



Certificate Course in
“BIRD IDENTIFICATION AND BASIC ORNITHOLOGY”
 26th November 2018 – 14th December 2018

ENVIS Resource Partner on
Wetland Ecosystems including Inland Wetlands
 Salim Ali Centre for Ornithology and Natural History (SACON)
 Anaikatty (POST), Coimbatore – 641 108

Report on Green Skill Development Programme (GSDP) - Certificate course in “Bird Identification and Basic Ornithology”

Background

The Green Skill Development Programme (GSDP) of the Ministry of Environment, Forest and Climate Change (MoEF&CC) is an initiative of the ENVIS Division for developing skill in the field of environment, forest, wildlife and climate change sector. It aims to facilitate India's youth to get employment or to become entrepreneur through ENVIS Resource Partners/HUB. ENVIS Resource Partner on “Wetland Ecosystems including Inland Wetlands” hosted by Sálim Ali Centre for Ornithology and Natural History (SACON), Coimbatore was assigned the GSDP Certificate Course in “Bird Identification and Basic Ornithology”.

The MoEFCC advertised this course during May 2018 in the local News paper “Pirpagal”. SACON ENVIS received 71 on-line applications. Based on the qualification and interest in the specified field 36 applications were short-listed and the applicants were called for the interview which commenced on 28th June 2018. Among the 36 applicants, about five individuals attended the interview and were selected to attend the course. Among the selected applicants, two individuals expressed their inability to attend the course due to their pre scheduled examination. The number of candidates to be trained was ten. Hence, the course was readvertised and also promoted through Whatsapp group and email contacts to the residents around SACON, Anaikatty, Coimbatore. In response we had 11 participants from Tamil Nadu, Kerala and Lakshadweep who attended the course during 26th November to 14th December 2018.

Inaugural program

The Programme was inaugurated on 26th November 2018 by Dr. K. Sankar, Director, SACON. He welcomed the participants and gave a brief introduction about the course and the employment opportunities in the field of environment, forestry and eco-tourism. The participants were provided with the kit and course material including the book “Birds of the Indian Subcontinent” by Grimmett *et al.* and binoculars. The program was also attended by SACON faculties thereby introducing the participants to different divisions of the Institute.

During the course period SACON faculties, ENVIS Staffs, researches and guest faculty trained the participants covering the following topics: Bird evolution and history, Bird classification and diversity, Adaptation in birds (Bird form and functions), Plumology, Birds and their habitats, Bird behaviour, Bird diversity of India, Threatened birds of India, Bird identification, Bird Conservation, Threats to the bird, Bird tourism as a livelihood, Bird and human interaction as in culture, religious beliefs, Basics of Instrumentation like Binocular, Spotting scope, Global Positioning System (GPS) and Camera, and basics of computer skill. The detailed program schedule is given in the Annexure 1. The proceedings of the entire course are as below:

26th November 2018 - Dr. M. Mahendiran, Scientist, SACON trained the participants on the Avian Evolution and their history. Dr. M. Mahendiran explained the participants about the Charles Darwin's Natural selection theory, Classes of Avian and Archaeopteryx. He described about the morphological features of the birds. He also took the participants on a campus tour to give them a firsthand experience of the birds commonly observed.

27th November 2018 - Dr. Rajah Jayapal, Principal Scientist, SACON introduced the participants to the Bird classification and their diversity. He explained about the Indian birds, health of forest ecosystem, endemic avifauna and feeding habits in birds. He elucidated the importance of protected areas to the participants and the need for their conservation. Dr. Ram Pratap Singh, Senior Scientist, SACON took class on characteristics of birds, adaptation in birds, their form and functions. He taught the participants in detail about the skeleton structure and anatomy of the bird detailing the role of every part of the bird's body. He also informed about the documentation of birds using genetic studies and also informed how the bird tissue, bones or feather is used for different studies. Dr. S. Muralidharan, Senior Principal Scientist, SACON gave a brief talk on ecotoxicology and the threats faced by the birds. He explained about the effect of pesticides on birds and elaborated on the research studies informing about the disaster caused in Kasaragod, Kerala resulting the loss of biodiversity due to spraying of endosulfan in the cashew plantations of State-owned Plantation Corporation of Kerala. Ms. Kirubha Nandhini, Ph.D., Research Scholar, Ecotoxicology Division, SACON introduced the participants to the Ecotoxicology laboratory and demonstrated the dissection of birds. She also elaborated on the procedures to send the dead bird samples for autopsy to determine the cause of birds death.

