



Nature Mates-Nature Club

# Annual Report

2023-2024



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**MISSION STATEMENT:**

At Nature Mates, our mission is to conserve and protect wildlife habitats, promote biodiversity, and foster environmental stewardship through education, advocacy, and community engagement.

**INTRODUCTION:**

Welcome to the Nature Mates-Nature Club’s Annual Report for the fiscal year 2023-2024. This report highlights our achievements, challenges, and the impact of our initiatives in the conservation and protection of wildlife and their habitats.

**PROGRAMS AND INITIATIVES**

**1. Habitat Restoration and Conservation:**

**Tree Transplantation and re-plantation:** Implemented tree transplantation in Rabindra Sarovar Lake on 20<sup>th</sup> August 2023, of 1 Putranjeeva Tree. Implemented transplantation in Dumurjola stadium on 3<sup>rd</sup> August 2023, of 1 Krishnachura Tree and re-plantation of 1 Jam Tree with 100% success.



**Santragachi Jheel Cleanup**

Started in 2011, we have been cleaning the waterbody before winter arrives and migratory waterbirds enter the wetland. Lake cleaning and vegetation management activities in the wetland is implemented by us in collaboration with Howrah Municipal Authority and funded by the West Bengal Biodiversity Board. Every year during the winter season, Asian Waterbird Census is conducted for the wetland, this year the total number of waterbirds to 5703. From its decline to less than 700 in January 2018, it has made a comeback in Santragachi.





**Fruit Tree and Shelterbelt Plantation:** Planted over 1000 native trees in coastlines of Sundarban in collaboration with Wildlife Conservation Trust and Uttarayan Wildlife, to rebuild the coastline & resilience as well as to minimise the effects of natural calamities on communities living near the coastline. Along with that local fruit trees were distributed to 500 families to establish sustainable food sources. The project benefitted a total of 4000 beneficiaries, encompassing both direct and indirect beneficiaries.



## 2. Wildlife Conservation and Research:

### Butterfly Conservation

#### i) Rajabhatkhawa Butterfly Conservatory:

A total of 4564 adult butterflies emerged in 2023-2024. A total of 53 species of butterflies emerged from Rajabhatkhawa Butterfly Conservatory.

*Delias hyparete*- Painted Jezebel was reared in Rajabhatkhawa Butterfly Conservatory for the first time.

ii) *Ecotourism Park Butterfly Garden*: A total of 8200 adult butterflies emerged in 2023-2024. A total of 54 species of butterflies emerged from Ecotourism Park Butterfly Garden.

### Surveys-

i) Padmaja Naidu Himalayan Zoological Park: A survey of Moths and Butterflies was carried out for the duration of one year and a comprehensive checklist was created elucidating the diversity of the area.

ii) Mahananda Wildlife Sanctuary: A year-long survey was carried out for the study of butterflies in the sanctuary and creation of a checklist.

iii) Senchal Wildlife Sanctuary: A year-long survey was carried out for the study of butterflies in the sanctuary and creation of a checklist.

