

Excursion conducted by the Department of Botany, Darjeeling Government College for M.Sc. 3rd Semester students

April-2023

The Department of Botany, Darjeeling Government College successfully conducted a five days botanical excursion to Singalila National Park in April 2023 for the students of M.Sc. 3rd Semester. The details of the same is presented here.

Class: M.Sc. 3rd Semester

Total number of students: 21

Teachers/guides: 2 (Mr.SatyamTamang and Dr.BikramSaha)

Date: 25.04.2023 to 29.04.2023

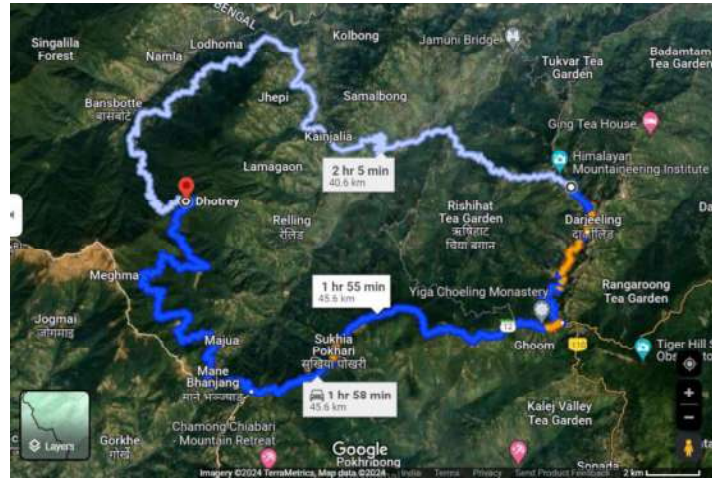
Place: Singalila National Park

Journey:

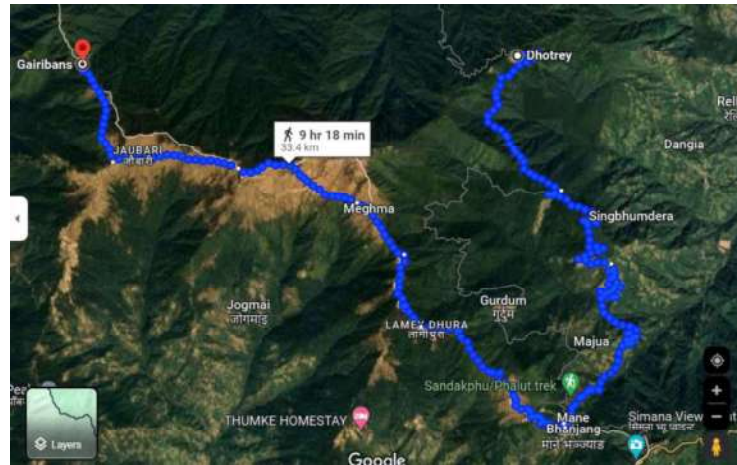
- Darjeeling Govt. College to Gairibash via Dhotery, Tonglu and Tumlingon 25.04.2023
- Gairibans to Sandakphu on 26.04.2023
- Sandakphu to Moley on 27.04.2023
- Moley to Gorkhey via Phaluton 28.04.2023
- Gorkhey to Government College via Raman and Srikhola