28th November 2018 - Dr. P. Jeganathan, Scientist, Nature Conservation Foundation was invited as a guest faculty. He took the participants around the SACON Campus and taught them how to identify the birds based on their features. He gave a lecture on basics of ornithology, bird distribution and diversity of India. He also stressed on the need for civil society involvement in documenting birds and also gave an introduction about Tamil birders meet and made the participants to register in the e-bird website. He conducted Nature games and held a Quiz where he showed an image of a bird and the participants were asked to identify them. During his interactions with the participants in the campus and communicating in the local language he generated interest among the participants to try promoting an all-inclusive conservation approach.

29th November 2018 - Dr. P. Balasubramanian, Senior Principal Scientist, SACON took class on birds, their habitats and behaviour. He elaborated on Nesting Birds and about the Hornbills. He described about the behaviour of fruit-eating birds, cavity nesting birds and the importance of birds in dispersing of seeds. The next session of the day was handled by Dr. Riddhika Ramesh, Scientist, SACON who discussed about the birds and their habitats, classification of habitat, causes of habitat loss and fragmentation, Threatened birds of India. She explained about the migratory birds and the need for migration. Dr. Riddhika conducted games on identifying bird species using the book “Birds of the Indian Subcontinent” book by Grimmett *et al.* The participants were taken to “National Ornithological Databank (NOD) Cell” at SACON where Ms. Divya Priya, Ph.D., Research Scholar, SACON briefed about the objectives of NOD Cell where they collate, organize, authenticate, curate, and make key information/data on Indian Ornithology.

30th November 2018 - Dr. Rajah Jayapal, Principal Scientist, SACON took the participants around the SACON Campus and emphasised on the skills to be used on field to observe and identify the birds. At noon, the participants started their travel to participate in the “Tamil Birder’s Meet” and to field visit.

01st and 2nd December 2018 - The GSDP participants actively participated in the annual “Tamil Birder’s Meet” held at Virudhunagar District. The sessions during the meet covered the topics on birds, climate change, women and bird studies, bird call records. They also attended workshops

on e-bird, photography, bird crayons sketching on 01st December 2018. The participants interacted with several birders and conservationists from various parts of Tamil Nadu.

03rd to 5th December 2018 - The field visit to the forest, inland and coastal wetlands for bird identification commenced from 03rd to 5th December 2018. The places covered were Koonthankulam Birds Sanctuary, Udhayamarthandapuram Birds Sanctuary, Vaduvor Birds Sanctuary, Thoothukudi harbour and Vellode Bird Sanctuary where bird watching and wetland survey was done based on the questionnaire. The participants were guided on several aspects of ornithology and wetland habitats by Dr. Goldin Quadros, Principal Scientist & SACON ENVIS Coordinator, Mr. T. Siva and Mr. S. Arulraj, Project fellows, Wetland Ecology Division. The use of GPS and mapping was also introduced on the field by Mr. N. Mohamed Ibrahim, IT Officer, SACON ENVIS RP. During the field visit Ms. Swapna Devi Ray, Junior Research Biologist, SACON introduced the bird road kill sampling for forensic and bird genomic studies.

06th December 2018 - Dr. S. Manchi Shirish, Senior Scientist, SACON introduced the participants to “Conservation of Birds”. He explained to the participants about the basics of conserving birds and then how to handle a bird or any wild animal which is under threat and need to work in association with the Forest Officers. He described the status and conservation of the Edible-nest Swiftlet in the Andaman and Nicobar Islands. He informed about the importance of nests of the Edible-nest Swiftlet which is the world's most expensive animal products that resulted in high levels of exploitation of its nests in the Andaman and Nicobar Islands. Ms. A. Julffia Begam, Information Officer, SACON ENVIS RP taught the participants about the basics of computers and Microsoft Office. She demonstrated to the participants the procedure to enter the data in MS-Excel and taught designing using PowerPoint slides. In the last session of the day, Mr. T. Siva, Project Fellow, SACON took class on the general introduction to the Owls and Indian eagle-owl. He explained to the students about the importance of Owls, taxonomy of birds.

07th December 2018 - Dr. M. Mahendiran, Scientist, SACON and Mr. N. Mohamed Ibrahim, IT Officer, SACON ENVIS RP introduced the participants to the basics of instrumentation technology and skilled them in the use of binocular, clinometers, compass, laser rangefinder, spotting scope, GPS and camera which are all used in the field for bird identification. The afternoon session covered the Library session where the participants were introduced to use and

importance of library. They were also introduced to the toposheets and its usage in the modern day GIS technology. They were also guided to finding out the bird books which are useful for bird identification.

08th December 2018 - Ms. Swapna Devi Ray, Junior Research Biologist, SACON took lecture and practicals on Plumology and introduced the participants on the basics of feather identification and genetics and avian forensic studies. The participants prepared the bird feather slides and identified some of the characteristics under the microscope.

09th December 2018 - Officially it was a holiday but the participants undertook a self bird watching trail in SACON campus observing over 75 different birds from the different habitats around the campus.

10th December 2018 - Dr. S. Babu, Senior Scientist, SACON gave a talk on Coastal birds and their habitat, and owl behaviour. He explained to the participants about diversity of owl species around the world and proportion of endemic owls. He elaborated the eating behaviour of barn owls. Mr. N. Mohamed Ibrahim, IT Officer, SACON ENVIS RP in continuation to the field exposure on GPS, further skilled the participants on the Geographic Information System (GIS), GPS and its types. He described to the participants on the usage of GPS in the field and explained in detail about the role of satellite signal in receiving the latitude and longitude to the GPS receiver. In the afternoon session, Dr. P. Pramod, Principal Scientist, SACON took class on Bird tourism as a livelihood. He explained about Dr. Sálim Ali and his travel on study of birds. He told about the conservation of wetlands and the role of SACON in conserving the Singanallur Lake, Coimbatore. Dr. B. Hemambika, Programme Officer, SACON ENVIS RP gave a talk on Threats to Birds and the ways to protect the birds. She explained about the anthropogenic activities such as pollution, agricultural expansion, coastal development, airports, resorts, tourism, golf courses, hunting and exploitation, and its effect on birds. She elucidated the effect of climate change on migratory birds.

11th December 2018 - Ms. A. Julffia Begam, Information Officer, SACON ENVIS RP conducted practical session on MS Word and Ms Excel. Dr. Riddhika Ramesh, Scientist, SACON gave a talk on interaction of birds and humans, birds in culture and resource. She enlightened on the festivals associated with birds like Black-necked crane festival in Bhutan, the hornbill festival in India, etc. She informed about the association of Sarus crane with people in

Gujarat, sacred groves, beliefs associated with birds such as Crow, Rose-ringed Parakeet, Peafowl, Falcon, Hornbills, Vultures with Zoroastrian community, Brahminy Kite, Crested Serpent Eagle, Mute Swan and Brown Wood Owl. She described about the role of migratory birds in thriving ecotourism. Dr. S. Babu, Senior Scientist, SACON took class on Coastal Bird diversity of India. He explained about the breeding of pelagic birds.

