

# EcoTraining 19 - Day Real Schools EcoQuest



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## COURSE OBJECTIVES

To provide participants with an introduction to African wildlife and the natural environment, in an enjoyable and exciting way. The course will teach ethical behaviour in natural environments as well as conservation initiatives that everyone can contribute to in their day-to-day life. The objective is for participants to understand the underlying elements that support this amazing variety of life such as geology, soils, plants and climate as well as how both small and large organisms and species interact with one another and their environment.

Arrival for the below course is 14h00 on the first day, with departure at 10h00 on the last day.

## CURRICULUM

Ecology forms the basis of this course, and the basic principles of ecology are: "Study of the House" earth's ecosystem that includes both the living and non-living parts of the environment. Plants, animals, fungi, protists and bacteria as well as the rocks, water and atmosphere make up your average ecosystem. Once this is grasped it is easy to see how a change in one part of an ecosystem might very well affect all the other parts.

### A typical day will include:

- 05h00 Drumbeats start the early morning with tea/coffee.
- 06h00 A daybreak drive or walk, focusing on the topic of the day
- 09h30 Return to camp for a hearty cooked breakfast.
- Debriefing on morning activities observations/ lessons
- 11h30 Midday lecture
- Free time or leisure activities
- 14h30 Mid-afternoon light lunch
- 16h00 Afternoon drive or walk, focusing on the day's lecture theme ended with sundowners.
- 19h00 Dinner and debriefing on the evening activities' observations and lessons.

Practical Experience and Discussion Headings with sub-headings:

Basic Ecology and Geology	Basic Navigation & Orientation	Animal Tracks and Tracking	Bird ID and Behaviour	Animal ID and Behaviour	Common Trees and Shrubs	Astronomy
Geology and Soils	Basic skills including use of landmarks, sun, compass, and maps	Basic Identification of Tracks	Basic Bird Identification	Mammals	Identification and how to identify	Night Sky including Southern Cross, Milky Way, common constellations
Weather and Atmosphere				Amphibians and reptiles		
Vegetation and Habitats						
Grasses		Basic Trailing Skills	How to use Bird Reference guides	Fish	Traditional uses	
Food Web and Energy Flow						
Habitat Ecology			Understanding basic Bird behaviour	Arthropods		
Conservation						

## DETAILED DAILY ITINERARY

<b>1</b>	Welcome to Pridelands
	14:00 Estimated Arrival Time at Pridelands.
	Upon arrival a safety briefing will be conducted, an orientation of camp as well as an introduction to the staff.
	Welcome, introductions, code of conduct, camp safety and rules.
	What this course is about and explain the schedule and the daily structure
	Participants will be shown to their accommodation, followed by time to settle in as well as time to prepare for the afternoon activity (dependent on arrival time).
	Participants meet for high tea / lunch and thereafter depart for an afternoon activity. Dependent on arrival time.
	Afternoon Activity
	A late afternoon activity which will be a game drive and night drive to introduce the participants to the reserve. Ice Breakers with the students around the fire before dinner.

<b>2</b>	Introduction to Guiding in the Natural Environment
	Morning Activity:
	<ul style="list-style-type: none"> <li>• A morning activity which will either be in the form of game drive or bush walk.</li> </ul>
	<ul style="list-style-type: none"> <li>• Focussing on Guiding in the Natural Environment</li> </ul>
	Noon Discussion and Practical Experience:
	<ul style="list-style-type: none"> <li>• Interactive discussion by instructor based on Guiding in the Natural Environment- Gaining a comprehensive understanding of the role and function of a professional nature guide within the tourism industry, including the aims of nature guiding and guiding ethics.</li> </ul>
Afternoon Activity:	
<ul style="list-style-type: none"> <li>• Afternoon activity which will either be in the form of game drive or bush walk.</li> </ul>	
<ul style="list-style-type: none"> <li>• Incorporating general game viewing, with emphasis on Nature Guiding and guiding ethics – topics covered during the Noon Discussion.</li> </ul>	

<b>3</b>	Astronomy
	Morning Activity:
	<ul style="list-style-type: none"> <li>• A morning activity which will be in the form of game drive or bush walk.</li> </ul>
	Noon Practical Experience:
	<ul style="list-style-type: none"> <li>• Interactive discussion by instructor based on Astronomy</li> <li>• Discussion topics and practical experiments to include: <ul style="list-style-type: none"> <li>○ Introduction to the African Night Sky including Southern Cross, Milky Way, and common constellations.</li> </ul> </li> </ul>
Afternoon Activity:	
<ul style="list-style-type: none"> <li>• Afternoon activity focusing on the elements discussed in the lecture which will either be in the form of game drive or bush walk.</li> <li>• Focus on the Night Sky including the Southern Cross, Milky Way, and Common Constellation</li> </ul>	

