

Report On Educational Field Visit To

Yamuna Biodiversity Park – A Nature Reserve In Delhi



- **Event**– Education Field Visit on “World Wetlands Day”
- **Date**– 2nd February 2024
- **Time** - 10:00 A.M
- **Teacher In-charge** - Dr. Sapna Chourasiya, Dr. Babita Singh, Dr. Sandeep Kr. Gautam, Dr. Manisha
- **Organized by**–Aranyani: The Environmental Society, under the aegis of IQAC, Satyawati College Evening, University of Delhi

Introduction

Biodiversity is the heart of the planet and is very important for maintaining the ecological balance of a place. It provides so many useful resources necessary for the survival. Without biodiversity, there would be no life and almost all the species will extinct. The biodiversity today is threatened by several human activities. Therefore, all the biodiversity reserves must be protected at all costs by taking necessary steps.

Nestled along the serene Yamuna riverfront in Delhi, Yamuna Biodiversity Park unfolds over 9770 hectares, representing a remarkable initiative by the Delhi Development Authority (DDA). In collaboration with the Center for Environmental Management of Degraded Ecosystems (CEMDE), University of Delhi, this expansive park not only provides a sanctuary for diverse wildlife but also stands as a testament to conservation and ecological restoration efforts.



Functions of Yamuna Biodiversity Parks

The overarching goal of Yamuna Biodiversity Park is the preservation of the delicate ecosystems surrounding the Yamuna River and the Aravalli hills. This unique venture strives to safeguard biodiversity, establish gene banks for threatened species, raise environmental awareness, and support indigenous communities. A significant aspect involves creating a mosaic of wetlands that not only enhances sewage quality but also acts as a vigilant guardian, monitoring the ecological changes within the dynamic landscape of Delhi.

Beyond its role as a protector of ecosystems, Yamuna Biodiversity Park serves multiple functions. It acts as a refuge for approximately 50 threatened species, fosters increased groundwater recharge, and serves as an alternative habitat for migratory and resident bird species. This ecological haven contributes to climate improvement, reduces temperatures in sensitive urban areas, and fosters social interactions within the city.

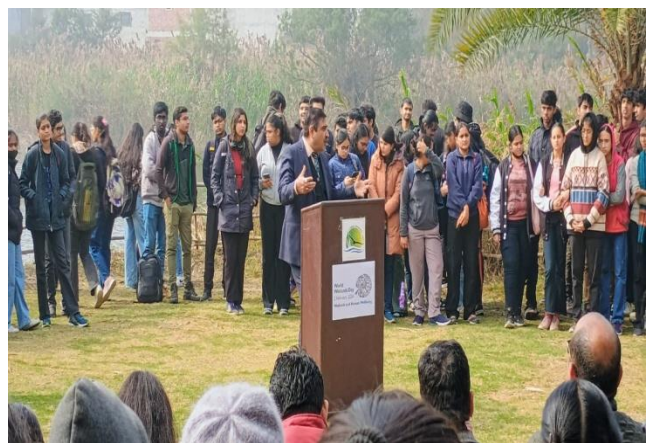
Goals and Objectives of Yamuna Biodiversity Parks Visit

The main objective of this field visit was to facilitate and develops the learning skills,enhancing environmental and social awareness among the students related to biodiversity, proper resource utilization and importance of wetland ecosystem. Other goals of the field visit was to give students effective learning opportunity outside of the classroom with the real observations and practical experience. This visit helps the students to understand significantly the broad spectrum of ecological and environmental concerns,

Distinguished Speakers

Eminent speakers shared their invaluable insights and knowledge with the participants during the visit at Yamuna Biodiversity Park,

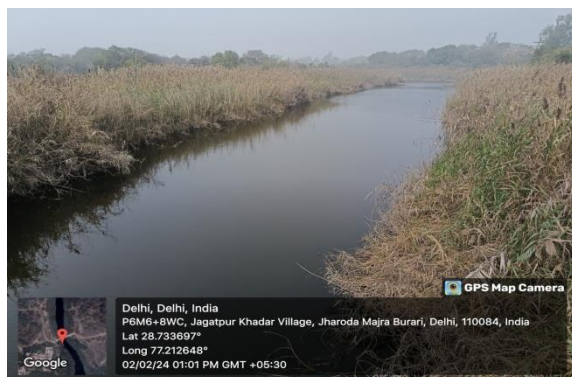
- **Dr. Asghar Nawab:** He is a Head of Programme – Aquatic Ecology with Wetlands International South Asia. According to him, Wetlands are environmental superheroes, crucial for ecological balance.
- **Prof. RadheShyam Sharma:** He is a professor in the Department of Environmental Studies, University of Delhi. He mentioned the significance of wetland in terms of insurance plan. He mentioned that, Wetlands act as insurance for the mainland, inspiring sustainable practices.
- **Shankar Shekhar:** professor of zoology in Delhi University, Wetlands are natural temples of urban cities, fostering spiritual and ecological connections.
- **Ravi Shankar Tiwari:** he is a journalist any work for environment, according to him, Journalism plays a key role in advocating for wetland protection.
- **Vijay Kumar Singh:** he is a finance member of DDA (Delhi development authority), Financial commitment is vital for wetland preservation.
- **Prof. P. C. Joshi:** he is the ex **Pro Vice-Chancellor of University of Delhi**. He was the head of Department of Anthropology, University of Delhi before becoming the PVC of University of Delhi in June 2020. He has also served as head of the Department of Anthropology in various institutions. He was nominated Asia Coordinator of the European Union 6th Framework Microdis Integrated Project, 2007 and was a delegate of the European Union to Poznan, Poland in United Nations Framework Climate Change Conference in 2008. He is recipient of the Indira Priyadarshini Vriksha Mitra National Award as Friends of Trees founder member, 1987. He mentioned that wetlands, seen through the eyes of an experienced counselor, are nuanced ecological treasures.





