Addon Course on:

"Knowing the campus butterfly diversity: A step towards pollinator conservation"



OFFERED BY:

THE DEPARTMENT OF ZOOLOGY,
GOVERNMENT GENERAL DEGREE COLLEGE, KESHIARY
VILLAGE: TILABONI MAHISHAMURA, P.S. KESHIARY
DIST. PASCHIM MEDINIPUR, PIN 721135

FOR:

THE STUDENTS OF LIFE SCIENCES, CHEMICAL SCIENCES, ARTS & HUMANITIES, GGDC, KESHIARY



Department of Zoology Government General Degree College, Keshiary

Tilaboni Mahishamura P.S. Keshiary, Dist. Paschim Medinipur, PIN 721135

Value Added Course on:

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Introduction:

Butterflies belong to the class Insecta and the order Lepidoptera. Their short life cycle and quick response to the changes in the surroundings make them sensitive environmental indicators. Being efficient pollinators, they influence the nutrient cycle and food chain in the ecosystems and are often considered as the flagship species. Butterflies depend on specific host plant in order to complete the developmental stages of their life cycle and hence their diversity is also linked with the flowering plant diversity of a geographical location. The college campus of GGDC, Keshiary is located in a rural environment with plenty of greenery within the campus. Moreover, the nearby Hatigeria Forest Range and Langamara Forest Range add to the habitat diversity within its vicinity. The condition promotes growth of a variety of butterflies within the and around the campus round the year.

The Department of Zoology, GGDC, Keshiary within its limited scope has thus taken up the challenge to induct a value-added course on "**Knowing the campus butterfly diversity**" utilizing its own laboratory facilities. The course would empower the young graduates to understand the pollinators, their host plants and plant-animal interaction. The training would likely infuse interest among the students to take up butterfly watching as a hobby or to act as a local guide to butterfly enthusiasts. Moreover, their love and bonding with the topic would propagate the idea of butterfly and their habitat conservation which would be beneficial for the nature as well as the society.

Aims and objectives:

- i. To train students on the methods involved in identification of butterflies
- ii. Present study was designed to generate the preliminary checklist of butterflies in the campus of their own educational institute;
- iii. To inspire a student to account butterfly diversity of a geographical location and to take up the art as a hobby or future butterfly guide of an area.

Duration of the course:

The course would be conducted for not less than 30 hours over a period of three months.

Admission Procedure:

Candidates for admission to the course should be students of the Government General Degree College at Keshiary, Paschim Medinipur. Interested students from the departments of Life Sciences, Chemical Sciences and Arts and Humanities can apply for admission at the time of notification in the prescribed form. Certificates would be issued to the candidates on successful completion of the course.

Contact Information:

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Course objectives:

- i. To make a trainee understand the importance of butterflies as a pollinator
- ii. To make a trainee introduced to the basic method to identify a butterfly till the Genus/species level.
- iii. To make a trainee accustomed to the methods of accounting butterfly diversity in a given geographical area and to relate it with the host plant diversity.

Syllabus:

"Knowing the campus butterfly diversity: A step towards pollinator conservation"

Sl. No.	Topics	Assigned hours
1.	Butterfly as a pollinator: an introduction	2 hrs
2.	Methods involved in identification of butterflies	5 hrs
3.	Methods to account butterfly diversity in a given geographical area	4 hrs
4.	Field study to account butterfly diversity	$(1 \times 15) = 15 \text{ hrs}$
5.	How to establish a butterfly garden?	2 hrs
6.	Application of butterfly watching in career building	2 hrs

Selected reference books:

- 1. Kehimkar I. The Book of Indian Butterflies: BNHS Field Guide. Bombay Natural History Society, Mumbai. 2016.
- 2. Ghatak, S.; Basu Roy, A. A Pictorial Guide: Butterflies of Garumara National Park. Department of Forests, Government of West Bengal, Barnana Prakashani, Kolkata, India, 2013.
- 3. Kunte, K. (2000). Butterflies of Peninsular India. Universities Press Limited, Hyderabad, India,
- 4. Smetacek, P. A Naturalist's Guide to the Butterflies of India. Prakash Books India Private Limited.

Outcome of the course:

- i. Trainee would be able to identify any butterfly on morphological basis upto the Genus/species level.
- ii. Trainee would be able to apply the methods involved in accounting the butterfly diversity in a given geographical area
- iii. Trainee would be able to relate the butterfly diversity in a given geographical area with the host plant diversity.
- iv. The experience would make the trainee to understand the importance of pollinators in an ecosystem and the need for their conservation
- v. The trainee would be motivated to take up butterfly watching as a hobby and can act a local butterfly guide to the butterfly enthusiast.