<b>4</b>	Ecology & Geology
	Morning Activity:
	<ul style="list-style-type: none"> <li>• A morning activity which will either be in the form of game drive or bush walk.</li> </ul>
	<ul style="list-style-type: none"> <li>• Focus on the Ecology and Geology of the surrounding areas.</li> </ul>
	Noon Discussion and Practical Experience:
	<ul style="list-style-type: none"> <li>• Interactive discussion by instructor based on Ecology and Geology - understanding the inter-relatedness and with a focus on the local area, including Geology and Soils, Weather and Atmosphere, Food Web and Energy Flow, Habitat Ecology and Conservation.</li> </ul>
Afternoon Activity:	
<ul style="list-style-type: none"> <li>• Afternoon activity which will either be in the form of game drive or bush walk.</li> </ul>	
<ul style="list-style-type: none"> <li>• Incorporating general game viewing, with emphasis on the Basic Ecology and Geology – topics covered during the Noon Discussion.</li> </ul>	

<b>5</b>	Common Trees and Shrubs
	Morning Activity:
	<ul style="list-style-type: none"> <li>• Morning activity which will be in the form of game drive and bush walk focusing on Common Trees and Shrubs and their Traditional &amp; Medicinal uses.</li> </ul>
	Noon Discussion and Practical Experience:
	<ul style="list-style-type: none"> <li>• Interactive discussion by instructor based on Common Trees and Shrubs.</li> </ul>
	<ul style="list-style-type: none"> <li>• Discussion topics and practical experiments to include: <ul style="list-style-type: none"> <li>○ Common Tree and Shrub Identification and how to identify as well as Traditional and Medicinal uses.</li> </ul> </li> </ul>
Afternoon Activity:	
<ul style="list-style-type: none"> <li>• Afternoon activity which will either be in the form of game drive and bush walk incorporating general game drive viewing, with emphasis on Common Trees and Shrubs.</li> </ul>	

<b>6</b>	Bird Identification and Behaviour
	Morning Activity:
	<ul style="list-style-type: none"> <li>• A morning walking activity focusing on Bird Identification and Behaviour. This includes Bird Identification, understanding Bird behaviour as well as how to use Bird Reference guides.</li> </ul>
	Noon Discussion and Practical Experience:
	<ul style="list-style-type: none"> <li>• Interactive discussion by instructor based on Bird Identification and Behaviour.</li> </ul>
	<ul style="list-style-type: none"> <li>• Discussion topics and practical experiments to include: <ul style="list-style-type: none"> <li>○ Bird Identification, Understanding Bird Behaviour &amp; How to use Bird Reference guides.</li> </ul> </li> </ul>
Afternoon Activity:	
<ul style="list-style-type: none"> <li>• Game drive, combining with a walk and incorporating general game drive viewing, with emphasis on Bird ID and Behaviour. Incorporating common species found in the local area.</li> </ul>	

<b>7</b>	Animal Identification and Behaviour
	Morning Activity:
	<ul style="list-style-type: none"> <li>• Trail from camp focusing on Animal Identification and Behaviour. Emphasis on Mammals, Amphibians, Reptile, Fish and Arthropods.</li> </ul>
	Noon Practical Experience:
	<ul style="list-style-type: none"> <li>• Interactive discussion by instructor based on Animal Identification and Behaviour.</li> </ul>
	<ul style="list-style-type: none"> <li>• Discussion topics and practical experiments to include Introduction to Mammals, Amphibians, Reptiles, Fish and Arthropods.</li> </ul>
Afternoon Activity:	
<ul style="list-style-type: none"> <li>• Game drive, combining with a walk if there are interests, and incorporating general game drive viewing, with emphasis on Animal Identification and Behaviour and extra focus on Big Game Animals.</li> </ul>	



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Presentations

Morning Activity:

- A morning activity which will be in the form of a game drive to enable participants to apply the skills they've learned in creating a natural guiding experience.

Noon Discussion and Practical Experience:

- Students will showcase the presentations they've meticulously crafted in preparation for the course.

Afternoon Activity:

- Afternoon activity which will either be in the form of game drive or bush walk.
- Enjoy an engaging session of storytelling by the fire after dinner.

