of Vol1–10 has been completed, proofreading of Vol 4–5 is underway, and proofreading of Vol 1–3 has been completed.



Existing Titles Reprinted:

- The Book of Indian Birds by Sálim Ali (English)
- Bharatna Pakshiyon by Ashok Kothari (Gujarati translation: The Book of Indian Birds)
- The Book of Indian Trees by K.C. Sahani
- Completed scanning of all 10 volumes of the monumental Handbook of the Birds of India and Pakistan by Sálim Ali and S. Dillon Ripley (proofreading for Volumes 1–3 completed; Volumes 4–5 underway). Updating and Printing the Ten-Volume Handbook of the Birds of India and Pakistan is supported by TVS MOTORS LTD.

Titles under preparation:

- Mammals of India* by A.J.T. Johnsingh and P.O. Nameer (pre-publication offer to book copies of the book was announced)

Others

Besides developing educational material for academicians and nature enthusiasts the Publications Department lends editorial and design support (including three regional languages) to the other Departments (Research, Administration, Accounts, Programmes, CMD, Director Office) of the BNHS for their publications (scientific, popular, and others).

Natural History Collection Department 2025–2026

Supported by: Directorate of Archaeology and Museums (DOAM) Government of Maharashtra
Department of Cultural Affairs

Collections Managing team:

Dr. S.R. Chandramouli, Curator, Mr. Vithoba Hegde, Senior Zoological Assistant, Mr. Vinod Patil, Junior Zoological Assistant, Ms. Pooja Patil, Field Zoologist, Mr. Shyam Jadhav, Collections Assistant, Ms. Priyanka Das, Senior Entomologist, Mr. Gaurang Tawade, Junior Entomologist

The BNHS Natural History Collection Department holds a scientific repository of approximately 150,000 biological specimens of rare and threatened fauna spanning present-day India, Pakistan, Afghanistan, Nepal, Bhutan, Myanmar, Thailand, Bangladesh, Iraq, and Iran. Designated as a ‘National Faunal Repository’ under the Biological Diversity Act 2002 by the Ministry of Environment, Forest and Climate Change (MoEF&CC), Government of India, the department has four five primary divisions: Invertebrates, Fishes, Amphibians & Reptiles, Birds, and Mammals. The collections serve as an indispensable reference resource for major national and international research institutions, including the Wildlife Institute of India (WII), Indian Institute of Science (IISc), Zoological Survey of India (ZSI), Smithsonian Institution, Natural History Museum (London), IISER Bhopal, and Flame University.

Table 1: Total Collections at BNHS’s Natural History Collection Museum

Sr. No.	Taxon	Number of Type specimens	Approx. Number of Specimens
1	Mammals	06	20000
2	Birds	65	30000
3	Bird eggs	—	5500
4	Reptiles	242	7250
5	Amphibians	485	5259
6	Fish	15	2000
7	Insects	245	70000
8	Scorpions and Spiders	20	579
9	Other Invertebrate	10	10000

To streamline visitor management and research access to the BNHS Natural History Collections, an online visitor access system was introduced during the reporting period. The digital access platform includes

standardized visitor request forms, research access categories, institutional guidelines, and service-related information for researchers, students, educational groups, and general visitors.

The system was developed to improve accessibility, maintain systematic visitor records, facilitate appointment-based access, and support efficient coordination of collection visits and research-related activities. The following visitor statistics and category-wise analyses summarize the utilization of the collections facility during the reporting period.

Over the last year, The museum continued to attract visitors from diverse educational and public backgrounds during the reporting period. Visitor participation was recorded across multiple sub-categories including individual visitors, college students, school students, and institutional groups.

The museum and collections facility received visitors from multiple professional and educational sectors during the reporting period, reflecting its growing role as a centre for biodiversity education, academic research, and institutional engagement. Visitor categories included general public and educational groups, academic researchers and scholars, government and institutional representatives, as well as BNHS members.

Academic researchers and scholars constituted the largest visitor category (52.9%), highlighting the continued scientific importance of the collections for specimen-based research, taxonomic studies, and reference work. General public and educational visits accounted for 35.3% of the total visitors, demonstrating sustained interest among students and educational institutions in natural history collections and museum-based learning. Government and institutional visits represented 11.8% of the recorded visits, including trainees and officials associated with forest, conservation, and allied sectors.