Describing the View of the Park

As one enters the park, a meticulously planned landscape unfolds. Poplar hedges encircle the Domesticated Biodiversity Zone, adorned with perennial flowers like Ailanthus, Butea, and Bauhinia. Symbolic landscaping on the left signifies the origin of the Ganga and Yamuna rivers, a visual ode to the rich cultural and natural heritage of India.

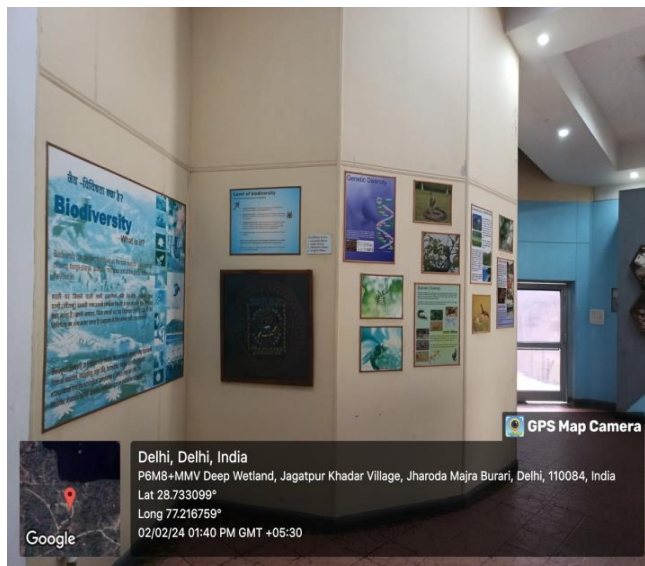


Herbal Garden

The Herbal Garden within Yamuna Biodiversity Park emerges as a green oasis, housing approximately 450 living species of medicinal plants. Carefully curated seasonal changing beds and borders, surrounded by shade-offering trees, create a captivating display of nature's pharmacy. From the vibrant Barlerias in spring to the blooming Hibiscus in summer, the garden is a testament to the ever-changing beauty of nature.

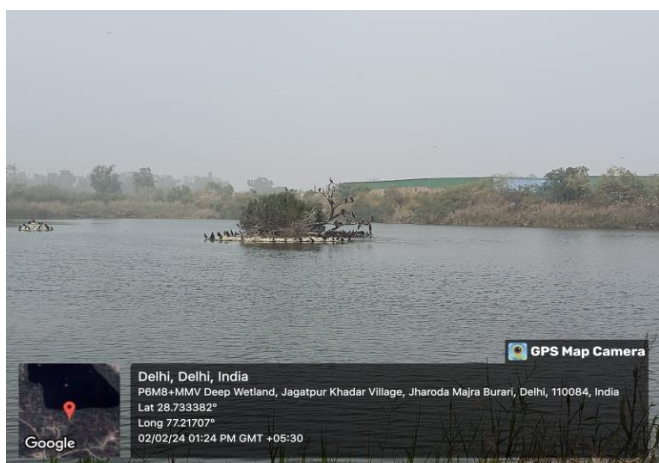
Butterfly Conservatory and Bambusetum

Recent years have witnessed the Butterfly Conservatory becoming a focal point for ecotourism. The carefully designed space, surrounded by four small ponds, attracts a myriad of wild butterflies, essential contributors to pollination and integral components in the delicate web of life. The Bambusetum, on the other hand, serves as an educational hub, showcasing the diverse world of bamboo plants, providing a habitat for various bird species.



Sacred Grove and Wetlands

The Sacred Grove, adorned with 30 species of Ficus trees of religious significance, symbolizes the importance of preserving green patches with untouched forests. The two wetlands, shallow and deep, extend over 1.8 km and 2 hectares, respectively, offering multiple advantages, including increased habitat diversity, ecological functions like water purification, groundwater recharge, and rainwater storage.



Nature Reserve Zone

Within the Nature Reserve Zone, spanning around 130 acres, a harmonious blend of forest communities and sprawling grasslands creates an environment with minimal human disturbance. This intentional design allows animals to roam freely, establishing a thriving ecosystem with various biotic communities, including Adina-dominated, Mitragyna-dominated, Acacia-dominated, and Hardwickia-dominated grasslands.

Nature Education and Faunal Diversity

A crucial aspect of Yamuna Biodiversity Park is its commitment to imparting Nature Education. Targeting school and college students, the park aims to nurture future decision-makers by providing insights into plant and animal life cycles, seed germination, bioremediation, ecosystem redevelopment, food webs, and life history strategies. Faunal diversity within the park is inspiring, boasting over 2000 species of plants, animals, and mammalian herbivores and carnivores living in more than twenty-five biotic communities.



Conclusion

Yamuna Biodiversity Park as the pioneer in its kind has not only revitalized lost ecosystems but has become a beacon of hope for environmental conservation. Its success story extends beyond ecosystem restoration, groundwater recharge, and microclimate improvement—it serves as a living classroom where students can delve into the intricacies of nature. As part of a broader citywide initiative, the mission of creating biodiversity parks should resonate across the nation and the world. By fostering collaboration with local communities, Yamuna Biodiversity Park aspires to be a global model, contributing to the well-being of Mother Earth.

THANK YOU!