DEPARTMENT OF ZOOLOGY

A Brief Activity Report on Ecological Field Study at Subhash Sarovar Lake, Beliaghata, Kolkata, West Bengal, India

CITY COLLEGE
DEPARTMENT OF ZOOLOGY
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Notice

An educational excursion for the 5th SEM ZOOG students will be conducted under the Guidance of Dr Debasish Karmakar at Subhas Sarobar, Beliaghata on 03/1/2023 at 9.00 am. The students of all 5th SEM Bio General Courses are asked to be present at the Gate of the Lake, opposite to Swavumi by 8.45 am on the scheduled date with College Identity card.

Principal, City College, Kolkata
24/12/2022

Principal
CITY COLLEGE
KOL-9

Dr. Supriti Sarkar 24/12/22
Head of the Department
Department of Zoology
City College
Kolkata-9

Head, Department of Zoology
City College Kolkata-700009

AQUATIC BIOLOGY. ZOOG-DSE-A-5-2-P

Full Marks 30	60 Hours	2 Credits

1. Determine the area of a lake using graphimetric and gravimetric method.
2. Identify the important macrophytes, phytoplanktons and zooplanktons present in a lake ecosystem.
3. Determine the amount of dissolved Oxygen, and free Carbon dioxide, in water collected from a nearby lake / water body.
4. Visit to any aquatic Ecosystem and preparation and submission of report.

Field Trip to "Subhash Sarovar, Kolkata" for 5th Semester Zoology General Students of City College

Organized By: Department of Zoology, City College

03.01.2023

Attendance Record of Students

Sl. No.	Roll No.	Full Signature
	204939	Koyel Das D-3.01.2023
	204919	Sushmita Karmakar D-03/01/23
	204923	Raima Nandi D-03/01/23
	204703	[illegible] Shikdar
	204710	Avinash Manna - 03/01/2023
	204738	Mousumi Nandi 03/01/2023
	204914	Jayshree Das 3/1/23
	204935	[illegible] 3/1/23
	204723	Aniket Dey 3/1/23
	204731	Sanchaya Dutta. 3/1/23
	204727	Somnath Manjit 03/01/23
	204712	Tahni Sarkar 3/01/23
	204928	Sima Mitra 3/01/23
	204909	Rumki Dutta. 3/01/23

Teachers

1	[illegible] 03/01/2023
2	Soufiul Alam Phy 3/1/23

Non-Teaching Staff

1	[illegible] 3-1-23

- **Date of Visit:** Day 1: 03/01/2023 (Tuesday) – From 09:00 AM to 12:00 Noon
- **Place of Visit:** "Subhash Sarovar" Lake, Beliaghata, Kolkata, West Bengal, India
- **Under the Guidance of:** Dr Debasish Karmakar, Assistant Professor in Zoology, City College, Kolkata

  Dr Saiful Anam Mir, Assistant Professor in Zoology, City College, Kolkata

  Sri Aswini Gore, Laboratory Attendant in Zoology, City College, Kolkata
- **No. of Participants:** 14 (Semester – V, Zoology General)

Summary

Subhas Sarovar, under the administrative control of Calcutta Improvement Trust, represents the lung of East Calcutta with massive environmental fillip. The lake ecosystem is playing a key role in maintaining the oxygen balance and is also being used for sports, recreational and cultural activities. The vast water body and its two islands have also got potential for attracting the tourists. Moreover, this ecosystem is acting as a natural sink through the removal of pollutants from the surrounding environment. Subhas Sarovar is one of the most important recreational sites of East Calcutta. This lake having a total area of about 98 acres including the water bodies. About 40 acres out of 100 acres of land was excavated to form the water body i.e. the lake, named today after the great Son of the Soil, Netaji Subhash Chandra Bose as "Subhas Sarovar Lake". Subhas Sarovar is an artificial lake the first of its kind in the city and was dug out as a recreational space during the 2 Five Year Plan. Its length from east to west is 533.3 m and width at broadest point, south to north, is about 366 m. The littoral zone is almost devoid of macrophyte during major part of years. This lake is also fed mainly by rain water. Recently, the pressure of human activities on the Subhas Sarovar has increased manifolds. Over three thousands of peoples per day are using it for washing of clothes and utensils and for bathing. Solid wastes including plastic wastes are also being dumped beside the lake water. All these anthropogenic activities have led to the deterioration of the environmental components specially the lake water quality. The environmental degradation consequently threatens the sustainable development of aquatic and terrestrial ecosystem of the area. The aim of the present study was to estimate some common water parameters, like dissolved oxygen concentration, free carbon di-oxide concentration, pH, temperature, relative humidity etc. to get an overview regarding the condition of the lake-water. However, many a times, these water bodies are subjected to undesirable uses such as discharge of industrial and domestic effluents or excessive use by surrounding dense human population for a variety of purposes and thereby degrading the water quality considerably and in our case we also found the same situation regarding the estimated water quality parameters. The management must address the issues of cleanliness and security in Subhas Sarobar. Awareness campaigns at regular interval are necessary among the local people for betterment of the environmental condition of the Subhas Sarobar Complex.









Some Glimpses of In-Field Studies to Measure Various Aquatic Parameters in Subhash Sarovar