# DEPARTMENT OF ZOOLOGY

A Brief Activity Report on Ethological Field Study on Behavioural Activities of Water Strider at Subhash Sarovar Lake, Beliaghata, Kolkata, West Bengal, India

# Department of Zoology



CITY COLLEGE

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Date: 26.04.2023

### Notice

All students of 6th Semester Zoology Honours Course (CBCS) are hereby notified that an Educational tour to Subhash Sarovar, Kolkata, will be held on 28th April. 2023, under the guidance of Dr. Supriti Sarkar, Dr. Debasish Karmakar and Dr. Arkadeep Mitra.

#### Reporting Time

The students must report by 11.00 AM in front of the Main gate of Subhash Sarovar. Kolkata on 28th April, 2023

#### LIST OF ITEMS TO BE TAKEN

- 1. College ld-Card
- 2. Cap
- 3. Binocular
- 4. Camera
- 5. Notebook, Pen and Pencils
- 6. Water-bottle

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Dept. of ZoologyHead Department of Zoology City College: City College, Kolkara-700000 Kolkara -09

_		Attrendance F 200A Seme		
	Field	Trip to Subhash S	CONTRACTOR	
27.04.23				
SL No.	Name of Students	College Roll No.	Signature	
1	Sounak Bera	281001	Sounak Bura	
2	Aritro Bhattacharya	201003	Arta Blattadora	
3	Gouray Sea Gupta	201008	Com Bryget "	
4	Subhamoy Bhattacherjee	201009	Sideman Gentlabergal	
5	Abhishek Dutta	201012	Abhiehok Dutta	
6	Anirban Mukherjee	201014	Anithm Muscheline	
7	Arindam Mudi	201015	Arrindam Nividi	
8	Bidesh Dey Kundu	201016	Bilan Ary Kunda	
9	Joydeep Saha	201020	Juggep Scho.	
10	Sayan Dutta	201022	Sayan Dutter	
11	Prisam Mondal	201023	Pritary Mandel	
12	Sayan Bhattacharya	201025	Sugar Chattacharjac	
13	A∳jnat•Rai	201026	Abhinay Ru	
14	Nilendu Dey	201027	Silender Soy	
15	Sobhajit Dev	201028	while Ad	
16	Bikki Yadav	201029	(ABSENT)	
17	Debjyoti Das	201030	Debityeti Dax	
18	Naini Mukherjee	201103	Natri Hukheyee	
19	Pratiksha Chakraborty	201105	Snatikoha Chaknabont	
20	Ssebani Pal	201106	Shorban Pal 1	
2)	Snigdha Kayal	201107	Songalar Kogal	
27	Soumyashree Bairagi	201108	Summaher Banani	
23	Moumita Roy	201109	Mounda Rey	
24	Eshita Chakrabarty	201110	Tobita Calombration	
28	Lopemudra Sahn	201111	Kopamudra Jaha	
26	Shrabanti Pal	201113	Shartwood Pal	
27	Anasua Rooj	201115	Pourse Rooj	
28	Tanashree Mondal	201116	Tarashree Mondal	
29	Ananya Sen Gopta	201117	Stranger Sengripta	
10	Disha Saha	201118	Diche Salve	
11	Pritika Dey	201119	Priting Day	
12	Sovono Bharti	201120	Sociami Abstrate	
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## ♣ Date of Visit:

Day 1: 28/04/2023 (Friday) - Mid-day Period (NOON) from 11:00 AM to 01:00 PM

Day 2: 03/05/2023 (Wednesday) - Early-day

Period (MORNING) 08:00 AM to 10:00 AM

Day 3: 12/05/2023 (Friday) – Late-day Period

(EVENING) 04:30 PM to 06:30 PM

♣ Place of Visit: "Subhash Sarovar" Lake, Beliaghata,

Kolkata, West Bengal, India

\* Under the Guidance of: Dr Supriti Sarkar, Associate Professor in

Zoology, City College, Kolkata

Dr Debasish Karmakar, Assistant Professor in Zoology, City College, Kolkata

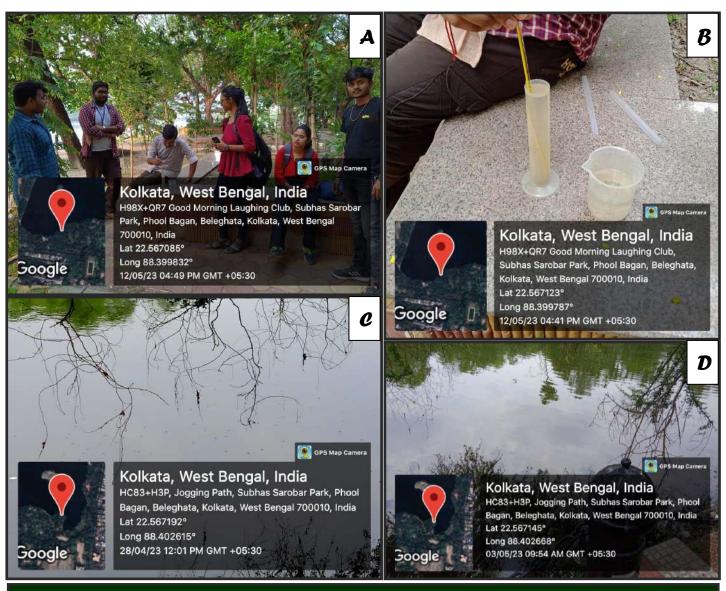
Dr Arkadeep Mitra, Assistant Professor in Zoology, City College, Kolkata

♣ No. of Participants:
31 (Semester – VI, Zoology Honours)

## Summary

Field studies of animals help to understand the complexities and causes of animal behaviour. Wild animals interact with their physical surroundings and the biological world while breeding, eating, and moving within their habitat. Although some behavioural studies are conducted in laboratories or zoos, many of the behaviours that animals exhibit in the wild are closely interconnected with the plants and animals around them and can only be observed during field studies. Field studies of animal behaviour have the practical value of increasing research attitude amongst the students/scholars/teachers/scientists understanding of how to conserve threatened and endangered species, as well as how to control pest species. Water striders (also known as water skippers or pond skaters) are relatively common insects that live on the surface film of lakes, ponds, streams even some species are thriving on seas and oceans too. They are easily distinguished by their ability to skim over the surface of the water. This insect differs from many other aquatic insects in that adult water striders are primarily wingless and the few that do have wings are reluctant to fly. Their lives on the surface of water make them easy for even a young child to observe. While they superficially resemble spiders, they are actually insects, members of the family Gerridae, under the order Hemiptera of class Isecta. Water striders' legs are covered in thousands of microscopic hairs scored with tiny grooves. These grooves trap air, increasing water resistance of the water striders' legs and overall buoyancy of the insect. The water skipper's legs are so buoyant they can support fifteen times the insect's weight without sinking. Even in a rainstorm, or in waves, the strider stays afloat. The strider's legs do more than repel water; they are also configured to allow efficient and rapid movement across the surface. This fascinating and extraordinary life sustenance attitude of this trivial creature instigated the inquisition to study their behavioural attributes in the nearby water body, i.e. Subhash Sarovar, as much as possible, by the team in a very little piece of time from the academic curricula.

Full Ma	rks 50	60 Hours	2 Credits	
List of P	ractical			
1. 7	To study nests and nesti	ing habits of the birds and social insec	ts.	
	To study the behavio only).	oural responses of wood lice to	dry and humid conditions(demonstration	
3.	To study geotaxis behav	viour in earthworm.		
4.	To study the phototaxis	behaviour in insect larvae.		
	Visit to Forest/Wild life Sanctuary/Biodiversity Park/Zoological Park to study behavioural activities of animals and prepare a short report.			
6 5	Study of circadian fur	nctions in humans (daily eating, sle	ep and temperature patterns).	



Geo-tagged Images at Subhash Sarovar [A. & B. Students are Estimating Various Water Parameters at 'EVENING'; C. Clumping of Water Striders was Observed on the Surface Water of the Lake under the Shed of a Huge Tree on the Bank of the Lake at 'NOON'; D. A few Number of Water Striders was Observed on the Surface of the Lake far apart from the Shed of the Tree on the Bank of the Lake at 'MORNING'!