The diversity of visitor categories reflects the increasing utilization of the collections for research, education, training, and scientific outreach activities undertaken by the institution. The majority of the visits were contributed by college students (50%), followed by school student groups (33.3%), indicating strong engagement from the academic community and educational institutions. Individual visitors accounted for 16.7% of the total visits recorded under this category. In addition, students belonging to different age groups from various schools and colleges actively participated in museum visits and educational interactions, with the total number of student visitors exceeding 200 within a span of six months. The data reflects the growing interest in natural history collections, biodiversity education, and museum-based learning activities among students and the general public.

These visits provided participants with opportunities to engage with scientific collections, understand specimen preservation and digitization processes, and gain exposure to biodiversity research and conservation initiatives undertaken by the institution.

Around 11 specimens of amphibians, including 3 type specimens, were received from researchers. The digitization project is undergoing work mainly on uploading post-processed images and relevant metadata on the portal, for the release of the Museum's website as soon as possible.

Collection staff carried out all the routine maintenance, curation work, including cleaning of and curation of specimens, labels, and purchase and Licenses for spirit (RS) and Storage License were renewed for the year 2025-26. addition of required chemicals. Also, while doing maintenance, we also conducted annual specimen verification for the taxa's amphibians, reptiles, and snakes, and made notes of specimens yet to be received from specific researchers or scientists. Accordingly, in the name of respective personnel, emails were drafted. This exercise was conducted to make sure specimens reach the national repository on time.

In addition to the annual verification and maintenance, under the project **Maintenance and Curation of Museum Collections** – Bombay Natural History Society, India project, funded by Directorate of Archaeology and Museums (DOAM) Government of Maharashtra Department of Cultural Affairs, the installation of the Compactor unit is completed.

All expenditures have been recorded and are reflected in the submitted Utilization Certificate or the financial year 2025-26. The deployment of funds has resulted in measurable improvements in the functioning of the Collections Department:

- It will enhance the preservation quality of biological specimens once the installation of the compactor unit completes.

- Improve organization and accessibility of collections.
- Strengthen capacity for scientific research and reference.
- Increase efficiency in handling and maintaining specimens.

These outcomes directly contribute to the long-term sustainability and scientific value of the collections.

The facilities and resources established under this funding will continue to be leveraged for:

- Supporting ongoing and future research in taxonomy, ecology, and conservation
- Facilitating access to researchers, students, and collaborators
- Enabling digitization and database development for collections
- Strengthening institutional capacity for biodiversity documentation

The investments made are expected to yield long-term benefits by enhancing both the quality and usability of the collections.

Future Plans

The next phase will involve the systematic transfer and reorganization of the collections into the new compactor cabinets. Simultaneously, updated catalogues and inventory records will be prepared to enable easier retrieval, reference, study, and research on individual specimens as well as specific taxonomic groups. BNHS will also focus on displaying a few unique specimens for the training purpose.

Highlights for the reporting period

- **Infrastructure Upgrades:** Completed the installation of a high-density Compactor Unit under the project *Maintenance and Curation of Museum Collections*, funded by the Directorate of Archaeology and Museums (DOAM), Department of Cultural Affairs, Government of Maharashtra.
- **New Specimen Accessions:** Received and accessioned 15 amphibian specimens, including 8 type specimens, deposited by researchers.
- **Curatorial Maintenance:** Conducted systematic chemical treatment, relabelling, fluid top-ups, and specimen preservation; successfully renewed statutory purchase and storage licenses for Rectified Spirit (RS) for 2025–2026.
- **Annual Specimen Verification:** Carried out annual physical inventory audits across amphibians, reptiles, and snakes; drafted and issued formal communications to external researchers to ensure the timely return and deposit of pending specimens into the National Repository.
- **Digitization:** Advanced museum digitization workflows, focusing on image post-processing and metadata population for the forthcoming launch of the collections web portal.

Conclusion

The funds allocated to the Collections Department have been utilized effectively and for the intended purposes. The improvements achieved will significantly contribute to advancing maintenance and curation of specimens at the Natural History Collections Department for further research, conservation, and knowledge dissemination activities at BNHS.

Digitization of Natural History collection at BNHS

Supported by: MMRDA and CIDCO

Location: Hornbill House, BNHS, Mumbai

Project Duration: 2018 – 2028.

Team members: Mr. Deepak Rajanna (IT Expert & Database Manager), Dr. S.R. Chandramouli (Curator & Project Investigator w.e.f 17/6/2026), Ms. Pooja Patil (Field Zoologist), Mr. Vedant Sawant (Junior Project Fellow)

Project highlights: Digitizing mammal, bird, reptile, amphibian, insects, fish, bird egg specimens and old record records, registers, cards and data sheets from the collection of BNHS and collating associated metadata to bring it under public domain as a research and educational tool.

