

# FIELD REPORT ON ONE-DAY FIELD STUDY IN POBA RESERVE FOREST

Date of Study: Sunday [10-11-2024]

Location: Poba Reserve Forest, Jonai town outskirts (Proposed Wildlife Sanctuary)

## Participants:

- 34 B.Sc. Botany students and Eco Club members, Silapathar Science College
- Faculty members from the Botany Department
- Coordinator- IQAC: Dr. Partha Nath Dutta
- NGO activist and retired senior teacher: Tukeswar Miri Agarwalla
- Senior Journalist and Wildlife Conservation Activist: Prafulla Kaman
- Total expenditure: 16,500 (Sixteen Thousand and Five Hundred only)

## 1. Introduction

The Poba Reserve Forest, located on the outskirts of Jonai, is a significant biodiversity hotspot in Assam. This forest, known for its rich plant diversity and various terrestrial and aquatic ecosystems, is a proposed wildlife sanctuary. To enhance students' understanding of ecology, plant taxonomy, and conservation practices, a one-day field study was organized by the Eco Club and Botany Department of Silapathar Science College.

## 2. Objectives

- To study the terrestrial and aquatic ecosystems of Poba Reserve Forest.
- To identify and classify various plant species within the forest.
- To gain an understanding of the local wildlife and their habitats.
- To learn about conservation rules and safety protocols in wildlife zones.

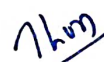
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## 3. Materials and Methods

### Materials:

- Field journals for note-taking
- Mobile cameras and magnifying lenses for plant identification
- GPS devices for navigation and marking observation sites
- Binoculars for observing wildlife
- Sampling tools for soil and water analysis
- Field guides for plant taxonomy and ecosystem identification

  
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### 1. Team Formation and Orientation:

The team was divided into smaller groups, each supervised by a faculty member. Tukeswar Miri Agarwalla, a retired senior teacher and conservationist, briefed the team on safety protocols, local regulations, and wildlife conservation guidelines before the trek.

### 2. Jungle Trekking and Observation:

The groups proceeded into different sections of the forest, covering terrestrial ecosystems and riparian zones. Field guides were used to help students identify plant species, and photographs were taken for documentation. Students maintained notes on various species observed and specific characteristics noted.

### 3. Soil and Water Sampling:

In specific zones, students conducted soil and water sample collection to analyze pH levels, nutrient content, and other chemical parameters. Aquatic ecosystems, including ponds and streams, were studied for native flora and fauna.

### 4. Interaction with Conservation Experts:

Prafulla, a wildlife conservation activist, shared insights on human impact on forest ecosystems, stressing the need for sustainable practices and the role of conservation activism.

### 5. Competition Objective:

Students formed three groups tasked with collecting the highest number of plant species during the trip.

## 4. Observations and Results

### Terrestrial Ecosystem:


Students documented approximately 45 different species of plants, including several native tree species, shrubs, and ground flora. Some notable plant families observed include Fabaceae, Poaceae, and Asteraceae. Several medicinal plants were identified, highlighting the forest's ethnobotanical significance.

### Aquatic Ecosystem:

The aquatic ecosystem in Poba Reserve Forest was characterized by diverse aquatic plants, such as Hydrilla, Eichhornia, and other algae. Fish and amphibian species were observed, which play a crucial role in the ecosystem's food chain.

### Wildlife and Conservation Insights:

Tukeswar Miri Agarwalla and Prafulla provided insights into the local wildlife, emphasizing the importance of minimal disturbance to their habitats. Students observed several bird species, butterflies, and evidence of larger mammals, likely to inhabit deeper regions of the forest.

  
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### **Soil and Water Analysis:**

Preliminary analysis of soil samples showed loamy texture with a moderate pH, indicating fertile conditions favorable for a variety of plant species. Water samples had slightly acidic to neutral pH, supporting aquatic biodiversity.

### **Interactive Performances and Outcome:**

Each group not only showcased their collection but also performed skits or roleplays to demonstrate the actions or behaviors of plants, monkeys, and butterflies, emphasizing ecological interactions. The group with the most diverse collection was declared the winner, combining academic learning with creativity and fun.

### **5. Discussion**


The study revealed that Poba Reserve Forest has a rich biodiversity and serves as a critical habitat for various flora and fauna. The presence of medicinal plants underscores the forest's value in ethnobotany, while the diversity of aquatic plants and animals suggests a well-balanced ecosystem. Human activities, if not controlled, could pose significant threats to these ecosystems. Education and conservation efforts, like those led by local activists, play a crucial role in preserving the biodiversity of Poba Reserve Forest.

### **6. Conclusion**

The field study in Poba Reserve Forest provided invaluable hands-on experience for the Botany students in ecosystem analysis and plant identification. The study underscored the importance of conservation and adherence to wildlife protocols for the sustainability of such biodiverse habitats. Continued efforts in education, activism, and conservation are essential to protect this ecosystem, which offers ecological and economic benefits to local communities.

### **7. Acknowledgments**

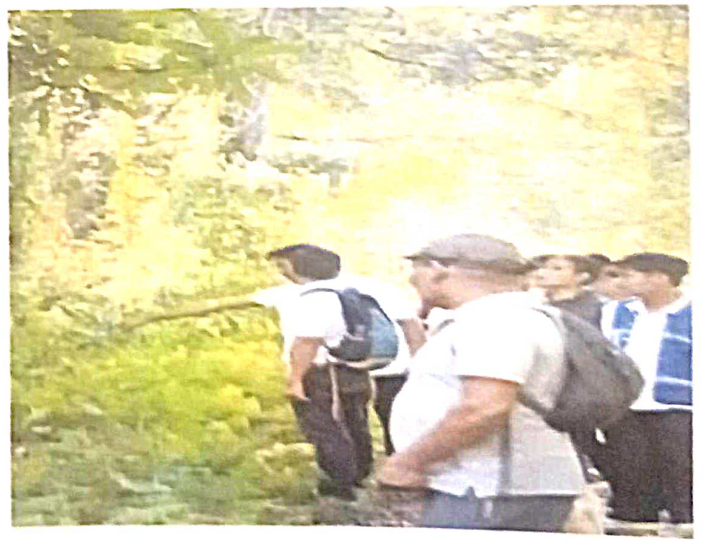
We extend our gratitude to the Principal Sir Dr. Ranjit Saikia, college administration, Tukeswar Miri Agarwalla, and Prafulla Kaman for their guidance and expertise. Their insights into conservation practices enriched the field study experience for all participants.

  
Principal  
Silapathar Science College  
Silapathar-787050





## PHOTOGRAPH



*Kurti*  
Principal  
Chilapathar Science College  
Phone: 797050

*Thon*