12th December 2018 - The participants visited the GASS Forest Museum at Institute of Forest Genetics and Tree Breeding (IFGTB), Coimbatore. The museum houses exhibits in categories like wildlife, botany, timber, geology, ethnology, mycology, entomology and wood crafts. The participants viewed the specimens which were present in two floors – a ground floor and first floor filled with all sort of exhibits such as stuffed birds and animals, reptiles, plants, samples of the various types of tree wood, skeletons, weapons, models of houses made of wood, forest ranger uniform, and almost everything else found in a forest. The participants were given an activity i.e., to find out the list of bird specimens using the “Birds of the Indian Subcontinent” book by Grimmett *et al.* In afternoon session, Mr. T. Siva, Project Fellow, SACON taught the participants on how to use e-bird website and enter the data on the website platform. In the last session, the participants visited the Ecotoxicology laboratory and saw the instruments used for the analysis of heavy metals and pesticides in the bird tissues.

13th December 2018 - The GSDP participants were evaluated based on the written examination, skill in identification of birds using the “Birds of the Indian Subcontinent” book by Grimmett *et al.* and PowerPoint practical viva examination. Dr. P.V. Karunakaran, Principal Scientist, SACON was invited as an examiner along with Dr. S. Manchi Shirish, Senior Scientist, SACON and Dr. Goldin Quadros, Principal Scientist & SACON ENVIS Coordinator.

14th December 2018 - The GSDP on “Bird Identification and Basic Ornithology” was concluded with the valedictory function. The welcome Address was delivered by Dr. K. Sankar, Director, SACON. The Chief Guest of the Day was Mr. Rajesh Gopalan, IFS, Chief Conservator of Forest & Head, Extension Division, IFGTB, Coimbatore, delivered the valedictory address stating the importance of GSDP, its relevance and opportunity for availing employment or self-employment. The Chief Guest along with the Dr. K. Sankar, Director, SACON distributed the certificates to the participants skilled at Level V by the Skill Development Agency of India. The GSDP participants gave their feedback and shared their experience of the programme. The Vote

of Thanks was delivered by Dr. Goldin Quadros, Principal Scientist & SACON ENVIS Coordinator, SACON, Coimbatore.

Photo Gallery

Annexure 1: Inauguration & Classroom sessions by SACON faculty



Inaugural ceremony



Dr. K. Sankar, Director, SACON distributing the course kit to the GSDP Participant



Dr. M. Mahendiran, Scientist, SACON delivering the lecture on 'Avian Evolution and their history'.



Dr. Rajah Jayapal, Principal Scientist, SACON explaining about 'The bird classification and their diversity'.



Dr. Ram Pratap Singh, Senior Scientist, SACON delivering the lecture on 'Characteristics of birds, adaptation in birds, their form and functions'.



Dr. P. Balasubramanian, Senior Principal Scientist, SACON delivering the lecture on 'Habitats and behaviour of birds'.



Dr. Riddhika Ramesh, Scientist, SACON explaining about interaction of 'Birds and animals, birds in culture and resource'.



Dr. Shirish Manchis, Senior Scientist, SACON delivering the lecture on 'Conservation of Birds'.

Photo Gallery

Annexure 2: "Classroom sessions by Resource Persons, ENVIS Staff and Researchers"



Dr. S. Babu, Senior Scientist, SACON addressing the participants about 'The Coastal birds, their habitat, and owl behaviour'.



Dr. P. Pramod, Principal Scientist, SACON delivering the lecture on 'Bird tourism'.



Dr. P. Jeganathan, Scientist, Nature Conservation Foundation delivering the lecture on 'Basics of ornithology, bird distribution and diversity of India' and 'e-bird website'.



Dr. B. Hemambika, Programme Officer, SACON ENVIS delivering the lecture on 'Threats to Birds and the ways to protect the birds'.



Ms. A. Julffia Begam, Information Officer, SACON ENVIS delivering the lecture on 'Basic of computers and MS-Office'.