Excursion team

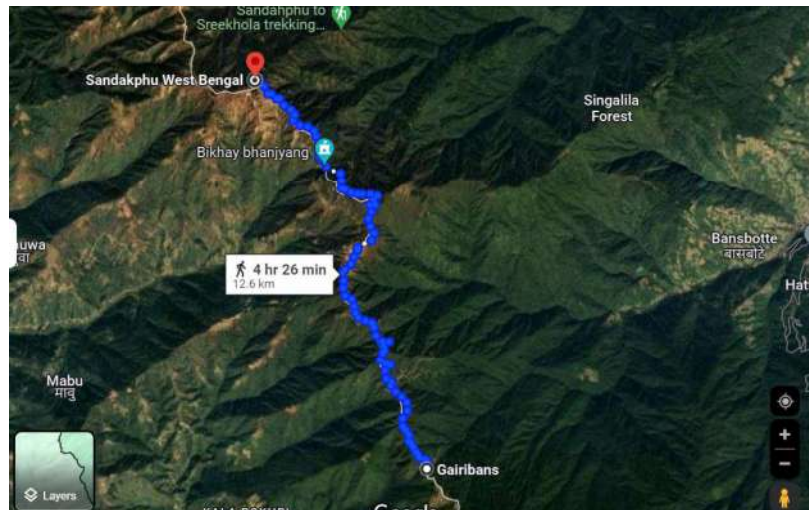


A

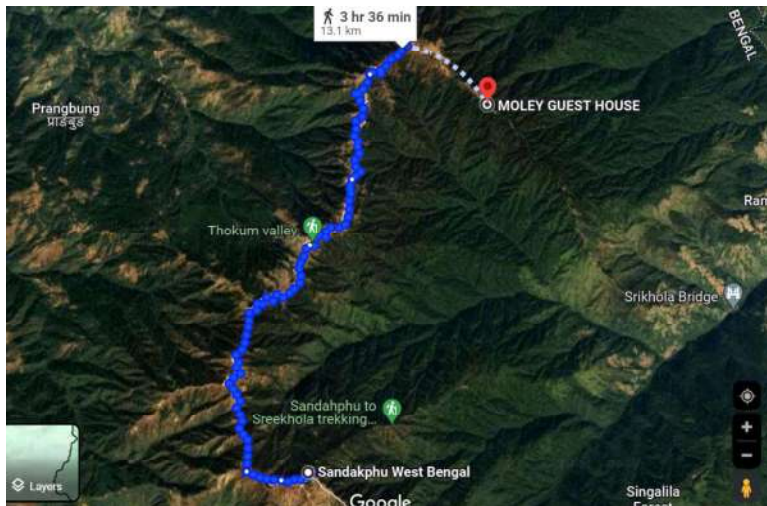


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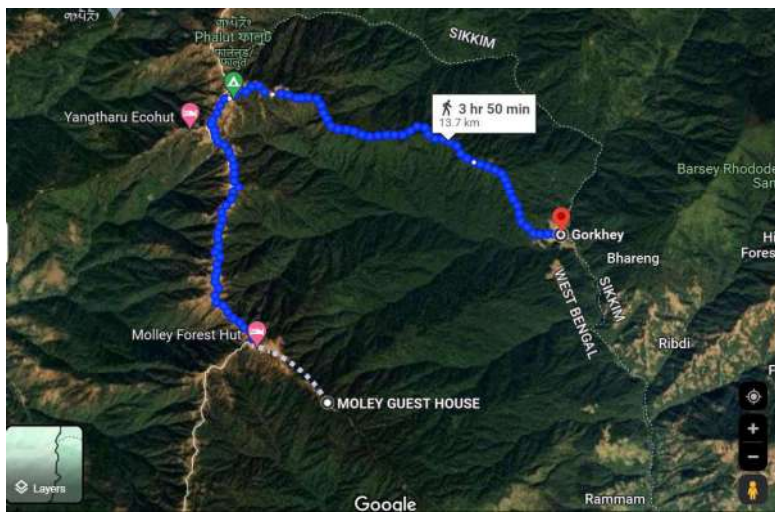
Route map of 1st day: A – From Darjeeling Govt. College to Dhotrey covered by vehicle (45.6 km); B – hiking from Dhotrey to Garibans (34.4 km)