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Presentations

Morning Activity:

- A morning activity which will either be in the form of game drive or bush walk.

Noon Discussion and Practical Experience:

- Students will showcase the presentations they've meticulously crafted in preparation for the course.

Afternoon Activity:

- Afternoon activity which will either be in the form of game drive or bush walk.



<b>12</b>	Tracks and Tracking
	Morning Activity:
	<ul style="list-style-type: none"> <li>• Morning activities which will be in the form of a bush walk focusing on Animal Track Identification.</li> </ul>
	Noon Discussion and Practical Experience:
	<ul style="list-style-type: none"> <li>• Interactive discussion by instructor based on Introduction to Animal Tracks and Tracking.</li> <li>• Discussion topics and practical experiments to include: <ul style="list-style-type: none"> <li>○ Introduction to basic Tracks, basic Track Identification as well as basic Animal Trailing Skills</li> </ul> </li> </ul>
	Afternoon Activity:
<ul style="list-style-type: none"> <li>• Afternoon activity which will be in the form of a bush walk focusing on the topics covered during the midday lecture and incorporating Animal Tracks and Trailing.</li> </ul>	

<b>13</b>	Hunter Gatherer Techniques
	Morning Activity:
	<ul style="list-style-type: none"> <li>• Morning activities which will be in the form of game drive focusing on Hunter Gatherer Techniques</li> </ul>
	Noon Practical Experience:
	<ul style="list-style-type: none"> <li>• Interactive discussion by instructor based on Hunter Gatherer Techniques.</li> <li>• Discussion topics and practical experiments to include: <ul style="list-style-type: none"> <li>○ Introduction to Tsonga (or Shangaan) Hunter Gatherer trap building (no animals are caught or harmed)</li> <li>○ Plants and their medicinal purposes</li> <li>○ Tsonga (or Shangaan) cultural associations with certain animals and plants</li> </ul> </li> </ul>
	Afternoon Activity:
<ul style="list-style-type: none"> <li>• Afternoon activity which will be in the form of game drive game drive incorporating general game drive viewing, with emphasis on Hunter Gatherer Techniques</li> </ul>	

<b>14</b>	Dangerous Game and how to approach animals on foot
	Morning Activity:
	<ul style="list-style-type: none"> <li>• Morning activities which will be in the form of a bush walk focusing on the basics of Trails Guiding.</li> <li>• Discussions on danger zones and reading mammal behaviour.</li> </ul>
	<p>Noon Practical Experience:</p> <ul style="list-style-type: none"> <li>• Interactive discussion by instructor based on Trails Guiding.</li> <li>• Discussion topics to include Rifle Handling and ballistics. How to stop a charging animal on foot, escape routes and planning your walking safari.</li> </ul>
	<p>Afternoon Activity:</p> <ul style="list-style-type: none"> <li>• Interactive discussion by instructor based on Walking and approaching dangerous game on foot – Trails Guiding. A walking safari focusing on how to approach animals on foot with emphasis on dangerous animals. How to use different mammal &amp; birds calls and their behaviour when walking in the bush.</li> </ul>

<b>15</b>	Bush Skills and Conservation
	Morning Activity:
	<ul style="list-style-type: none"> <li>• A morning activity which will either be in the form of game drive or bush walk.</li> <li>• Discussions on what you need and how you plan to survive in the bush (What can you use from your surroundings)</li> </ul>
	<p>Noon Practical Experience:</p> <ul style="list-style-type: none"> <li>• Interactive discussion by instructor based on anti-poaching, the importance of conservation and the impact poaching has on the environment and the ecosystem.</li> <li>• Discussion topics and practical experiments to include: <ul style="list-style-type: none"> <li>○ Snare collection</li> </ul> </li> </ul>
	<p>Afternoon Activity:</p> <ul style="list-style-type: none"> <li>• Afternoon activity focusing on the elements discussed in the lecture which will either be in the form of game drive or bush walk culminating in and incorporating bush survival skills of locating and sourcing water (in theory), preparing a fire and ensuring location is safe etc.</li> </ul>

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Full day Wilderness Trails Skills

Morning Activity:

- A full days Wilderness trails in the form of a bush walk
- The aim of today is to connect you with the wilderness that is inside you because not many of us know it is there.
- Lessons include wilderness appreciation and the MIA (Minimal Impact Approach)
  - Minimal footprint – how to guide in the bush leaving little or no evidence of your presence.
  - Minimization is maximization.
  - Wilderness – the importance thereof
  - Mastering 'Time'
  - Sounds of Silence - facilitating a wilderness experience

Afternoon Activity:

- Minimal footprint – how to guide in the bush leaving little or no evidence of your presence.
- Minimization is maximization.
- Wilderness – the importance thereof
- Mastering 'Time'
- Sounds of Silence - facilitating a wilderness experience

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Practical Guiding Experience

Morning Activity:

- Break camp with zero impact and then embark on a walk back to camp.