Item count by Collection – Media count				
Collection	Specimen count	Specimen with images	Total image count	Unique species
Birds	27,062	559	1,647	1,232
Mammals	12,692	199	954	286
Bird Eggs	2,171	73	91	535
Total	41,925	831	2,692	1,607

Summary for the period April 2025-present:

The digitization of the BNHS Natural History Collections continued extensively during the current reporting year with sustained efforts towards high-resolution imaging, metadata standardization, archival data management, and digital accessibility. The ongoing project aims to systematically digitize the institution's vast collection comprising over 1,50,000 specimens belonging to diverse taxonomic groups including mammals, birds, bird eggs, amphibians, reptiles, insects, fishes, and select marine invertebrates.

During the year, the digitization team continued photo-stacking, image post-processing, cataloguing, and metadata verification of priority specimens across multiple taxonomic groups. Previously digitized collections, including bird egg specimens, reptile and amphibian type specimens, and rare mammal and bird specimens, underwent further quality assessment, data validation, and integration into the digital database system. Multiple-angle imaging and stack processing were continued to ensure accurate representation of morphologically significant features for future taxonomic and research applications.

The digitized specimen database and associated image repository are presently being integrated into the institutional e-museum platform developed in collaboration with IT experts. The portal has now entered the internal testing and standardization phase and is currently accessible to institutional staff for workflow review, metadata verification, and system evaluation prior to phased public and member access.

In addition to specimen digitization, ongoing efforts were undertaken for verification and organization of historical collection records and accession-related data. The team also continued supporting the digitization and preservation of archival bird ringing records from different regions of India to facilitate long-term data accessibility and research use. Regular data backup, file organization, and standardization procedures were carried out throughout the year to ensure digital preservation and efficient retrieval of collection information.

Funders: MMRDA and CIDCO

Way ahead: The digitization website, developed in collaboration with IT experts for collection data management and accessibility, has now been released for internal staff use as part of the testing and standardization phase. The platform facilitates the systematic uploading, verification, and management of specimen images and associated collection data.

At present, access to the portal is restricted to institutional staff for workflow testing, data validation, and quality assessment. Following the completion of the internal review process and system refinements, the platform will subsequently be made accessible to members in a phased manner.

The portal is currently accessible at: <https://museum.bnhs.org/login>

LIBRARY AND INSTITUTIONAL ARCHIVES

Team Members:

Gouri Uchgaonkar Assistant Librarian, Ankush Pimpalkar Assistant Librarian,
Chandahas Mahakal Library Attendant

The Library & Archives Department serves as a premier repository of India's documentary and scientific heritage in the fields of natural history, wildlife biology, and environmental conservation. Its holdings comprise an invaluable array of rare books, peer-reviewed scientific publications, historical institutional reports, archival correspondence, photographs, and early cinematographic records. Prominent among these are the Dr Sálím Ali Collection and the E.P. Gee Collection, which chronicle over a century of pioneering ecological research and conservation milestones across the subcontinent. The primary mandate of the BNHS Library is to systematically curate, preserve, and provide access to these historical assets, catering to BNHS scientists and members, visiting scholars, university researchers, students, and conservation practitioners.

- **Present Holdings:** 25,525 Books, 4,950 Bound Volumes, 35 Subscribed Journals, 186 Dissertations/Theses, and 2,152 Historical Scientific Reports.
- **Procured and Donated Books:** Procured 13 environmental volumes and integrated 724 donated volumes (including Dr Ketaki Marthak (3 books), Mr Kamlesh Gandhi (6 books), Cdr.JVK Unnithan (8 books), Dr Bharat Bhushan (18 Books), 689 donated by Ms Shakuntala Indu Bharwani).
- Regularized catalogue records via the online OPAC portal. Users can access and browse the library collection through the online catalogue available at the BNHS Library OPAC.
(<https://libopacbnhs.itsinformatics.com>)
- **Archival Digitisation:**
 - Institutional documents: Scanned and processed 388 BNHS Reports, 90 e-reports, 15 rare volumes, and 17 academic theses.
 - Dr Sálím Ali Heritage Archives: Preserved 506 domestic letters, 232 international letters, 76 official records, 99 press clippings, 39 radio talks, 9 field diaries, 2,091 historical glass slides/photographs, 36 archival films, and 2 recorded oral history interviews.
- **Visitors:** Hosted more than 150 participants, students, and research scholars during Open Library Week (2–6 February 2026).
- **Outreach Initiative:** The BNHS Library organized Open Library Week from February 2–6, 2026, drawing over 150 students, researchers, and nature enthusiasts. Visitors explored rare archives, lithographs, and the personal collections of Dr Sálím Ali and E.P. Gee. The program featured guided tours, thematic exhibitions, and open access to wildlife and botanical resources. Beyond boosting academic engagement and reading interest, the successful initiative expanded library memberships and deepened research outreach across Mumbai colleges.

