DEPARTMENT WISE ACTIVITIES FROM 2019-2023

DEPARTMENT OF BOTANY SIKKIM GOVERNMENT COLLEGE NAMCHI FIELD TRIP TO BARSHEY RHODODENDRON SANCTUARY

The Department of Botany organized a two day (10th -11th May) to Barsey Rhododendron Sanctuary for VIth semester students. The main aim of the excursion was to familiarize them with the flora of the Barshey Rhododendron Sanctuary. The trip was led and guided by Dr. Bishnu Kr Sharma. A total of 60 students took part in the trip.

On the morning of 10 may at 6 AM all the students gathered in the central park namchi and by 6.30 AM we headed towards Hillay which is about 90 Km from Namchi. Two bus were provided by the college. At around 10.30 AM we reached Hillay and then we headed towards Barshey Rhododendron Sanctuary.

After trekking for almost 3 and half hours we reached the main spot.many plants were shown to the students and many photograph was taken by the students for the documentation. Then we returned back to Hillay and then we headed towards Okhrey.

At Okhrey we rested and stayed for the night. Next morning after breakfast we returned back to Namchi and reached Namchi by 11 AM and we ended our trip. The entire trek to BarsheyRhodedendron Sanctuary was fruitful and very educational helping us in overall understanding of the subject.



DEPARTMENT OF BOTANY, SIKKIM GOVERNMENT COLLEGE, NAMCHI

Trekking from Sikkim Government College Namchi to Tendong Hill

An excursion of 3rd Semester B.Sc. was organized by teachers of our department of our college on the 12th May 2021. The main aim of the excursion was to familiarize us with the flora of the Tendong region and gain infield knowledge.

The entire trek of Tendong was fruitful exercise. We came across numerous plants. It is felt by all of us that more educational tour will greatly help in identification and the ioverall understanding of the subject.



FIELD TRIP TO PERBING AND ITS SURROUNDING, SOUTH SIKKIM Field Visit to Perbing and its surrounding Organised by Department Of Botany, SGC, Namchi IV Semester Students

As a part of B.Sc Botany Curriculum one day field trip was organized by Department of Botany, Sikkim Government College, Namchi on 1 May 2022, for IV Semester Botany Honours students. The trip started from Central Park, Namchi To Perbing and its surrounding to South Sikkim for their floral exploration of different plant species. Field study is an essential part of Botany. The natural environment i.e., the surrounding where we interact, the plants in their natural habitat is one of the most interesting thing that is needed to be studied by the students of Botany. Studying plants in their natural habitat enhances our knowledge that is learnt from the classroom discussions and laboratory experiments. A group of 40 students were accompanied by Dr. Bishnu K Sharma, AssiostantProfessor,SGC, Namchi. An apprehensive knowledge of things are always required for students to start a particular study of a particular site in their natural environment. So classroom study and the field study are complementary to each other and we cannot ignore any one of them. Hence keeping these two things in view, this study tour was organized by the Department of Botany, Sikkim Government College, Namchi as per syllabus prescribed by the Sikkim University.

गान्तोक, शनिवार, ०२ जुलाई, २०२२

वनस्पति विज्ञान विभागका विद्यार्थीहरूको एक दिवसीय फील्ड भ्रमण



नाम्ची, १ जलाई। बीएससी वनस्पति विज्ञान पाठ्यक्रमको एक अंशको रूपमा वनस्पति विज्ञान विभाग, सिक्किम सरकारी महाविद्यालय नाम्चीद्वारा १ जुलाईमा सेमिस्टर ४ वनस्पति विज्ञानका विद्यार्थीका लागि एक दिवसीय फील्ड भ्रमणको आयोजना गरियो। भ्रमण सेन्ट्रल पार्क नाम्चीदेखि पर्बिङ अनि दक्षिण सिक्किमका वरपरका विभिन्न पौधाका प्रजातिहरूक पृष्प अन्वेषणका लागि शुरू गरिएको थियो। क्षेत्र अध्ययन वनस्पति विज्ञानको एक अनिवार्य हिस्सा हो। प्राकृतिक वातावरण यानी वरपर जहाँ हामी सबै कुराकानी गर्छौं, त्यसको प्राकृतिक आवासमा पौधा सबैभन्दा रोचक चिजहरू मध्ये एक हो जसलाई वनस्पति विज्ञानका विद्यार्थीद्वारा अध्ययन गर्ने आवश्यकता हन्छ। आफ्नो प्राकृतिक आवासमा वनस्पतिको अध्ययनले ज्ञान बढाउँछ जो कक्षा चर्चा तथा प्रयोगशाला प्रयोगहरूबाट सिकाइन्छ। नाम्चीको सिकिम सरकारी महाविद्यालयको वनस्पति विज्ञान विभागको तर्फबाट गरिएको घोषणाले चौथो सेमिस्टर वनस्पति विज्ञान सम्मानका विद्यार्थीहरूलाई धैरे खुशी बनाएको छ। ४० विद्यार्थीको एउटा समूहका साथ डा. बिष्णु के. शर्मा, सहायक प्राध्यापक तथा वनस्पति विज्ञान,

एसजीसी नाम्चीका विभाग प्रमुख थिए। चिजहरूको एउटा आशंकित ज्ञान सँधै विद्यार्थीहरूलाई आफ्नो प्राकृतिक वातावरणमा कुनै विशेष साइटको एक विशेष अध्ययन शुरू गर्नका लागि आवश्यक हुन्छ। यसैले कक्षा अध्ययन तथा क्षेत्र अध्ययन एक अर्काका पूरक हुन् तता हामी त्यस मध्ये कुनै एउटालाई अनदेखा गर्न सक्दैनौं। त्यसैले यी दवै क्रालाई ध्यानमा राख्दै यो अध्ययन भ्रमण सिक्किम विश्वविद्यालयद्वारा निर्धारित पाठ्यक्रम अनुसार वनस्पति विज्ञान विभाग नाम्ची महाविद्यालयद्वारा गरिएको थियो।

TREE PLANTATION DRIVE BY DEPARTMENT OF BOTANY IN COLLABORATION WITH BLOOMING SIKKIM.

15th JULY 2022







A mass tree plantation drive by the students of botany department in collaboration with Blooming Sikkim (BS) was done on 15 July 2022. A total of 80 students along with the blooming Sikkim members and students participated in the drive. We are very much grateful to our Principal for his support and to the officials of Forest and Environment department Namchi for the saplings. A total of 150 saplings were planted during the plantation drive.

Report on the field trip to 'TendongLho' South Sikkim, A Reserve forest and Biodiversity Park of Sikkim.

Tendong State biodiversity park is located in South Sikkim lies to the 14 km north of Namchi. It has a total area of 255 ha and the altitude varies from 1400 m to 2050 m above sea level. The park comprises of middle and upper hill forest.

Since the field trip is compulsory as it is in the syllabus we chose TendongLho as a field for the trip. We have a total of 90 students in third semester but a total of 86 student as few coudnt attend because of some medical reasons. The students gathered at college at 6.30 am and half of the students gathered at the petrolpumpjorthang road and at 7 am the trip started and we headed towards theDamthang. We reached Damthang at 7. 50 am and after giving a brief to the students about the trip we started the hike at 8.07 am. The trip was escorted by me, two Assistant professor from Sikkim Government College Mr Sonam Wangchuk Lepcha and Phurba Lepcha of chemistry and economics department and we had a special guest Ms Minto Sherpa a taxonomist from Sikkim Government College, Tadong for guiding students during the trip. We reached the destination at 11.30 am after about 3.30 hour walk from Damthang.

The hike was very interactive, informative and encouraging for the students, many plants were shown to the students, helped them to identify gave them the importance about the plants. At 11.30 am we reached the destination and we rested and had a lunch and at around 1 pm we started to return towards Damthang and reached there at around 2.30 pm and then we headed towards Kangchendzonga Biodiversity Park. After reaching park we showed the students the plant that were planted out there, the nursery for planting saplings of *Rhododendron*, *Azalea* etc and from there we completed our trip by returning to Namchi. The Department of BotanyNamchi is very grateful to Ms Minto Sherpa from Sikkim Government College, Tadong who gave us her valuable time, effort, knowledge to our students. We are also thankful to our colleague Mr Sonam Wangchuk Lepcha and MrPhurba Lepcha from chemistry and economics department in helping us to guide our students during



EDUCATIONAL TRIP TO BSI, GANGTOK AND PLANT CONSERVATORY BULBULEY.

Destination 1- Botanical Survey of India, Regional Centre Gangtok: Botanical survey of India (BSI) is an organization governed by Ministry of environment, Forest and Climate change, Government of India. An educational visit for Vth Semester Botany Honors students to The Botanical Survey Of India, Gangtok was scheduled On 16 February with the permission of the Head of BSI, Dr RajibGogoi. A total of 39 students under the guidance of Dr.Bishnu Kr. Sharma and Mr. Chuzing Lepcha visited BSI. On the morning of 16 february at 6.30 Am we departed from Namchi and reached BSI, Gangtok at 10 AM.

Introduction to the Botanical Survey Of India. The introduction started at the reception room by Mr Norbu Sherpa, the reception room had many important charts, pictures and posters regarding the species of specific types that are found in Sikkim like Balsams, Rhododendrons, Orchids, Gesneriads and Zingibers. After the introduction the students were guided to Herberium section by Mr Norbu.

Herbarium section: the session in the herbarium was also given by Mr Norbu, starting by explaining about the herbarium how it is prepared and how it is stored in the order(following Bentham and Hooker's Classification) how the herbarium is arranged. Due to the overcrowding of the students the session was done by dividing the students in two group by

covering the session one after the other. He explained in depth about herbarium and showed many preserved herbarium to the students. He explained in details about specimen, tags, labels, accession number, bar codes and about the number of herbarium holdings in the centre(Angiosperm: 52000, Cryptogams: 4000, Lichens: 1757, Macro- fungi: 170, Type collection: 22).

Museum section: The museum has 120 exhibits and 122 specimens are displayed and preserved under different heads like ethnomedicines, lichens, cereals & Beverages, traditional sacred use of plants, plant genetic resources, timber value woods, germplasm etc. Mr. Norbu guided our students through the museum explaining about the specimen preserved their labelling in the stored container and also about maintaining the humidity in the museum which is necessary for the preservation

Destination- 2: Plant conservatory,Bulbuley, Gangtok. The plant conservatory is a very well organized and designed structure with many preserved plant species. The conservatory has a well maintained clean park like design with waterfall, many trees of different ornamental and nonornamental trees, many small ponds and a glass house with various perennial, annual, medicinal, flowering plants. The educational excursion trip to BSI and Conservatory has proved to be a very fruitful and a successful programme for the students organized by Sikkim Government College, Namchi and in the upcoming days we will make more educational, fruitful, knowledgeable and experience gaining exposure trips for the students.

EDUCATIONAL TRIP TO KARFACTER, SOUTH SIKKIM 01 JUNE 2023

On 1 June 2023 the Department Of Botany arrange a Botanical Educational trip to Karfectar, South Sikkim for IV semester Students. The trip to Karfectar was based on the processing of Milk and their products which in related to their syllabus Milk processing and Diary products. The trip started at 11 AM from the college and reached the destination at 12 PM. The Assistant director showed all the important units of the Diary and explained the functions of the units and different sections of the diary. The diary mainly consists of input (collection) and processing into products(cheese, paneer, curd) and output (packaging and supply of products). The trip was escorted by Dr. BishnuK.r Sharma and Mr. Chuzing Lepcha. A total of 40 students attended the trip. The trip was very informative and educational to he students. At around 2 PM we finished Diary tour and we returned and reached Namchi by 3 PM.





Plantation on the Departmental Herbal Garden on World Environment Day 5th June 2023

Department of botany organised the 1 Day plantation for IIstIVthVIthSemester Botany Honours student. A total of 166 students took part in the plantation. The plantation was guided by Dr.Bishnu K. Sharma, Ms. Yeden Bhutia and Mr Chuzing Lepcha. Plants that were planted were mostly medicinal, plant with aromatic value and fruit bearing trees. Other shade trees were also planted.





REPORT AN EDUCATIONAL TRIP TO INDIAN BOTANICAL GARDEN KOLKATA



As per the syllabus of B.Sc botany honours 4 day educational trip to the Indian Botanical Garden, Kolkata (Acharya Jagdish Chandra Bose Indian Botanical Garden).