Mr. N. Mohamed Ibrahim, IT officer, SACON ENVIS delivering the lecture on 'GIS and GPS'.



Ms. Swapna Devi Ray, Researcher, SACON delivering the lecture on 'Plumology, basics of feather identification and genetics and avian forensic studies'.



Mr. T. Siva, Researcher, SACON delivering the lecture on 'General introduction about the Owls'.

Photo Gallery

Annexure 3: "Practical Sessions, Tamil Birder's Meet & Museum Visit"



Dr. P. Jeganathan, Scientist, Nature Conservation Foundation conducting Nature Games



Ms. V. Kirubhanandhini, Senior Research Biologist, SACON explaining bird dissection



Ms. Swapna Devi Ray, Researcher, SACON explains feather identification



Dr. Goldin Quadros, Principal Scientist, SACON explaining the working of Microscope



Dr. S. Muralidharan, Senior Principal Scientist, SACON explaining threats to the bird due to anthropogenic activities at Ecotoxicology Laboratory, SACON



Tamil Birder's Meet at Virudhunagar



GSDP Candidates at the Gass Forest Museum, IFGTB, Coimbatore



Photo Gallery

Annexure 4: "Field Trip"



Dr. Goldin Quadros, Principal Scientist, SACON interacting with the GSDP Candidates in the field



Field visit to Koonthankulam bird Sanctuary



Field visit to Vavduvoor bird Sanctuary



GSDP Candidates observing a bird from a road kill during their field visit



Field visit to Vellode bird sanctuary and interacting with RFO Mr. Vijayakumar



Field visit to Udhayamarthandapuram bird Sanctuary



Birding with Dr. Rajah Jayapal, Principal Scientist, SACON



Dr. M. Mahendiran explaining the usage of instrumentation in SACON CAMPUS

Photo Gallery

Annexure 5: "Evaluation and Valedictory function"



Presentation done by Mr. Saeed Anvar Ali M V



Presentation done by Mr. P. Kumar



Lighting of Lamp during the Valedictory function



Dr. Rajesh Gopalan, IFS, Head, Extension division, IFGTB, Coimbatore addressing the gathering



Feedback by Mr. G. Lakshmanan



Feedback by Mr. Noorul Ameen F M



Certificate distribution



Group Photo

GSDP Success Stories



Mr. Velkumar got placed in one of the projects of SACON as Field Assistant



Mr. Saeed Anvar Ali delivered a lecture on Basics of Bird Identification to Govt. Victoria College, Palakkad

Course Material



GREEN SKILL DEVELOPMENT PROGRAMME (GSDP)

Government of India
Ministry of Environment,
Forest and Climate Change (MoEF&CC)
New Delhi

Certificate Course:
Bird Identification and Basic Ornithology

Course Material



ENVIS Resource Partner on Wetland Ecosystems including Inland Wetlands
Salim Ali Centre for Ornithology and Natural History (SACON)
Anaikatty (POST), Coimbatore – 641 108

Banner and Invitation



GREEN SKILL DEVELOPMENT PROGRAMME (GSDP)

GOVERNMENT OF INDIA
MINISTRY OF ENVIRONMENT,
FOREST AND CLIMATE CHANGE (MoEF&CC)
NEW DELHI

**Certificate Course on
Bird Identification and
Basic Ornithology**

25th November to 14th December 2018
SACON, Coimbatore

Organised by:
ENVIS Resource Partner on
Wetland Ecosystems including Inland Wetlands
Salim Ali Centre for Ornithology and Natural History
Anaikatty (Post), Coimbatore - 641 108
Tamil Nadu (INDIA)



**SACON - ENVIS Resource Partner on
Wetland Ecosystems including Inland Wetlands**

Cordially invite you for the Valedictory function of the

Green Skill Development Programme (GSDP)