Noon Activity:

- Time to unwind after the wilderness trail and give participants a chance to prepare for their practical guiding opportunity.

Afternoon Activity:

- Participants will have the chance to lead a guided experience for the group, applying the knowledge they've gained throughout the course, while the Ecotraining Guide drives the vehicle

<b>18</b>	Practical Guiding Experience
	Morning Activity:
	<ul style="list-style-type: none"> <li>Participants will have the chance to lead a guided experience for the group, applying the knowledge they've gained throughout the course, while the Ecotraining Guide drives the vehicle</li> </ul>
	Noon Practical Experience:
	<ul style="list-style-type: none"> <li>Time to enjoy camp.</li> </ul>
Afternoon Activity:	
	<ul style="list-style-type: none"> <li>Participants will have the chance to lead a guided experience for the group, applying the knowledge they've gained throughout the course, while the Ecotraining Guide drives the vehicle which will include a Sundowner stop to bask in the African sunset and reflect on their course experience.</li> </ul>

<b>19</b>	All good things come to an end
	<ul style="list-style-type: none"> <li>Short activity drive with hotbox for last coffee/tea as the sun rises and provides an opportunity for students to sit in silence and just "be in nature". Return to camp for packing and departure @ 09:00am</li> </ul>



## TOPICS FOR PRESENTATIONS

### 1. Introduction to Guiding in the Natural Environment

- The Role of a Guide: Understanding the responsibilities and impact of a guide in connecting people with nature.
  - The Ethics of Guiding: Promoting conservation, respect for wildlife, and sustainable practices.
  - The Art of Observation: Techniques for noticing the small but significant details in the natural environment.
  - Creating Memorable Experiences: How guides use knowledge, storytelling, and enthusiasm to engage guests.
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### 2. Astronomy

- The African Night Sky: Exploring major constellations visible in the southern hemisphere.
  - Myths and Legends of the Stars: African cultural stories and folklore about the night sky.
  - Astronomy Basics: Understanding the life cycle of stars, the movement of planets, and the moon's phases.
  - The Milky Way Adventure: Learning about our galaxy and its significance to Earth.
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### 3. Ecology and Geology

- The Web of Life: Understanding how animals, plants, and the environment are interconnected.
  - Earth's Timeline in the Rocks: What rocks reveal about Earth's ancient history.
  - The Power of Water: How rivers, rainfall, and erosion shape ecosystems.
  - The Magic of Biomes: An introduction to South Africa's diverse ecosystems and their significance.
  - Geological Clues: Identifying rock types and their ecological importance.
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### 4. Common Trees and Shrubs

- The Tree of Life: Exploring the roles trees play in shelter, food, and oxygen production.
  - Medicinal Plants: Trees and shrubs used in traditional medicine and their significance in survival and health.
  - Tree ID Techniques: Tips for identifying trees through leaves, bark, and seeds.
  - Nature's Architects: How trees and shrubs provide habitats for wildlife.
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## 5. Bird Identification & Behaviour

- Birds of South Africa: Highlights of key species and their habitats.
  - The Language of Birds: Understanding bird calls and what they can tell us about the environment.
  - Flight Patterns and Adaptations: How birds' unique adaptations allow them to thrive in specific environments.
  - Birds as Nature's Alarms: How bird behaviour can signal nearby predators or changes in the environment.
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## 6. Animal Identification and Behaviour

- The Big Five and Beyond: Exploring the diversity of South African mammals and their behaviours.
  - Predator vs. Prey: Understanding the strategies animals use for hunting or avoiding predation.
  - Family Dynamics: Social structures and group behaviour in mammals such as elephants and lions.
  - Choose a Mammal: Assign a mammal for research on its behaviour, social structure, and unique adaptations.
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## 7. Tracks & Tracking

- The Language of Tracks: Learning how to interpret animal tracks and understand their movements.
- The Art of Tracking: Key principles for identifying and analysing tracks.
- Signs of the Wild: Beyond footprints—exploring droppings, feeding signs, and markings.
- Stories in the Sand: How trackers use small details to piece together wildlife activity.