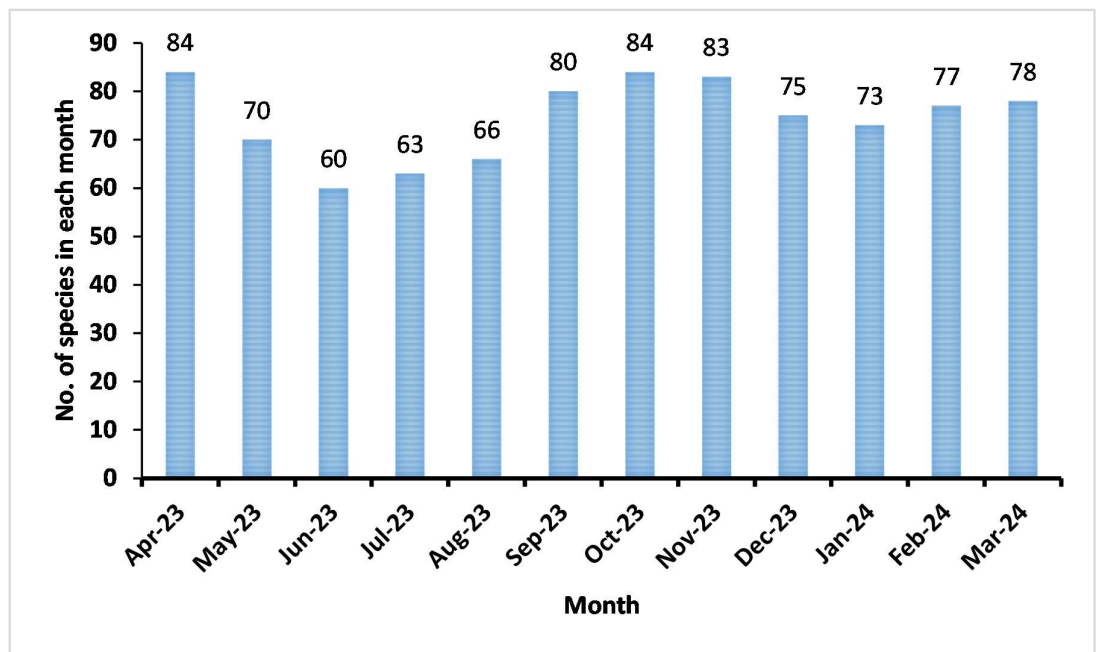
iv) West Kameng District: Many areas of the West Kameng District, Arunachal Pradesh have been surveyed to compile a checklist of butterflies. The areas surveyed include Eaglenest Wildlife Sanctuary, Ramalingam, Singchung Bugun Village Community Reserve, Singchung and Shergaon.

## Pakhibitan- Bird Sanctuary

Pakhibitan, a small bird sanctuary, aids in protecting bird populations and habitat conservation. Pakhibitan or 'Bird's House' is located in the Ecopark Newtown, a project by WBHIDCO and maintained by Nature Mates.



- A total of 141 species of birds belong to 18 orders and 50 families recorded from April 2023 to March 2024.
- Among these observed birds 96 species were Resident, 29 species were winter migrant, 13 species local migrant, two summer migrant and one passage migrant. According to the IUCN Red List the status of 139 species were Least Concern (LC), two were Near Threatened (NT). These two species were Alexandrine Parakeet and Red-breasted Parakeet.
- Throughout the year about 2000 visitors visited in this place. We provide field guides and resources to aid in recognizing different bird species.



Month-wise graphical representation of avian species recorded from April 2023 to March 2024

## Elephant Conservation Project

A joint initiative of Baikunthpur Division, Department of Forest, [SNAP Foundation](#) and [Nature Mates-Nature Club](#), through our Asian Elephant project we reclaimed forest land for restoration and to secure Elephant Movement area at Debgram Forest Range of Baikunthpur Division. Around 1500 seedlings were planted in Nepali Basti, Dabgram Range of Baikunthpur Division.



With Funding support from The Nature Conservancy and collaboration with SNAP Foundation, we installed fencing (Elefence) along 5 km stretch in Madhya Pradesh. We conducted 27 workshops over a span of 90 days with local people, to raise awareness about elephant behaviour, safe practices during encounters, and the importance of early warning systems, sensitizing around 1922 local people.

We have installed 40 early warning devices in Railway Tracks in Jalpaiguri district, the impact of which is given in the link below (has saved around 600+ elephants in a year).

<https://www.etvbharat.com/en/!state/elsesense-device-saving-elephants-from-getting-killed-on-tracks-big-hit-in-west-bengal-enn24022108141>

Currently with recent events of elephant death in railway tracks in Buxa Tiger Reserve (link below), we are collaborating with the forest department to install early warning systems in the railway tracks.