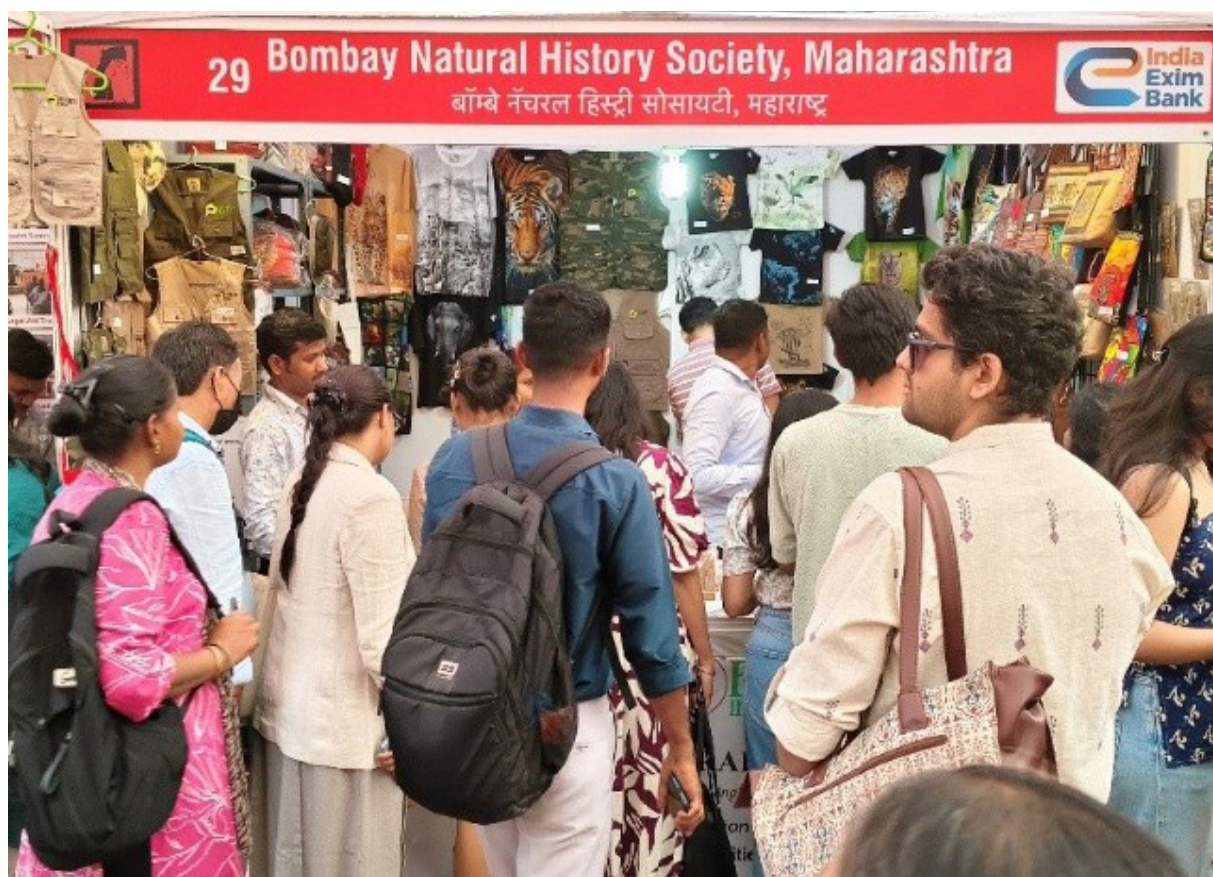
CENTRAL MARKETING DEPARTMENT (CMD)

The primary objective of the Central Marketing Department includes the development of new products, the sale and distribution of BNHS publications, membership promotion, fundraising through donations, and organizing exhibitions and awareness programmes.

Team Members: Sandesh Kadam, Archana Sonawane and Amzad Hussain

Key Highlights:

- **Events & Exhibitions:** Coordinated, set up, and managed stalls across 38 exhibitions, wildlife fairs, corporate corridors, and Van Mahotsavs across Mumbai, Pune, Amravati, Delhi, and Udaipur. Organized World Environment Day sales drives with 16 corporate entities.



- **Product Development & Sales:** Developed new nature-oriented awareness merchandise including Any Time Planners, Desk Calendars, Bamboo accessories, Wildlife T-shirts, and Lapel Pins. Dispatched publications and products via the BNHS Hornbill House Sales Counter, BNHS Website, Amazon, and Mystore (ONDC Network).
- **Corporate Partnerships:** Recruited 6 new Corporate Members: MSPL Limited, RPG Foundation, Maharashtra Hybrid Seeds Co., Harrier Information Systems, Heritage River Journeys, and Matix Fertilisers. Secured sponsorship support for the 2025–2026 Product Catalogue and corporate advertisements for *Hornbill*.

The Central Marketing Department continued to play a significant role in promoting BNHS activities through product development, exhibitions, fundraising, corporate partnerships, and publication sales. The support received from members, corporates, and well-wishers greatly contributed towards strengthening BNHS conservation and awareness initiatives during the year.

BNHS Conservation Education Centre (CEC), Mumbai

Team Members:

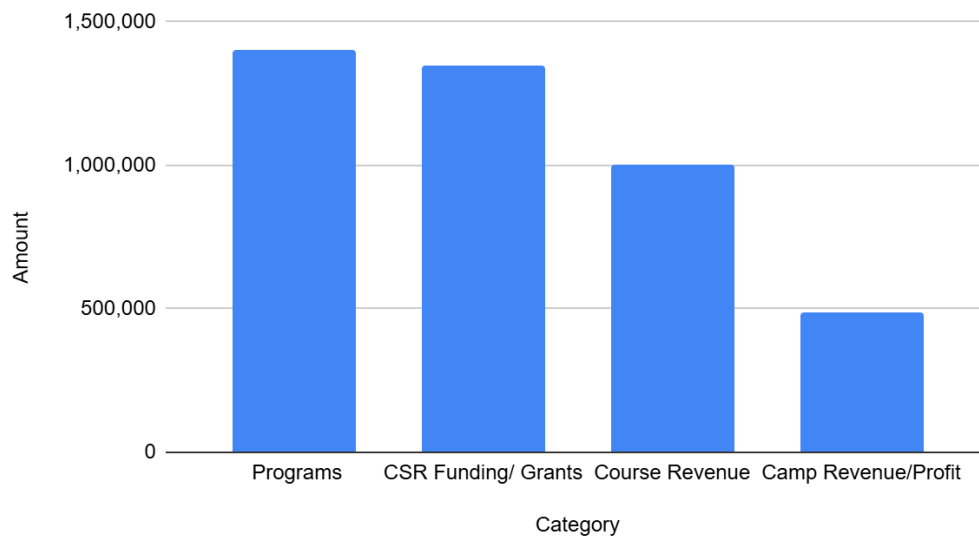
Centre In-Charge : Aqsa Majgaonkar

Education Officer: Aqsa Majgaonkar, Kimaya Gajare

Technical and Administrative Support: Prakash Ghadshi, Dilip Giri

CEC Mumbai continued its work of building environmental awareness and conservation action through experiential learning, outreach and field-based education. Across 2025–26, the Centre functioned as a space where students, teachers, members, communities and other participants could engage directly with biodiversity and conservation.

Amount vs. Category

**Object**

- Promote environmental awareness and conservation ethics.
- Provide experiential and field-based learning.
- Engage communities and institutions.
- Strengthen conservation education frameworks

Key Highlights:

- **Visitor Footfall & Engagement:** Recorded a total footfall of 5,495 visitors (4,426 non-members and 1,069 BNHS members) through educational campus trails, public walks, and specialized events, with peak attendance in July, December, January, and February.
- **Nature Camps & Specialized Field Programs:** Executed experiential biodiversity camps across key ecosystems:



- *Goa Birding Camp*: Focused on Western Ghats avifauna (Oriental Dwarf Kingfisher, frogmouths, hornbills).
- *Sattal–Pangot*: Himalayan birding and structured ecology discussions.
- *Bharatpur–Chambal*: Wetland and riverine birding covering migratory waterfowl and Indian Skimmers.
- *Amboli Herpetology Camp*: Western Ghats herpetofauna surveys focusing on the Malabar Gliding Frog, Amboli Toad, and Malabar Pit Viper.
- **Hybrid Courses & Capacity Building**: Conducted structured hybrid certificate courses combining online webinars, expert mentorship, and field camps in Ornithology, Botany, Herpetology, and Butterfly Studies.
- **Teacher Training & Institutional Learning**: Delivered interactive educator workshops focused on experiential pedagogy, activity-based nature education, and linking curriculum concepts with field ecology.
- **Public Events & Thematic Walks**: Organized Earth Day initiatives, monsoon biodiversity walks, insect trails, and community nature walks at the BNHS Nature Reserve.
- **CSR Partnerships & Financials**: Received CSR grant support of USD 12,450 from BlackRock under the *Promote Environmental Conservation* project (Project Code: 552-FC); generated a total reported revenue of 42,40,558 through programs, hybrid courses, CSR grants, and field camps.
- **Innovations & Improvements**: introduced a more discussion-oriented learning approach, strengthened pre-camp communication, expanded the use of eBird and other digital tools, and worked to improve programme delivery and participant experience.
- CEC recorded a **total reported revenue of 42,40,558**, comprising programme revenue, course revenue, CSR funding and field camp profits. Overall, the year reflected continued growth in experiential education, biodiversity engagement and conservation outreach, with CEC aiming to further strengthen advanced field programmes, research-linked education and long-term conservation engagement.

Way Ahead:

Expand advanced-level field programs, integrate research datasets and digital technologies into educational modules, cultivate long-term alumni and participant engagement, and build structured, progressive conservation learning pathways.

On a War Footing: Biodiversity Monitoring and Conservation with the Indian Army

Project Duration: Long-term (Phase 1: 2022–2025 completed; Phase 2: 2025–2028 proposed)

Supported by: The Habitats Trust (THT)

Team members:

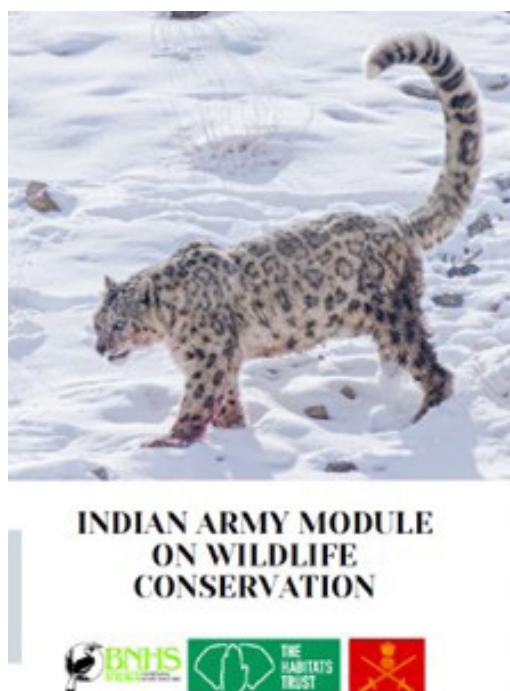
Principle Investigator: Mr Niaz ul Hassan (up to October, 25) | Mohd Raza, Ph.D. (December, 2025 onwards)

Researcher and Project Biologists: Ms Prakruthi, Mr Marmagaya (Researcher)

Technical and Administrative support: Mr Arief Ahmed Khan (Para Vet), Mr Sarfaraz Ahmad (Para Vet), Mr Mohd Hassan (Field Assistant), Mr Nawang Gailson (Field Assistant), Mr Akhtar Hussain (Animal Handler), and Mr Mohd Hassan (Mir) (Animal Handler)

Principle Investigator: Mohd Raza, PhD

Location: Changthang, Nubra, and adjoining protected areas (Hemis National Park, Karakoram Wildlife Sanctuary, and Changthang Wildlife Sanctuary) in Leh District; Drass and Suru Valleys in Kargil District, Union Territory of Ladakh.



Project Highlights:

- **Curriculum Integration:** Completed and finalized the comprehensive training module on environment, biodiversity, and climate change for the Indian Army training curriculum, incorporating remote sensing, wildlife census methods, and field identification protocols.
- **Free-Ranging Dog (FRD) Management & Animal Birth Control (ABC):** Sterilized 2,069 free-ranging dogs across Ladakh in collaboration with the Animal Husbandry Department (AHD) and Indian Army units—including 1,032 around Leh, 567 near Hemis National Park, 267 in Nubra, and 204 in Changthang.
- **Endangered Wildlife & Threat Monitoring:** Conducted field surveys monitoring Snow Leopard, Brown Bear, Himalayan Ibex, Tibetan Wolf, Pallas's Cat, Eurasian Lynx, Tibetan argali and sympatric ungulate populations; documented severe FRD conflicts (5–6 dog bite cases annually per army unit in Drass and pack chases targeting brown bears with cubs); sighted 21 bird species in Suru Valley (including Yellowhammer and Rufous-backed Redstart).
- **Waste Management Mitigation:** Operationalized the bio-digester unit at the Drass Army camp in coordination with EnviCare engineers to curb open food-waste provisioning to feral packs.
- **Strategic Partnerships & MoUs:** Executed an MoU with the University of Ladakh for collaborative high-altitude field studies; submitted a draft MoU to prepare Management Plans for Changthang and Karakoram Wildlife Sanctuaries; established army nodal coordination with the 56 Mountain Division (Drass) and 14 Corps HQ (Leh).
- **Outreach & Awareness:** Conducted conservation awareness drives for border troops along the LoC/LAC, career guidance at Govt. Higher Secondary School (Silmo), and co-organized Wildlife Week 2025 in Kargil.