*Certificate Course on
Bird Identification and Basic Ornithology*

*on Friday, the 14th December 2018, 10.00 a.m.
at SACON Class Room*

Chief Guest

Mr. Rajesh Gopalan, IFS
Head, Extension Division
Institute of Forest Genetics and Tree Breeding, Coimbatore

Presided by

Dr. K. Sankar
Director, SACON



Programme Schedule

10.00 AM	Lighting of Lamp
10.05 AM	Welcome Address Dr. K. Sankar Director, SACON
10.10 AM	Presidential Address Mr. Rajesh Gopalan, IFS Head, Extension Division Institute of Forest Genetics and Tree Breeding, Coimbatore
10.20 AM	Feedback from GSDP Participants
10.30 AM	Certificate Distribution & Felicitation
10.40 AM	Vote of Thanks Dr. Goldin Quadros Principal Scientist, SACON
10.45 AM	Refreshments

Annexure I

TIME TABLE GREEN SKILL DEVELOPMENT PROGRAMME: Bird Identification and Basic Ornithology Duration: 114 hrs.

DATE	DAY	09:45 - 11:15	11:15 - 11:30 (Tea Break)	11:30 - 01:00	L U N C H B R E A K	14:00 - 15:30	15:30 - 15:45 (Tea Break)	15:45 - 17:15
26 Nov 2018	Monday	<ul style="list-style-type: none">Inauguration (12:00 PM)				<ul style="list-style-type: none">Bird evolution and history (Dr. Mahendiran)		
27 Nov 2018	Tuesday	<ul style="list-style-type: none">Bird classification and diversity (Dr. R. Jayapal) (09:45 - 11:15)Adaptation in birds (Bird form and functions) (Dr. R. P. Singh) (11:30-01:00)				<ul style="list-style-type: none">Adaptation in birds (Bird form and functions) (Dr. R. P. Singh) + PracticalThreats to the bird (Ecotoxicology) + Laboratory (Dr. Muralidharan S) (15:45 – 17:15)		
28 Nov 2018	Wednesday	<ul style="list-style-type: none">Dr. Jeganathan (Tamil Birders meet and basics of ornithology)				<ul style="list-style-type: none">Dr. Jeganathan (Tamil Birders meet and basics of ornithology)		
29 Nov 2018	Thursday	Birds and their habitats Bird behavior <ul style="list-style-type: none">(Dr. Balasubramanian) (09:45 - 11:15) [Nesting Birds](Dr. Riddhika) (11:30 – 01:00)				Threatened birds of India <ul style="list-style-type: none">(Dr. Riddhika) National Ornithological Databank (NOD) Cell(Ms. Divya Priya) (15:45 – 16:15) Bird Conservation(Dr. Riddhika)		
30 Nov 2018	Friday	How to observe birds; Bird identification <ul style="list-style-type: none">(Dr. R. Jayapal & Mr. T. Siva) (08:00 – 10:45)				<ul style="list-style-type: none">Travel to Virudhunagar for Tamil Birders meet		
01 Dec 2018	Saturday	Field Trip (Bird Counting)				Field Trip (Bird Counting)		
02 Dec 2018	Sunday	Field Trip (Bird Counting)				Field Trip (Bird Counting)		
03 Dec 2018	Monday	Field Trip (Koontamkulam)				Field Trip (Thoothukudi Harbour)		
04 Dec 2018	Tuesday	Field Trip (Udhayamarthandapuram Birds Sanctuary)				Field Trip (Vaduvoor Birds Sanctuary)		
05 Dec 2018	Wednesday	Field Trip (Vellode Bird Sanctuary)				Field Trip (Vellode Bird Sanctuary)		
06 Dec 2018	Thursday	Birds and their habitats Bird behavior <ul style="list-style-type: none">(Dr. Shirish Manchi) Bird Conservation(Dr. Shirish Manchi)				Basics of IT skills <ul style="list-style-type: none">(Ms. Julffia) Introduction to Owls(Mr. T. Siva)		

07 Dec 2018	Friday	<ul style="list-style-type: none"> Basics of Instrumentation - Binocular, Spotting scope, GPS, Camera (Dr. Mahendiran & Mr. M. Ibrahim)	<ul style="list-style-type: none"> Library (02:00 – 05:15) - Toposheet - List of Bird Books, etc.
08 Dec 2018	Saturday	Plumology - Theory & Practical <ul style="list-style-type: none"> (Ms. Swapna Devi Ray) 	Plumology Contd.,
09 Dec 2018	Sunday	---- Holiday ----	---- Holiday ----
10 Dec 2018	Monday	Birds and their habitats Bird behavior <ul style="list-style-type: none"> (Dr. Babu) [Coastal birds & their habitat; Owl behavior] <ul style="list-style-type: none"> Basics of IT skills (Mr. Ibrahim)	<ul style="list-style-type: none"> Bird tourism as a livelihood (Dr. Pramod) Threats to the bird (Dr. Hemambika B)
11 Dec 2018	Tuesday	Basics of IT skills <ul style="list-style-type: none"> (Mr. Ibrahim) Birds and humans – Birds in Culture – Bird as resource <ul style="list-style-type: none"> (Dr. Riddhika) 	Bird diversity of India <ul style="list-style-type: none"> (Dr. S Babu) Basics of IT skills <ul style="list-style-type: none"> (Ms. Julffia)
12 Dec 2018	Wednesday	◆◆◆◆◆Museum Visit◆◆◆◆◆	Introduction to e-bird <ul style="list-style-type: none"> (Mr. T. Siva) Ecotoxicology Laboratory
13 Dec 2018	Thursday	Examination: 1. Written Exam 2. Identification of Birds	Examination: Viva
14 Dec 2018	Friday	❖❖❖Valedictory❖❖❖ (12:00 – 01:00)	

Annexure II

Green Skill Development Programme (GSDP) - 2018
Certificate Course: Bird Identification and Basic Ornithology
Feedback Form

Name:

User Id:

S. No.	Topic	Name of the Resource Person	Grade 1 to 5 (5 being very satisfied)
1.	a. Bird evolution and history b. Basics of Instrumentation Binocular, Spotting scope	Dr. M. Mahendiran	
2.	a. Bird classification and diversity b. How to observe birds; Bird identification	Dr. Rajah Jayapal	
3.	Adaptation in birds (Bird form and functions)	Dr. R P Singh	
4.	Ecotoxicology	Dr. S. Muralidharan	
5.	a. Basics of ornithology b. E-Bird basics	Dr. Jeganathan	
6.	Birds and their habitats Bird behavior	Dr. P. Balasubramanian	
7.	a. Bird Habitats b. Birds and humans c. Birds in Culture d. Bird as resource	Dr. Riddhika Ramesh	
8.	a. Coastal birds & their habitat; b. Owl behavior	Dr. S. Babu	
9.	a. Bird Conservation b. Bird habitats	Dr. Manchi Shirish S	
10.	Bird tourism as a livelihood	Dr. P. Pramod	
11.	Threats to the bird	Dr. B. Hemambika	
12.	Ecotoxicology Laboratory	Ms. V. Kirubhanandhini	
13.	NOD	Ms. C. Divyapriya	
14.	Library Visit	Mr. M. Manoharan	
15.	Basic IT Skills	Mrs. A. Julffia Begam	
16.	GIS Basics	Mr. N. Mohamed Ibrahim	
17.	Feather concepts	Ms. Swapna Devi Ray	
18.	a. Bird Identification b. E-Bird c. Owls in India	Mr. T. Siva	
19.	Tamil Birder's Meet		
20.	a. Field Trip b. Food c. Accommodation	Dr. Goldin Quadros	
21.	Wetland Flora	Mr. S. Arulraj	
22.	Food		
23.	Accommodation		

Signature