<https://www.telegraphindia.com/west-bengal/three-elephants-killed-as-goods-train-hits-them-in-bengals-alipurduar/cid/1982947>

## Hornbill Research and Conservation

Nature Mates-Nature Club in collaboration with Nature Conservation Foundation (NCF) initiated the hornbill research and conservation project in Northern West Bengal in Buxa Tiger Reserve in November 2017. Since 2017, we are working extensively in Buxa Tiger Reserve and since 2021 in Latpanchar, fringe village of Mahananda Wildlife Sanctuary.

At Buxa Tiger Reserve and Latpanchar, our work has largely focused on estimating hornbill population, monitoring hornbill nests and roost sites, understanding the vegetation structure and composition and studying tree phenology. In May 2021, we expanded our research and conservation work in the adjacent forests outside of Protected Areas (PA) in north Bengal, with a focus on Latpanchar.



Our team is currently monitoring a total of 33 hornbill nests now out of 39 known nests and 2 artificial nest boxes (installed by the Buxa TR management/WB Forest Department in early February 2024).

The highest count of Wreathed Hornbills (in roost) in one monitoring visit was 243 individuals which was observed in January 2024.

The highest count of Great hornbills in one monitoring visit was 26 individuals, observed in March 2024, of which majority of the birds were juveniles.

During the 2023 breeding season, hornbills in the Buxa Tiger Reserve witnessed an impressive 90% success rate in their breeding efforts. Within the reserve, our team has found a total of 27 active nests belonging to all four hornbill species (Great, Oriental Pied, Rufous-necked and Wreathed hornbill).

In February 2024, we also conducted a conservation action planning workshop for hornbills in Northern West Bengal to secure the conservation and well-being of hornbill populations, as well as their habitats in north Bengal and the trans-boundary landscape. The workshop was attended by representatives of different stakeholders such as the West Bengal Forest Department, representing the various forest divisions of north Bengal, scientists, researchers from 12 NGOs, community members, nature guides, and civil society representatives.

We conducted a one-day nature education programme for four schools of Buxa Tiger Reserve on 18th, 19th and 21st December of 2023. The programme was for Class 7 students of Jainti High School, Jainti; Agape Academy, Santalabari; Buxa Fort Nepali Junior High School, Buxaduar and Rajabhatkhawa High School, Rajabhatkhawa. We had a total of 60 students who participated from the four schools for the programme. Nature trail walks were conducted, during which, students were taken through the basics of observing birds, butterflies, other insects and trees around them and understanding about the diversity and services provided by all beings in the forest. Many activities are conducted to foster their connection with this natural world. Some of the activities include bird watching, creating a sound map of natural calls, tree hugging and demonstrating food chain through a game.



### 3. Education and Outreach:

- i. City Nature Challenge, 2023 and 2024: Nature Mates conducted the City Nature Challenge in Kolkata as a part of biodiversity documentation and citizen science initiative. This initiative was carried out by a number of cities all over the world, collaborated to share observations of nature. More than 500 people all over the city of Kolkata participated actively over a week from 28<sup>th</sup> April to 1<sup>st</sup> May 2023 and 26<sup>th</sup> to 28<sup>th</sup> April 2024.
- ii. Conducted Monitor Lizard (*Varanus* spp.) count for World Lizard Day 2023 celebration in the month of September. Participants from all over India took part in the event, there were overwhelming responses from every part of the country.
- iii. Dibang Valley Butterfly India Meet, 2023: We conducted a four-day event, Butterfly India Meet in Dibang Valley from 28<sup>th</sup> April to 1<sup>st</sup> May, 2023. This event brought together butterfly enthusiast from all over the World. We organized butterfly and moth watching events and the place was explored to find butterfly habitats. A checklist was also prepared recording all the observations of the event.



- iv. Van Mahotsav: Members of Rajabhatkhowa Butterfly Conservatory participated in hosting a stall at Van Mahotsav Fair organized by Forest Department. A large number of school students, local stakeholders and forest department staff were made aware about the butterfly conservation work ongoing in our organization and the importance of butterflies.





- v. Moth Week Celebration: We celebrated National Moth Week in Banabitan, Ecotourism Park, Sundarbans of West Bengal and Singchung, Shergaon of Arunachal Pradesh. A total of six events were organized by us during National Moth Week Celebration. Students were given a brief introduction on the life cycle of Lepidoptera. Moth screens were setup and students were introduced to a variety of moth species in all of the events.



- vi. Big Butterfly Month Celebration: Big Butterfly Month was celebrated for the very first time in Arunachal Pradesh. We organized a total of five events in Arunachal Pradesh namely in Singchung, Jigaon, Shergaon and Ankaling. One event each was organized at Ecotourism Park Butterfly Garden, Kolkata and Rajabhatkhawa Butterfly Garden. Approximately 1000 individuals participated for the various events organized in the duration of Big Butterfly Month celebration. The celebration of Big Butterfly Month included butterfly walks, discussions on butterfly biology and sit and draw competition.



- vii. Celebrated World Elephant Day: On 12<sup>th</sup> August 2023, Nature Mates celebrated World Elephant Day in Jalpaiguri district (Northern West Bengal) and in Bankura district (Southern West Bengal).

In Jalpaiguri, in collaboration with SNAP Foundation, we felicitated our Frontline Forest Staffs, Conservation Organizations and Individuals who have performed extraordinary commitment towards the protection of our National Heritage Animal. We have also



organized various cultural events, live quiz for school kids. 350+ students from 14 schools of Jalpaiguri were present along with teachers and forest staffs and official of Gorumara Wildlife Division, Jalpaiguri Division and Baikunthpur Division.



In Bankura, we distributed 200 umbrellas to forest officials who are working day and night in harsh weather on the occasion of World Elephant Day.



- viii. Nature Walks: Nature Mates in collaboration with the Department of Forest, Government of West Bengal conducted nature walks in Banabitan and Ecopark. School and college students attended these walks, the program received overwhelming response with over 1000 students benefitting directly.
- ix. We celebrated the Wildlife week through nature walk with school students and local kids in the "Field Workshop and Nature Study Camp" organised by [Eco-Club, Dept. of Zoology, SS Mahavidyalaya](#) at Sahaj Path, Danki Village, Amta, Howrah.

- x. Conducted quiz, elocution and sit-and-draw competition on the occasion of the Global Tiger Day, 29<sup>th</sup> July, 2023 in schools of Sundarban with over 60 students.



- xi. Nature Mates conducted its first Field Ecology Course from 23<sup>rd</sup> to 25<sup>th</sup> September, 2023 for ecology students. This immersive programme guided participants in using diverse field methodologies, wielding various instruments and tackling arising environmental challenges.



- xii. CSR activities: We conducted plastic cleanup drives at Maidan, Princep Ghat and Banabitan in association with Goodera, participated by corporate employees from EY, HDFC ERGO, DBS Bank, Marico, Tata Communications, etc. Over 300 participants collected around 50 kgs of plastic wastes from the city.





Through our “Gift a Tree” initiative, Nature Mates in association with Goodera conducted a seed pod making event. In this event the volunteers from Tata Communications made 120 sapling pods ready to be gifted.



#### 4. Trainings

- i. Training program on survey of lesser cat: Conducted on 9th September 2023 by Nature Mates, WWF and SHER, first time in West Bengal, organised by the Forest Department of Bankura, West Bengal. Over 100 forest staffs attended the training. A detailed theory and hands-on training session with the forest staffs was done.



- ii. Rajabhatkhawa Butterfly Conservatory:
  - Total of 12 training batches of Range officer and beat officer batches from Dowhill, Kurseong were trained.
  - A training batch of 10 students from IIFM, Bhopal trained at Rajabhatkhawa Butterfly Conservatory.
  - Railway driver and guard training batches from Zonal training centre, Alipurduar junction trained at Rajabhatkhawa Butterfly Conservatory.
- iii. Ecotourism Park Butterfly Garden:
  - Students from Derozio Memorial College and Ramakrishna Mission Residential College studying B.Sc in Environmental Science completed their Course on Animal Behaviour here.
  - Course on Conservation and Research for Masters students was completed here.