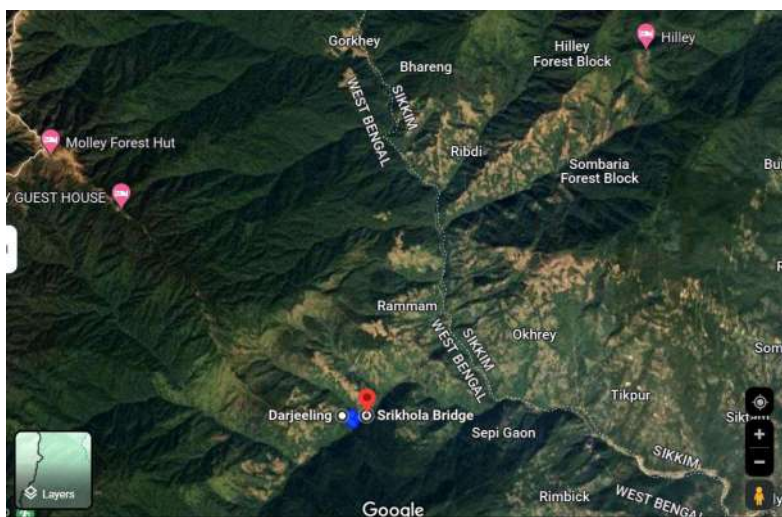
Route map of 2nd day: From Gairibans to Sandakphu hiking (12.6 km)

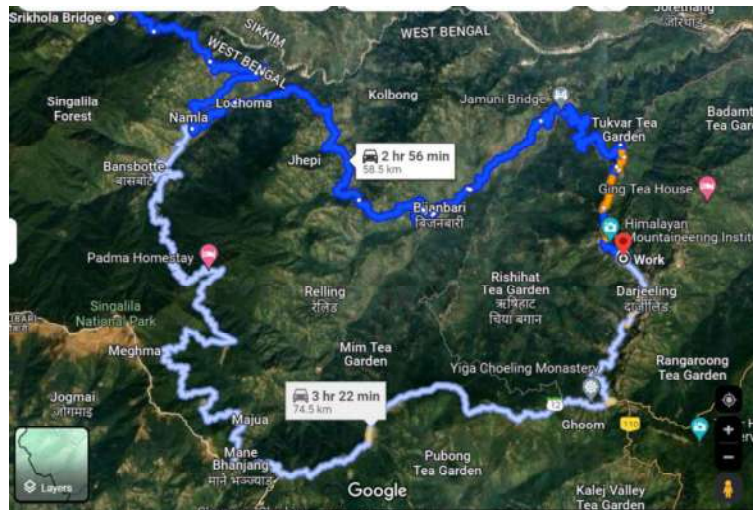


Route map 3rd day: Hiking from Sandakphu to Moley (13.1 km)



Route map 4th day: Hiking from Moley to Gorkhey (13.7 km)





Route map 5th day: A – hiking from Gorkhey to Srikhola Bridge (14 km); B – from Srikhola Bridge to Darjeeling Government College (58.5 km) covered by vehicle

Objectives

Educational objectives:

- Enhance students' understanding of plant diversity and ecosystem dynamics in a temperate to sub-alpine Himalayan ecosystem.
- Provide students with hands-on experience in plant identification, collection, and preservation techniques.
- Develop students' critical thinking and observation skills through field-based research.
- Foster an appreciation for the ecological importance and conservation challenges of the Himalayan ecosystem.

Research objectives:

- Collect and document plant specimens for herbarium study and scientific analysis, if permitted, otherwise take photos of the live plant species in their natural habitat.
- Investigate the relationships between plant communities, habitat characteristics, and altitude gradients.
- Study phenology and reproductive strategies of selected plant species.
- Identify potential areas for future plant conservation and research initiatives.

Conservation objectives:

- Raise awareness about the ecological significance and threats to Singalila National Park.
- Promote responsible tourism practices and encourage student involvement in conservation efforts.
- Foster a sense of stewardship and protect the ecological integrity of the park.

Other objectives:

- Develop teamwork and communication skills among students.
- Provide students with a unique and enriching outdoor learning experience.

- Promote the value of field research and exploration in botanical studies.

Activities and outcomes

A botanical excursion to Singalila National Park promises a rich and diverse experience for students. Here are the activities for which they were engaged during this excursion.