Summary for the Period:

Operating along sensitive trans-Himalayan border frontiers, this long-term initiative partners with the Indian Army to institutionalize conservation stewardship, monitor threatened fauna, and mitigate critical ecological threats across Leh and Kargil districts. During the reporting cycle, the project completed a customized army environmental training module, carried out intensive wildlife and feral predator surveys, executed large-scale ABC camps sterilizing 2,069 free-ranging dogs across military stations and protected areas, and operationalized food-waste bio-digestion units. The team also concluded the Phase 1 technical report, submitted a Phase 2 proposal (2025–2028), and consolidated formal institutional frameworks with the University of Ladakh, the Wildlife Protection Department, the Animal Husbandry Department, and Indian Army commands.

Publications:

Final Technical Report (2022–2025) and detailed GIS mapping database submitted to The Habitats Trust. Bombay Natural History Society. (2025). *On a war footing: Biodiversity monitoring & conservation with the Indian Army in Ladakh (2022–2025)*.

Way Ahead:

Roll out the finalized environmental curriculum across Indian Army training establishments. Execute a coordinated, Ladakh-wide systematic assessment of the free-ranging dog population to guide scaled ABC drives across forward outposts. Implement new awareness campaigns for incoming military regiments, secure approval to draft Management Plans for Karakoram and Changthang Wildlife Sanctuaries, and operationalize the second phase of the project (2025–2028).

Tadoba-Andhari Tiger Reserve Buffer Conservation Education Programme (Saving Leopard and Tiger Populations - SLTP)

Project Duration: April 2025 – March 2026

Supported by: Supported by: Born Free Foundation, In collaboration with: Tadoba-Andhari Tiger Reserve

Team members: Saurabh Dande (Education Officer, Central India),
Shashank Ladekar (Education Officer, SLTP), Charandas Shende (Driver cum Field Assistant)

Location: Buffer Zone of Tadoba-Andhari Tiger Reserve (TATR) and Chandrapur District, Maharashtra

Project highlights:

- Reached 2,800 students across 106 buffer-zone schools (56 primary, 29 upper primary, and 21 high schools) using structured modules including pre- and post-evaluations, biodiversity presentations, interactive nature games, and conservation documentary screenings (including Truth About Tiger).
- Established intensive engagement in 10 designated Ambassador High Schools, cultivating local student advocates to champion human–wildlife coexistence and forest protection within buffer communities.





- Collaborated with the TATR administration to conduct educational jungle safaris via Moharli, Khutwanda, and Kolara gates from 20 November 2025 to 30 April 2026, engaging 4,190 students and 323 teachers across 159 schools (including Ashram and Special schools) with experiential wildlife observations.
- Integrated conservation ethics with local cultural traditions by commemorating Wildlife Week, Bird Week, International Tiger Day, Pola Festival, and Nag Panchami to highlight the ecological roles of birds, reptiles, and apex carnivores.

Summary for the period:

The SLTP conservation education programme addresses rising human–wildlife interactions in the forest-agriculture mosaic buffering the Tadoba-Andhari Tiger Reserve, a stronghold for the Endangered Bengal Tiger (*Panthera tigris tigris*). Operating across 106 village schools, the project used classroom pedagogy, audio-visual screenings, and standardized knowledge assessments to evaluate and improve conservation literacy. In tandem, the ‘Chala Mazya Tadobala’ safari campaign provided thousands of rural students and teachers direct experiential exposure to tiger reserve ecosystems. Combined with outreach during traditional festivals and ecological observance days, the initiative engaged over 4,190 students and buffer-zone residents, reinforcing coexistence values and community stewardship around TATR.