## 5. Wildlife Rescues

Urban areas are increasingly encroaching on natural habitats, leading to more frequent interactions between humans and wildlife. These interactions often result in wildlife requiring rescue and rehabilitation. Nature Mates is dedicated to mitigating these conflicts in the city of Kolkata and ensuring the safety and well-being of urban wildlife.

Urban environments host a surprising variety of wildlife. The most commonly rescued animals include:

- Birds (e.g., pigeons, sparrows, eagles, owls)
- Mammals (e.g., small cats, civets, squirrels, bats)
- Reptiles (e.g., snakes, turtles)

Each type of animal presents unique challenges and requires specific rescue and rehabilitation techniques.

### **Common Rescue Scenarios**

*Injured Animals:* Animals often get injured due to vehicle collisions, window strikes, or encounters with domestic pets.

*Orphaned Young:* Young animals are sometimes found orphaned due to parental death or separation.

*Entrapment:* Animals frequently become trapped in buildings, pipes, or other urban structures.

*Human-Wildlife Conflicts:* Situations where wildlife poses a threat to human safety or property.

*Eggs of Birds and Snakes:* Situations wherein we come in contact with abandoned eggs or eggs inside people's home.

### **Rescue and Rehabilitation Procedures:**

*Field Rescues:* Trained volunteers and staff respond to reports of animals in distress 24\*7, using nets, traps, and specialized equipment.

*Community Assistance:* Educating the public on how to safely contain and transport injured wildlife to rescue facilities, etc.

*Partnerships:* Collaboration with local authorities and other organizations for large-scale or complex rescues.

*Medical Care:* Initial assessment and treatment of injuries or illnesses is done by trained staffs.

*Recovery:* Providing a safe, quiet environment for healing, including proper nutrition and care.

*Transfer to Forest Department for complex medical situations:* Animals that require prolonged care and/or specialised attention are immediately sent to the nearest forest department.

*Release:* Once rehabilitated, animals are released back into suitable habitats, ideally close to where they were found to maintain territorial familiarity.

### **Community Involvement:**

*Education Programs:* During each rescue we educate and aware local people regarding the significance of snakes in urban landscape, safely containing and reporting, etc.

*Volunteer Programs:* Opportunities for community members to participate in rescue operations, animal care, and educational outreach.

*Citizen Reporting:* Encouraging the public to report sightings of injured or distressed wildlife through our 24\*7 rescue number provided in our website.



Emergency Rescue Number: 9674233588



Images of few rescues in Kolkata

Wildlife rescue compiled for the year 2023-2024			
	Mammals	Birds	Reptiles
Total no. of calls attended	7	16	16
Total Individuals Rescued	5	13	9
% of Successful Release & Rehabilitation	100%	92%	89%

## 6. Medical Camps

Nature Mates in collaboration with Tata Medical Center organised a never before heard of screening program in remote areas of Sundarban. It is an initiative to start with in Patharpratima block of Sundarbans in December 2023, wherein a team of doctors from Tata Medical Center volunteered for conducting a free screening and awareness camp on cancer especially for women. 42 women in total attended the camp of which 35 were screened of cervical and breast. It was a very successful awareness camp. Another camp was conducted in the month of February, 2024 in Sonatikori School, Haripal, a total of around 65 women attended the camp.



## 7. Conference

i) Student Conference on Conservation Science (SCCS-Bangalore): We participated in the Who's who in conservation event of SCCS-Bangalore. In this event we had discussions on butterfly conservation projects as well as other ongoing projects of Nature Mates-Nature Club such as Tree transplantation, Lesser Mammal conservation, Mangrove Plantation and Alternative Livelihood in the Sunderbans and with the participating organizations and delegates.