Observation and documentation:

- Collection/taking photographs and identification of plants: Students could learn to identify various plant species using field guides, and expert guidance. They could collect specimens or take photographs, documenting them with detailed descriptions, sketches, and photographs.
- Habitat mapping and analysis: Students mapped different plant communities such as mixed-temperate vegetation, Rhododendron mixed-forest, Rhododendron dominant forest, temperate bamboo dominant forest, and temperate grasslands, noting their location, altitude, and associated environmental factors (soil type, sunlight exposure, humidity, etc.)
- Phenological observations: Students observed and recorded the flowering, fruiting, and leafing stages of different plants, contributing to ecological research.
- Biotic interactions: Students observed interactions between plants, animals, and insects within the ecosystem, documenting pollination, herbivory, and symbiotic relationships.





Some plant species observed during the excursion



Pictures depicting the landscape and protected water body

Practical skills development:

- Herbarium preparation: Students learned the techniques of pressing, drying, and mounting plant specimens, creating a permanent record of their findings.
- Field sampling techniques: Students learned to collect soil, water sample for further analysis in lab.
- Photography: Students learned to document their observations with high-quality photographs, showcasing the beauty and diversity of the park.

Data compilation, presentation, and reporting:

- Students compiled their observations and samples, analyzing them to conclude plant distribution, diversity, and ecological factors.
- They presented their findings through presentations, posters, and reports, sharing their learning experiences with others.

Environmental awareness and conservation:

- Ethnobotanical exploration: Students learned about the traditional uses of plants by local communities, highlighting the importance of biodiversity for human well-being.
- Conservation strategies: Students discussed conservation challenges facing the park and explore potential solutions, promoting a sense of responsibility for the environment.

Other activities:

- Nature walks and hiking: Students enjoyed the scenic beauty of the park, observing its flora and fauna and participating in guided nature walks or hikes.
- Birdwatching: Singalila National Park is known for its diverse birdlife, offering students the opportunity to observe and learn about different species.
- Teamwork and collaboration: Encourage teamwork and collaboration among students during field activities, promoting a sense of community and shared learning.
- Nature appreciation: Cultivate an appreciation for the natural world, inspiring students to become environmental stewards and advocates.

Conclusion

In conclusion, the botanical excursion to Singalila National Park was a resounding success. The students gained valuable insights into the diverse flora of the region, and the experience undoubtedly enhanced their understanding and appreciation of plant biology. The Department of Botany plans to conduct similar field trips in the future to provide students with more such enriching experiences.



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MOVEMENT ORDER

A party consisting of two teachers and twenty-one students of MSc 3rd Semester (seven boys and fourteen girls) of PG Department of Botany, Darjeeling Govt. College is scheduled to undertake an educational excursion (as per G.O. No. 1434/1(3)-A dated 20.10.2022) in the Sandakphu and adjoining areas during the period from 25.04.2023 to 29.04.23. The party will carry departmental analytical instruments and camera for the said study tour. Necessary cooperation and help may please be extended to the party for smooth execution of their official duties.

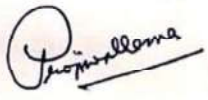
Teaching staff:

1. Mr. SATYAM TAMANG WBES, Assistant Professor of Botany
2. Dr. BIKRAM SAHA WBES, Assistant Professor of Botany

Name of the students who will participate the excursion:

Sl. No.	Name	Age	Gender
1	Prashant Thakuri	23	Male
2	Siddhu Chhetri	23	Male
3	Sushant Lama	24	Male
4	Saurav Thapa	22	Male
5	Jigme Norbu Bhutia	23	Male
6	Siddhant Sharma	23	Male
7	Prajwal Rai	24	Male
8	Sabina Subba	23	Female
9	Subashini Sharma	23	Female
10	Rasika Dewan	23	Female
11	Ausmita Chettri	24	Female
12	Parmisha Pradhan	23	Female
13	Sujata Bhujel	23	Female
14	Riya Gurung	22	Female
15	Abiksha Thapa	23	Female
16	Panisha Roka	23	Female
17	Anisha Kharga	23	Female
18	Sappu Thapa	23	Female
19	Anupa Chettri	23	Female
20	Sumnima Rai	24	Female
21	Mrinal Sinchury	23	Female




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