### LIST OF DRINKS IN CAMP

Coke	R15,00
Coke Light/ Zero	R15,00
Fanta Orange	R15,00
Lemon Twist	R15,00
Iced Tea	R17,00

We have water filling stations with purified water, we do not have bottled water in camp and recommend that all students bring a water bottle that will hold a sufficient amount of water to last through their activities.

## RECOMMENDED BOOKS

The camp boasts a comprehensively stocked library with a copy of each book listed below, but if shared amongst learners, they may often be inaccessible. You are welcome to bring along your own books, for easy reference while out on activities. If you wish to purchase your own books, we recommend you purchase your own bird book, tree book, and mammal book. Purchasing all the books listed below is not expected.

We recommend the following books as a great start to your collection:

- Robert's Bird Guide: Hugh Chittenden, David Allan, and Ingrid Weiersbye
- Robert's Bird Guide: Greater Kruger National Park (2nd Edition) Duncan McKenzie, Hugh Chittenden, Ian Whyte
- Trees and Shrubs of Mpumalanga and Kruger National Park: Ernest Scdmidt, Mervyn Lotter, and Warren McClelland
- The Behaviour Guide to African Mammals: Richard Estes
- **Game Ranger in your Backpack: Megan Emmet and Sean Patrick**
- Field Guide to Trees of Southern Africa: Braam van Wyk & Piet van Wyk
- Photographic guide to Tracks and Tracking of Southern Africa: Louis Liebenberg
- Tracker Manual: Alex van der Heever, Karel Benade & Renias Mhlongo
- **PathFinder - Illustrated for Nature Enthusiast: Janesta Pulella**
- 100 Bushveld Trees: Megan Emmett Parker

The highlighted books are very good books for the age range of the students and cover all topics that will be covered during the course.

Online Bookshops

Books are available for purchase through the following online bookshops:

Exclusive Books

Bargain Books

Takealot

Penguin Random House South Africa

Struik Nature

Loot

Reader's Warehouse

Wordsworth

Briza Bookstore

AWN Books

Kirstenbosch Bookshop

Online Reference books: Apps and eBooks can be downloaded before the course commences (As there is very limited, to no internet access in the camps)

- eMammals of Southern Africa
- eTrees of Southern Africa
- Africa Sasol First Field Guide to Grasses Of Southern Africa (ebook)
- Roberts Bird Guide 2
- eSnakes App / African Snakebite Institute App

## WHAT TO BRING

**Electricity:** There is no electricity at the camp – solar lamps are used for all lighting and a generator is used to charge batteries. Studying at night with solar lamps can at times be challenging so a headlamp for this purpose is recommended as well as an extra battery-operated lamp if you wish to study in your tent at night. The kitchen is equipped with gas fridges for storage of all perishable food items, thus unfortunately there's no space for personal items (drinks, water, or other things). There is, however, a full selection of affordable drinks available at camp.

**Beverages:** Select beverages are available for purchase (over and above the cordials, tea and coffee included in the course fee).

**Water:** Fresh, drinkable water is available from the taps. Bottled water is available for purchase but for sustainability we encourage you to use the purified water available at the camp to refill your own bottles.

**Laundry:** A hand washing laundry service is provided at a nominal weekly fee.

### What to bring:

- Appropriate walking shoes (hiking boots). Thorns go straight through sport shoes!
- A pair of takkies or sneakers to serve as back up for your walking shoes (hiking boots)
- Sandals for around the camp
- Khaki (or neutral colored) clothing for activities (walks and drives)
- Warm jacket, jersey, gloves, beanie, and scarf as it gets chilly in the mornings and evenings during winter.
- Hat for protecting both the head and neck.
- Sunscreen
- Personal toiletries and towel
- A powerful torch to use in and around camp (opt for free standing for use inside the tent)
- A headlamp
- Extra batteries
- Personal pillow if preferred
- Raincoat / poncho
- Insect repellent
- Water bottles for at least 2 liters. We recommend a camelback, MTB or walking water pouch.
- Snacks/ cigarettes – no shops nearby. Include high energy snacks for walks i.e., protein bars, energy bars, nuts.
- Binoculars
- A bird book or electronic bird phone application is essential for your birding courses!
- Camera
- Daypack
- Any personal medication
- CASH (in ZAR Rands only)
- Please note radios and C.D. players are NOT allowed.