The trip was organized by the Department of Botany, Namchi Government College for the 6th Semester Botany Honours student. A total of 40 students was escorted by Dr.Bishnu Kumar Sharma and Chuzing Lepcha. The trip was from 19th June to 22rd June 2023. The educational trip to the Botanical Garden proved to be of very importance to our students giving them a chance to explore and widen their knowledge.



A One-day Educational Tour to Padmaja Naidu Himalayan Zoological Park, Darjeeling, West Bengal

The Department of Zoology organized a **One-day Educational Tour to Padmaja Naidu Himalayan Zoological Park, Darjeeling, West Bengal**on 20th May 2022. The students of VIth Semester, 45 in number were escorted by five faculty members of the department. Ms. Ruma Mandal, Research Educational officer and Mr. Vedant Chettri, Librarian escorted the group throughout.

A presentation by the Director of PNHZP, Darjeeling Dr. Basavaraj Holeyachi, IFS on the topic "Linking in-situ and ex-situ conservation: Red Panda Conservation Breeding and Reintroduction Efforts at PNHZP, Darjeeling" was given to the students. He wonderfully highlighted on various conservation practices and briefed about the breeding practices of many endangered animal species. He gave the insights on various research aspects expanding the horizon of the students in conservation program and future research scope.

The tour was a good exposure to the students and they enjoyed and learned about the ongoing research in the zoo.



A Report on Filed Visit to Meteorological Centre,

Gangtok, Sikkim-737103.

Date of Visit: 17th December, 2022. **Institution:** Sikkim Government College, Namchi. Department of Geography

Introduction: The purpose of this report is to document and analyze the observations and experiences from a one-day field visit to the Meteorological Centre, Gangtok, Sikkim. The visit was attended by three faculties of Department of Geography, and fifteen students of M.A/M.Sc. Geography (IInd Semester), Sikkim Government College, Namchi which aimed to gain insights into the functioning, data collection methods, and technology used by the department to forecast and monitor weather patterns in the region.

Background: The Meteorological Centre in Gangtok plays a critical role in providing accurate weather forecasts and warnings to the local community, businesses, and government agencies. Given the geographical diversity and the susceptibility of the region to rapid weather changes, the department's work holds significant importance.

Objectives: The objectives of the field visit were as follows:

- To understand the instrumentation and technology used for weather data collection and analysis.
- To observe the procedures involved in generating weather forecasts and warnings.
- To interact with meteorologists and gain insights into the challenges faced in predicting weather in the hilly terrain of Sikkim.

Activities and Observations:

Upon arriving at the Meteorological Department in Gangtok, the following activities and observations were made:

Instrumentation and Data Collection: The meteorologists explained the various instruments used for data collection, including anemometers, barometers, rain gauges, and thermometer. Automatic Weather Stations (AWS) were deployed at different altitudes to capture localized weather data accurately.

Data Analysis: The collected data is sent to the Central Meteorological Office for analysis. Satellite imagery and radar data are also integrated to provide a comprehensive view of weather patterns.

Weather Forecasting: Meteorologists demonstrated the process of weather forecasting using computer models. They explained how historical data, satellite inputs, and atmospheric models are used to predict weather changes.

Challenges: The meteorologists shared insights into the challenges specific to Sikkim, such as the rapid elevation changes leading to microclimates, abnormal readings of instruments due to freezing cold weather and the difficulty in predicting sudden weather shifts.

Community Outreach: The department engages in community outreach programs, educating locals as well as the school students about weather preparedness and safety measures during extreme weather events.

Technological Integration: The Meteorological Department in Gangtok heavily relies on advanced technology for accurate weather predictions. They utilize weather satellites, weather radars, and computer models to improve the precision of their forecasts. The integration of modern technology enhances their ability to track and predict weather changes effectively.

Conclusion: The field visit to the Meteorological Department in Gangtok provided valuable insights into the crucial role they play in monitoring and forecasting weather in the region. The integration of technology and the dedication of meteorologists contribute to more accurate predictions, which are vital for the safety and well-being of the local population.