ii) First Asian Bird and Butterfly Meet, Gajoldoba: This was a 5-day event held in the Dooars landscape. This event was organized by Association for conservation and tourism and Tourism Department, Government of India. In this event international delegates from Bangladesh, Bhutan and Nepal were



present along with participants from all over India. In the duration of this event we took participants on butterfly walks. We had presented our works on butterfly conservation. The idea of ecotourism through butterfly conservation was also discussed with the participants.

iii) Committing towards conserving Hornbills, our Hornbill Project Manager, Shilpita Mandal presented her work on "Roosting patterns of hornbills in Buxa Tiger Reserve in the Indian Eastern Himalaya" at the 8th International Hornbill Conference in Thailand on the occasion of the International Biodiversity Day on May 2023.

iv) On 27th February 2024, we conducted seminar at Binnaguri Army Cantonment, in collaboration with SNAP Foundation and Gorumara Wildlife Division on tackling Human Wildlife Conflict in Northern West Bengal. Army Personnel's and Forest Department were present in the seminar and fruitful discussion on mitigating human-elephant conflict was discussed.

## 8. Advocacy and Policy

Nature Mates-Nature Club and Nature Conservation Foundation together with Zoo Outreach Organisation, IUCN SSC Hornbill Specialist Group, and CPSG, organized a three-day workshop focusing on Hornbill Conservation Action Planning in the enchanting landscapes of Northern West Bengal. NGOs, researchers, wildlife enthusiasts, Sikkim and West Bengal Forest departments, Indian Tea Association, and esteemed colleague from Bhutan's Ugyen Wangchuk Institute for Conservation and Environmental Research were also present for the workshop. The workshop was an initiative to come together and formulate action plans for hornbill conservation, policy level discussions were done.

# Hope for hornbill: State set to draft action plan to save 'farmers of forest'

Subhro.Niyogi@timesgroup.com

Pic courtesy: Nature Mates

**Kolkata:** Organizations, researchers, individuals specialising and interested in bird conservation and the state forest department have joined hands to prepare a conservation action plan for hornbills in north Bengal.

The state that leaps to mind when discussing hornbills is Nagaland due to the popularity of its annual Hornbill Festival. But, West Bengal has more species of the hornbills in north Bengal's Buxa forest, Gorumara and Mahananda wildlife sanctuaries and Neora Valley National Park, adjoining territorial forests of Jalpaiguri, Kurseong, Kalimpong and Baikunthapur. The five types of hornbills that are found in north Bengal are oriental pied hornbill, great hornbill, rufous-necked hornbill, wreathed hornbill and Indian grey hornbill.

Hornbills are distinct with large bills, often with horn-like structures on top called casques. They have pro-

## RESEARCHERS ROPED IN

### Species & their Bengal habitats

**Great hornbill** | Buxa, Gorumara, Mahananda, Darjeeling, Kalimpong

**Oriental pied hornbill**  
Lower elevation areas of Buxa, Mahananda, Gorumara

**Wreathed hornbill**  
Lower to mid-elevation forests of Buxa

**Rufous-necked hornbill**  
Higher elevation areas of Buxa, Mahananda, Neora Valley

**Indian grey hornbill**  
Rural landscapes and near towns in north Bengal



A rufous-necked hornbill

### Key traits

- > Large bills often with horn-like structures on top
- > Prominent long eyelashes
- > Can disperse seeds over long distances

minent long eyelashes and distinctive calls, often harsh and loud. They are known as "farmers of the forest" for their ability to disperse seeds over long distances.

"Of the five species found in Bengal, three — great, rufous-necked and wreathed hornbills — are globally threatened and listed as 'Vulnerable' on IUCN Red List. The

conservation action plan attempts to chart out strategies to ensure that hornbill species in the region are protected," said Arjan Basu Roy, principal investigator of the Hornbill Project of Nature Mates-Nature Club, in association with Nature Conservation Foundation (NCF).

Aparajita Datta from NCF, who is also the co-chair of the

IUCN Hornbill Specialist Group, pointed out that hornbills are indicators of the health of a forest ecosystem. Hornbills nest in already existing cavities of large trees and cannot make or build their own cavity. Hornbills also exhibit site fidelity with most pairs re-using the same cavity in the following breeding season. The pair selects a nest and cleans it together.

Nature Mates in collaboration with NCF, Zoo Outreach Organization, the IUCN Conservation Planning Specialist Group and the Hornbill Specialist Group organised a three-day workshop in Siliguri to chalk out the action plan to survey hornbill populations, protect and restore key forest habitats, nest and food trees, and work with other NGOs and local communities to generate awareness. The event was attended by forest department officials led by state assistant principal chief conservator of forest (wildlife), Ujjal Ghosh, besides 38 representatives from Sikkim, Assam, Tamil Nadu and Bhutan.

On October 2023, a Policy Level Workshop and Discussion session was conducted on "Co-Existence of People & Elephants in Madhya Pradesh, Policy Opportunity & Challenges" organized by Madhya Pradesh Forest Department, Madhya Pradesh Tiger Foundation Society and The Nature Conservancy in Van Bhavan, Bhopal, Madhya Pradesh. The workshop was attended by Madhya Pradesh Forest Department officials, Wildlife Trust of India, SNAP Foundation and Nature Mates. Policy level discussion on human-elephant conflict mitigation was discussed.



## 9. Events

On 9<sup>th</sup> December, 2023, we celebrated annual Nature Mates Day at Banabitan Biodiversity Park, completing 17 years of actively working in the field of wildlife conservation. We awarded the Kushal Mookherjee Memorial Life Time Achievement Award (earlier Lifetime Achievement Award) and Srikumar Chatterjee Memorial Young Biologist Award (earlier Young Biologist Award) to Dr. Anwaruddin Choudhury Sir and Dr. Arijit Pal. Dr Dulal Chandra Pal memorial award for Sustainable Agricultural Practice was awarded to Shri. Birendra Kumar Roy and his family. A new book was unveiled on that day: Feathered Friends of Gajoldoba, penned by Anjan Guha, Arjan Basu Roy and Lina Chatterjee. The book will be commercially available soon. Officials of West Bengal Forest Department, wildlife organisations in Kolkata, namely, Prakriti Samsad, NEWS, Uttarayan Wildlife, HEAL, WWF and Birdwatchers' Society attended the event.





This year we participated at the 47<sup>th</sup> International Kolkata Book Fair & in 10<sup>th</sup> Newtown Book Fair, as an initiative to reach out to nature enthusiasts and make biodiversity knowledge available to public. With our own published books on birds, butterflies, mammals, snakes, etc. posters, bookmarks, calendars, etc. and a range of wildlife themed products we reached out to 1000s of people. We also conducted a fair at the Nandan campus, with a range of books, art and crafts.



Nature Mates organised a unique event named “Math theke rannaghor” (from field to the kitchen), hosting talents all over West Bengal. Natural homemade and organic products, products made of natural substances like honeycomb candles, honey, etc. range of handloom products, books, healthy, nutritious and low calorie homemade delicacies were showcased and sold by the entrepreneurs. People from different parts of West Bengal came for the event. With the event gaining high popularity we conducted two events in the last year and wish to conduct many more in the coming years.



## ACHIEVEMENTS:

**Habitats Trust Action Grant:** The Hornbill Project of Nature Mates received the prestigious Habitats Trust Award in December 2023. The project is a collaborative approach by Nature Mates and Nature Conservation Foundation, ongoing in Buxa Tiger Reserve since 2016. Through the grant we will continue doing our important research on hornbills, engage with stakeholders, generate awareness and conduct trainings of forest officials and nature guides.

