

Syllabus For Bird Watching Guide

Course Name	Bird Watching Guide
Sector	Tourism and Hospitality
Course Code	THC/2024/BIWG/435
Occupation	Bird Watching Guide, Bird-photographer, Nature/Bird blog writer
Job Description	Different occupation holds different responsibilities but mostly they have to identify birds with their english common names and preferably they should be able to distinguish between close species and have information about the behaviour, food habit, breeding, nesting etc.
Course Duration	Total Duration 120 Hrs (T- 40 hrs, P- 80 hrs)
Trainees' Entry Qualification	10th Grade Pass (preferably 12th Grade pass with Biology as a subject)
Trainers Qualification	10+2 with Biology as a subject and 4-years relevant experience OR Bachelor's degree in Zoology/ Wildlife biology/ Ecology/ Ornithology/ Conservation biology with 1-year relevant experience.

Structure of Course:

Module No.	Module name	Outcome	Compulsory/ Optional	Theory (Hrs)	Practical (Hrs)	Total (Hrs)
1.	Introduction to bird watching	Explain history of bird watching with bird diversity across Indian subcontinent.	Compulsory	10 hrs	-	10
2.	Bird biology and behaviour	Describe anatomy, physiology, migration, diets and nesting behavior in birds.	Compulsory	15 hrs	-	15
3.	Essential equipment and birding ethics	Demonstrate tools and equipment for bird watching and birding ethics.	Compulsory	5 hrs	10 hrs	15
4.	Bird identification and observation	Demonstrate visual, audio, and behavioral bird identification skills.	Compulsory	5 hrs	15 hrs	20
5.	Bird habitats and conservation	Promote community engagement for bird conservation.	Compulsory	5 hrs	20 hrs	25
6.	Advanced birding techniques	Apply advanced bird identification skills using birding apps.	Compulsory	-	15 hrs	15

Module No.	Module name	Outcome	Compulsory/ Optional	Theory (Hrs)	Practical (Hrs)	Total (Hrs)
7.	Field session	Show independent birding skills in the field.	Compulsory	-	20 hrs	20
TOTAL:				40	80	120

SYLLABUS:**Module Name: 1. Introduction to bird watching**

Outcome: Explain history of bird watching with bird diversity across Indian subcontinent.

Theory: Duration: 10 hrs
1.1 History of bird watching.
1.2 Basic concepts of ornithology – Definition, Significance, Taxonomical classification of birds, Difference between ratitae and carinatae.
1.3 Indian bird species – common species. Bird diversity in India.
Classroom Aids:
Computer, Projector, Power Point Presentation and software, Participant's Handbook.
Tools, Equipment and Other Requirements
Models and pictures of bird.

Module Name: 2. Bird biology and behaviour

Outcome: Describe anatomy, physiology, migration, diets and nesting behavior in birds.

Theory: Duration: 15 hrs
2.1 Avian anatomy and physiology (feather, beaks, wings, tail).
2.2 Foraging and diet.
2.3 Recognition and study of nesting sites.
2.4 Bird migration - overview.
Classroom Aids:
Computer, Projector, PowerPoint Presentation and software, Participant's Handbook.
Tools, Equipment and Other Requirements
Models and pictures of bird.

Module Name: 3. Essential equipment and birding ethics

Outcome: Demonstrate tools and equipment for bird watching and birding ethics.

Duration: 5 hrs	Duration: 10 hrs
Theory	Practical
3.1 Ethics of bird watching	3.1 Demonstration of birding equipment – Binoculars, Spotting scopes, Camera and lenses, Checklist book, field books, birding apps.
3.2 Prohibited/ discouraged actions – Nest photography, bird photography in breeding season, playback bird call.	3.2 Demonstration of birding attire and other
3.3 Role and responsibilities of a bird watching guide.	

3.4 Wildlife Protection Act, 1972, IUCN red list.	equipment – Dress, shoes, caps, call recording devices, GPS device etc.
Classroom Aids:	
Computer, Projector, PowerPoint Presentation and software, Participant's Handbook.	
Tools, Equipment and Other Requirements	
Binoculars, Spotting scopes, Camera and lenses, GPS device, Checklist book, field books, birding apps, demo dress shoes and caps for field visit.	

Module Name: 4. Bird identification and observation**Outcome:** Demonstrate visual, audio, and behavioral bird identification skills.

Duration: 5 hrs	Duration: 15 hrs
Theory	Practical
4.1 Bird identification – Feather, colour, shape, call, flight pattern, bill patterns, digit pattern.	4.1 Practice identification and checklist preparation.
4.2 Field report and checklist preparation on bird watching.	4.2 Prepare field report and checklist.
Classroom Aids:	
Computer, Projector, PowerPoint Presentation and software, Participant's Handbook.	
Tools, Equipment and Other Requirements	
Binoculars, Spotting scopes, Camera and lenses, GPS device, Checklist book, field books.	

Module Name: 5. Bird habitats and conservation.**Outcome:** Promote community engagement for bird conservation.

Duration: 5 hrs	Duration: 20 hrs
Theory	Practical
5.1 Bird habitat types – Tropical, sub alpine and alpine forests, Trans Himalayan zone, Grassland, Wetland, Urban and village areas.	5.1 Practice identification and checklist preparation.
5.2 Habitat degradation and its impact on bird diversity.	5.2 Identify degraded/ degrading habitats and take note of the physical and biological indicators.
	5.3 Conduct field surveys and community surveys.
Classroom Aids:	
Computer, Projector, PowerPoint Presentation and software, Participant's Handbook.	
Tools, Equipment and Other Requirements	
Binoculars, Spotting scopes, Camera and lenses, GPS device, Checklist book, field books, survey questionnaire.	

Module Name: 6. Advanced birding techniques**Outcome:** Apply advanced bird identification skills using birding apps.

Practical: Duration: 15 hrs
6.1 Behavioural identification – Foraging behaviour, perching behaviour, social behaviour.
6.2 Auditory identification – call and song recognition.
6.3 Technological identification – e-bird, Merlin Bird ID, Audubon Birds, Bird ID etc.
Tools, Equipment and Other Requirements
Binoculars, Spotting scopes, Camera and lenses, GPS device, Checklist book, field books Mobile phone, computer, audio recorder, Audio/video recording and editing software, birding apps.

Module Name: 7. Field session**Outcome:** Show independent birding skills in the field.

Practical: Duration: 20 hrs
7.1 Practice different birding techniques for identification.
7.2 Demonstrate birding experiences with the fellow co-trainees and participate in group discussions.
7.3 Present seminar and workshops with the experts of this field.
7.4 Prepare final report of checklists.
Tools, Equipment and Other Requirements
Binoculars, Spotting scopes, Camera and lenses, GPS device, Checklist book, field books Mobile phone, computer, audio recorder, Audio/video recording and editing software, birding apps.

List of Tools, Equipment & materials needed for 30 Trainees (Practical)

Sl No	Items Name	Specification	Qty
1	Binocular	Magnification: 10X Objective Diameter: 40mm to 42mm Prism Type: Porro or roof prism Focus Distance: 6-8ft Optical Quality: Premium optics with multi-coated lenses and phase correction. Waterproof and Fogproof: Should be weather sealed.	30
2	Spotting scope	Optical Quality: 1. Objective Lens Size: 60-80mm 2. Magnification: 30-40x zooming capable 3. Lens Coatings: Multi coated lenses. Ergonomics and Build quality: 1. Weight and Size: A lightweight and compact spotting scope. 2. Eyepiece Design: A zoom eyepiece or a interchangeable eyepiece system. Additional Features: 1. Waterproof and Fogproof: Should be weather sealed. 2. Tripod Compatibility: A scope with a tripod adapter or a built-in tripod mount. 3. Digiscoping Adapter: A digiscoping adapter is preferable.	01
3	Camera and lenses	Digital SLR or mirrorless camera with good range of lens compatibility, weather sealed, burst mode and good autofocus capabilities. Telephoto lenses: (Lenses should be compatible with the camera bodies) Focal length: 70-300mm/ 100-400mm/ 500mm/ 400mm or equivalent. Aperture: f/4.5-5.6, f/4 or equivalent. Image Stabilization: with good image stabilization.	02
4	GPS device	1. Garmin eTrex 10: A compact and lightweight GPS device with a 2.2" monochrome display. 2. Garmin eTrex 30x: A feature-rich GPS device with a 2.2" color display, compass, and altimeter. 3. Smartphone GPS	02

Sl No	Items Name	Specification	Qty
5	Checklist book	Each trainee should carry a checklist book.	30
6	Field books	Each trainee should carry a bird identification field book.	As required
7	Mobile phone	Smart phone is needed for running the birding apps.	As required
8	Other	Birding app software Tripod for camera and spotting scope. Sound recorder: High quality recording capabilities (24bit/96kHz or higher), high quality directional microphone, in-built storage or SD card compatible.	02 02 03

Marks Distribution:

Theory 200

Practical 800