Way ahead:

The future goal of the Satpuda Landscape Tiger Programme (SLTP) is to continue this awareness programme on a long-term basis. Every year, new students join the project and gain knowledge about wildlife conservation, human–wildlife coexistence, and the importance of tiger corridors. This continuous engagement will help nurture a new generation of environmentalists. By sensitising students from a young age, we aim to build a community that lives in harmony with nature and actively participates in conservation efforts. This long-term educational approach will help ensure a better future for both tigers and villagers across the Central Indian landscape.

Membership & Programmes Department

The Membership & Programmes Department of the Bombay Natural History Society (BNHS) continued to play a pivotal role in expanding community engagement and fostering a sense of belonging among members throughout the 2025–2026 fiscal year. The department delivered engaging, nature-focused experiences that foster environmental awareness and conservation consciousness across all age groups. A wide range of themed walks, educational events, and camps were conducted, enabling deeper public involvement in biodiversity appreciation and citizen-led science.

Membership Figures:

Please find below the Membership Figures for FY 2025-2026:

Category	Opening	Balance As of 31 March 2026
Life Membership	2483	2554
Annual Membership	464	273
Annual Membership 3 years	145	176
Annual Membership 5 years	118	92
Student Membership	123	53
Institutional Membership	7	9
Armed Forces Membership	1	1
Family (Life) Couple	450	450
Complimentary List-	2	2
Friends Of Bnhs (Silver)	0	2
Friends Of Bnhs (Gold)	0	5
Friends Of Bnhs (Platinum)	2	3
Life Foreign	82	84
Ordinary Foreign	0	0
Life (Saarc)	12	12
TOTAL	3889	3716

Given below are the comparative numbers for New and Renewal of Membership:

	2024-2025	2025-2026
New members	454	382
Renewals	205	127
TOTAL Members Gained	659	509

In the 2025-2026 period, membership gained has been 509. However, this includes New members: 7 corporate members, 4 institutional members and 39 Life. In addition to renewals of 4 institutional members and 3 ordinary members who converted to Life Members.

BNHS Membership at Pakshi Mitra Samelan

During the annual Pakshi Mitra Samelan (1st–2nd November 2025), the BNHS Membership Department set up a dedicated enrolment drive to engage avian enthusiasts and birdwatchers. This initiative successfully onboarded new members into the Society's network, expanding grassroots participation in bird conservation while providing delegates direct access to member benefits, scientific publications, and citizen science programs.

Members Programmes

Mumbai-based themed events—including Tree, Bird, Marine, Butterfly, and Flamingo walks—helped spread awareness of BNHS membership and its broader conservation work while actively engaging members.

Birds & Beyond: Exploring Indian Avifauna

A first-of-its-kind collaborative workshop was organised with the Sarmaya Art Foundation at Kala Ghoda. Participants explored historic BNHS taxidermy specimens alongside rare ornithological literature, including works by John Gould.

Sketching in the Forest Series

BNHS organised multiple wildlife illustration sessions during the year. These programmes demonstrated the growing popularity of art-based conservation engagement.

At the Point Calimere Centre, a specialized camp offered members hands-on bird ringing and tagging experience. Participants observed migratory species up close and interacted with BNHS researchers to learn bird migration study methodologies and long-term monitoring techniques firsthand.

Member-led community walks:

Led by members like Girish Gopalarao (Bengaluru) and Ranjeet Rane (Pune), grassroots walks at Cubbon Park and Vetal Tekdi promoted urban biodiversity documentation and public outreach. Members contributed valuable field observations and photos to the BNHS Newsletter, advancing nationwide conservation.

Members conduct Asian Waterbird Census (AWC)

As part of BNHS's wetland conservation efforts, members conducted the Asian Waterbird Census (AWC) across key Mumbai biodiversity hotspots. The initiative provided valuable citizen science data for long-term monitoring while highlighting the ecological importance and climate resilience of Mumbai's urban wetlands.

SGNP Bird Monitoring Programme

A total of 11 systematic counts were conducted to document avian diversity and seasonal patterns in the park. The total number of bird species recorded during the SGNP Bird Monitoring Programme till the end of FY 2025–26 stands at 250 species. During the year 10 new species were added to the SGNP Bird Count list.

The program has successfully tracked migration patterns and guided conservation efforts for SGNP, highlighting its critical role as a stopover and winter habitat for many bird species.

BNHS Online Talk Series for Members:

To keep members actively engaged and informed, BNHS organized a series of online lectures featuring BNHS scientists and expert conservationists. These interactive sessions provided valuable insights into ongoing research, critical wildlife conservation initiatives, and biodiversity protection strategies across India.