**Conservation Leadership Program Award:** Sarika Baidya was awarded the Future Conservationist Award, 2023 for Population Monitoring and awareness building for Ludlow's Bhutan Glory in India. The research for this was started on July, 2023 in Eaglenest Wildlife Sanctuary and is still in progress. We have conducted multiple discussions and awareness sessions with the local communities emphasising the importance of butterflies and their habitat conservation. A local woman of the Monpa community, Gendan Monpa came forward for butterfly conservation and we have trained her in butterfly rearing. She is currently our local field assistant. She is rearing the early stages of *Bhutanitis ludlowi* and helping us keep a record of the phenology of the host plant. We have also met the forest department of Arunachal Pradesh on multiple occasions to discuss the project and the importance of butterflies. We have also discussed the issue of rampant cutting of plants including the host plant of *Bhutanitis ludlowi* and *Bhutanitis lidderdalii* for electric line establishment with the forest department.

**Round Glass Sustain** has covered butterfly conservation done by Nature Mates-Nature Club and has developed a documentary which has been released for public viewing.

<https://www.facebook.com/RGSustain/videos/820760883254153/>

**Award of Appreciation** was bestowed to us by the West Bengal Forest Department on the occasion of World Tiger Day, 2023 for our continuous and dedicated work towards tiger conservation in Sundarban. This prestigious award has been given to us since 2021.

**Electrosteel Jal Sevak Samman:** India Electrosteel Castings Ltd. awarded the Electrosteel Jal Sevak Samman to Nature Mates in June 2023. We received the award for our active and dedicated work in conservation of water and making drinking water available in Sundarban during the time of Covid and Amphan. The award granted us a sum of Rs.3,00,000 as well.

**Earth watch Grant, awareness program:** Our young researcher Debarpan Datta's project on "Habitat and Threat Assessment of Waders in Bakkhali Coastline in Sundarban Biosphere Reserve" was recently presented to the local stakeholders, aiming to raise collective awareness about the importance of conservation of the Waders, the habitat and their role in sustaining the local economy. The initiative included sensitisation of the local grounds men, especially the E-rickshaw drivers who are the local tour guides; about their habitat, threats and possible remedies. We want to express our gratitude towards the Department of Forests; Government of West Bengal, Indian Coast Guard Station- Bakkhali, WBTD, Toto Association, Fisherman Association, Business Association, Hotel Owners Association, Hawkers and Shop Owners Association, Port and Harbour Authorities for their active participation and support.

**Asian Elephant Project:** A joint initiative of Baikunthpur Division, Department of Forest, [SNAP Foundation](#) and [Nature Mates-Nature Club](#), a dream project of Restoring reclaimed forest land from encroachment to secure Elephant Movement area at Debgram Forest Range of Baikunthpur Division. Funding support from [Voice for Asian Elephants Society](#).

Reached over 1,00,000 individuals through educational programs and community outreach events, fostering a deeper appreciation for nature.

Received funding support from Linde Foundation for the revival of Butterfly Garden and Laboratory at Banabitan.

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Feathered Friends of Gajoldoba, penned by Anjan Guha, Arjan Basu Roy and Lina Chatterjee.

Butterflies of Bankura by Dr. S.Kulandaivel, Anjan Guha, Kalyan Mukherjee and Arjan Basu Roy.

Beauty of Nature by Dr. Arijit Chatterjee.

Sundarbaner Dev Debi Ebong Royal Bengal Tiger er Kotha by Pratik Kumar Palit.

110 Stories on Beasts and Birds for Children by Bhagya Ratan Khan.

Sinha S, Chatterjee L, Samanta T, Basu Roy A., 2023. *Bharti Publication*. Study on Seed Dispersal Efficiency by Three Resident Birds at Rajarhat Ecopark in West Bengal.


Rong A, Besra S, Chatterjee L, Samanta T, Mazumdar S, Hazra D, Samrat CS, Basu Roy A. 2023. A Comprehensive Study on Diversity and Land Use of the Bird Species around Eco Park Area, Kolkata, West Bengal.

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*As we reflect on the past year, we are grateful for the dedication and support of our members, volunteers, donors, and partners who have contributed to our success. Looking ahead, we remain committed to our mission of conserving wildlife & protecting our natural heritage.*



Secretary  
Nature Mates-Nature Club

Arjan Basu Roy,  
Secretary,  
Nature Mates Nature Club  
Kolkata,  
22.05.2024