

GOVERNMENT GENERAL DEGREE COLLEGE, MANGALKOTE

DEPARTMENT OF ZOOLOGY

ADD-ON COURSE
STUDY OF AVIFAUNAL DIVERSITY
FOR BEGINNERS

(Effective for the Academic Session 2021-2022)



Dr. Pradipta Kumar Basu
OFFICER IN CHARGE, W.B.E.S.
Government General Degree College, Mangalkote
Dt. Purba Bardhaman, West Bengal- 713132

Syllabus contents

Units	Course contents (Theory)	Class/Lectures
1	Aves: Classification and Diversity; Aves: Morphology, Anatomy and Sexual dimorphism	04
2	Life history traits and foraging behaviour of birds; Courtship and mating behaviour in birds	02
3	Basic concepts on bird populations and communities; Concept of heronry	04
4	Bird habitats; Biogeography of birds	02
5	Migration in birds and its significance; Effects of urbanization on migratory birds	03
6	Birdwatching: Basic concepts and techniques; Ethics of birdwatching	03
7	Bird census techniques – Point Counts, Line Transects	03
8	Ecological roles of birds; Threats to avifaunal diversity and their conservation strategies. <i>Case study</i> : Current status of population of house sparrows.	05
Total no. of lectures		26*

* Duration of 01 class/lecture = 01 hour.

Practical (Total duration = 14 hrs.)	
1	Identification of some common birds through photographs.
2	Understanding the habits and habitats of some common birds through photographs.

Pedagogical Approach:

1. Lecture methods.
2. Demonstration methods in smart classroom using ICT-based teaching-learning approaches.

Assessment and evaluation pattern:

1. Theory (Multiple Choice Questions) – 20 marks
2. Practical (Viva voce) – 20 marks

Full Marks:40

CERTIFICATE WILL BE PROVIDED BY THE COLLEGE AFTER COMPLETION OF COURSE

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COURSE REQUISITES

Intake capacity:25

Learners:UG students of B.Sc. Zoology (H)

Semester for which the course is being offered:Semester II

Mentors:Faculty members of the Department of Zoology, GGDC, Mangalkote.

Course Fee:Nil

Total contact hours of the course: 40



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Objectives of the course:

The emergence of the importance of studying birds is attributed to their various ecological roles like pollination of flowers, seed dispersal, insect consumption and so on. They are also the indicators of ecosystem health since they are sensitive to environmental fluctuations. Lately, much has been written and discussed about climate change, environmental degradation and habitat destruction which accompanies the rising human population, urbanization and industrialization. In this trajectory of civilization many species including birds have declined drastically in silence. The researchers in this field and the conservation biologists face a major challenge regarding the availability of data from a particular area over a time-span to analyze the changes in bird communities. This has fueled the urge to study birds because they can readily be observed or can be identified from their vocalizations. However, the availability of data needs standardization to make it readable by researchers. This necessitates proper training in field study of birds and systematic data collection. Interestingly, today's youth are exposed to a greater coverage of nature and conservation issues in the social media, upcoming environmental NGOs and various apps which they can use to expand the knowledge on birds across a geographical scale. This makes the study of avifaunal diversity very relevant in the current scenario. Keeping all these things in mind the course has been designed in such a way that it will enable the students to:

- Appreciate nature.
- Strengthen their fundamentals of ecological balance.
- Nurture their scientific outlook towards nature.
- Impart first-hand knowledge about research designs.
- Identify birds in field conditions by observing them or listening to their calls.
- Understand bird behavior.
- Identify the threats to birds and the importance of their conservation.
- Gain knowledge about the current crises being faced by bird species in India.
- Sharpen their skills of observation, record-keeping and report writing.

Expected learning outcomes of the course:

After completion of the course, the students will acquire some knowledge and skills which will help them to:

- Identify the birds around them thereby giving them an overall idea about the kinds of habitats available and plant-coverage in the adjoining areas.
- Identify threatened or vulnerable species and make people aware about the needs to protect them.



- Identify threats to avifaunal diversity in a particular area and inform the concerned authorities for remedial measures.
- Draw their own research designs, collect and interpret data related to birds and/or other species.
- Understand bird behavior, seasonal fluctuations of local bird populations and identify the local migrants.
- Participate in community studies related to bird census.
- Become volunteers of several organizations related to bird conservation.
- Discover their interests in ecological/environmental studies/allied areas and pursue relevant courses to realize their dreams.

Suggested readings:

- Ali, S. (2003). The Book of Indian Birds. Oxford University Press, Oxford.
- Bibby, C., Burgess, N. D., and Hill, D.A. (1992). Bird Census Techniques. Academic Press, London.
- Inskipp, C., Richard G., and Inskipp, T. (2011). Birds of the Indian Subcontinent. Oxford University Press, Oxford.
- Urfi, A. J. (2004). Birds: Beyond Watching. Universities Press (India) Pvt. Ltd.

Gradation pattern:

Percentage of marks obtained	Grade
90-100	Excellent - A
70-89	Good - B
50-69	Fair - C
40-49	Not Eligible for Certificate - D

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Department of Zoology

GOVERNMENT GENERAL DEGREE COLLEGE MANGALKOTE

(Affiliated to The University of Burdwan)

Certificate of Completion

This certificate is awarded to Mr./Missbearing Roll No.....of Semester.....of the session **2021-2022** of the Department of...**Zoology**....,G.G.D.C.Mangalkote, for successfully completing Add-on Course entitled “**STUDY OF AVIFAUNAL DIVERSITY FOR BEGINNERS**” during his/her.....Semester study.

The candidate has fulfilled all requirements and specifications set by the institute.

Grade:

Dr.Debraj Biswal
(Head, Department of Zoology)
G.G.D.C.Mangalkote

Dr.Debraj Biswal
(IQAC Coordinator)
G.G.D.C. Mangalkote

Dr.Pradipta Kumar Basu
(Officer In Charge)
G.G.D.C. Mangalkote

Grade for the certificate, 90-100% 'A', 70-89% 'B', 50-69% 'C' and 40-49% 'D'

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Date of issue: