

KARURA FOREST ENVIRONMENTAL EDUCATION TRUST



Environmental and Conservation Education Programme

INTERNATIONAL SCHOOLS: ENVIRONMENTAL AND CONSERVATION PROGRAMME

Our dedicated education team is ready to welcome and guide visiting schools and students in discovering the marvels of Karura Forest. Our educational program, designed for students from international schools, caters to preschool through upper primary levels. Our curriculum delves into topics such as minibeasts, forest birds, and environmental conservation. Schools can select from a variety of pre-prepared sessions or request custom sessions tailored to their specific objectives. Come join us for an enriching experience that fosters intellectual curiosity and environmental stewardship.

CBC SCHOOLS: ENVIRONMENTAL AND CONSERVATION PROGRAMME

CBC EDUCATIONAL PROGRAMME: At KFEET, we have created a database of lessons tailored around the CBC subjects such as Science, Environmental Education and Agriculture. The lessons have been crafted to capture the learning objectives of relevant subject areas, and tie these in with environmental and conservation education, while showcasing the wonderful ecosystem that is Karura Forest.

CBC OUTREACH PROGRAMME: In line with the CBC Educational programme, the purpose of the CBC Outreach Programme is to develop an education programme that focuses on aligning forest, environment and conservation education with the objectives of the CBC curriculum. This initiative, conceptualized through the combined support of Karura Forest Environmental Education Trust, and Friends of Karura is focused on creating a fair opportunity for all learners to visit the forest, explore and learn. Through this initiative, we continue to offer assistance to selected schools and pupils who would like to visit the forest but require our support or assistance in order to do so. The support we currently offer includes transport to and from the forest, free entry as well as lunch for the pupils.

Key Successes

- **Fun Interactive Lessons:** Engaging lessons aligned with the CBC curriculum, enhancing learning experiences.
- **Comprehensive Content:** PPT presentations, worksheets, and activities for each grade, each term.
- **Educational Facilitators (Scouts):** Trained facilitators ready to deliver enriching content.
- **Impact:** Over 1,300 pupils reached in 2023; potential to expand the reach even further in 2024

Fun Interactive Lessons

The interactive lessons make learning enjoyable and effective. The lessons have been carefully prepared to align with the CBC objectives, in order to supplement their classroom learning with practical, experiential learning.

Welcome to Karura Forest

How Forests Conserve Our Environment and Control Soil Erosion

1

KARURA FOREST

Welcome to Karura Forest, one of Nairobi's most remarkable green spaces. Today, we are going to embark on an exciting journey to explore the importance of forests in conserving our environment and their role in controlling soil erosion.



2

Biodiversity

Let's start by understanding what a forest is and what makes it unique. A forest is an ecosystem with various plants, animals, and microorganisms living in harmony. Forests are homes to a wide variety of plant and animal species, contributing to a healthy and balanced ecosystem.



3

What is a forest?

Carbon dioxide and Oxygen gases play a crucial role in absorbing carbon dioxide, a greenhouse gas responsible for global warming, and producing oxygen essential for all living beings.




4

FORESTS: Conservation of Environment

Air and water purification: Forests act as natural filters, cleaning the air we breathe and the water we drink. They absorb harmful pollutants and maintain the water cycle.

Climate regulation: By regulating temperature and precipitation patterns, forests help stabilize the climate, preventing extreme weather events.

Wildlife habitat: Many animals rely on forests for food, shelter, and breeding grounds. Conserving forests ensures the survival of numerous plant and animal species.



5

FORESTS: Controlling soil erosion

What is soil erosion? Soil erosion is a gradual process that occurs when the impact of water or wind detaches and removes soil particles, causing the soil to deteriorate. Soil deterioration and less water quality due to erosion and surface runoff have become severe problems worldwide.

The effects of soil erosion go beyond the loss of fertile land. It has led to increased pollution and sedimentation in streams and rivers, clogging their waterways, and causing declines in fish and other species. Degraded lands are also often less able to hold onto water, which can worsen flooding.



6

The Role of Trees and Roots

Trees act as natural barriers, preventing rainwater from reaching away from the ground. The water drains down the leaves and branches and soaks into the soil rather than forcefully hitting the ground, which decreases the amount of soil that is washed away with the rain. The large canopies also help to break the force of the wind and limit the amount of soil that is carried away with it. Their roots help bind the soil, reducing erosion.



7

The Role of Trees and Roots

Watershed protection: Forests play a significant role in maintaining healthy watersheds (streams, rivers and lakes), ensuring a steady supply of clean water for communities downstream. Trees promote infiltration by slowing down runoff and by increasing soil drainage in the root zone.



8

Forests and Rainfall

Forests play a crucial role in the water cycle! Did you know that forests help create rainfall? When it rains, trees and plants in the forest catch and absorb the water through their roots. But that's not all!

Transpiration: Trees have leaves, and these leaves release water vapor into the air. This process is called transpiration; it's like trees breathing out water vapor just like we breathe out air. This helps in keeping our climate cooler and conserving our environment.

THE ROLE OF KARURA FOREST

There are five rivers that flow through Karura Forest: the Ruaka River, the Karura River, the Thaga River, the Mathare River and the Gitathuru River. Karura Forest therefore offers vital protection for these watersheds. Many communities rely on the water from these rivers, and therefore, Karura Forest plays an important role in conserving the environment.



THE ROLE OF KARURA FOREST

Karura Forest is 1,041 hectares (2,570 acres) consisting of three parts separated by Lamu and Karibu roads. As we had looked at earlier, the forest cover is extremely important in acting as a natural barrier, and in preventing rainwater from washing away fertile forest soil.



Let's Conserve Our Forests!

As we have seen, forests like Karura Forest are key in conserving our environment and in helping to control soil erosion. We should make every effort to protect our forests!



Comprehensive Content

For each term, the lessons are planned around a chosen topic in a given subject area, and the presentation is linked to a relevant objective – thus combining their classroom learning with practical forest, environmental and conservation education.

In the example below, we can see a snapshot of Term 1, Grades 5 to 7. This has been done for Terms 1 to 3, from Grade 1 to Grade 7. The database will be expanded as the CBC content for Grade 8 upwards becomes available.

Grade	Focus	Activities
Grade 7	Link to Agriculture – Conserving Agricultural Environmental – Soil Erosion How forests help in combating soil erosion	<ul style="list-style-type: none">• Welcome remarks• PPT on the role of forests in preventing soil erosion• Activity• Break• Walk• Lunch• Afternoon activity
Grade 6	Link to Science and Technology - Living Things - Characteristics of Invertebrates - Insects, arachnids, millipedes and centipedes Invertebrates of Karura Forest	<ul style="list-style-type: none">• Welcome remarks• PPT on invertebrates of Karura Forest• Activity• Break• Walk• Lunch• Afternoon activity
Grade 5	Link to Agriculture – Conserving our Environment What is conservation? Why is it important? Why do we need to conserve our forests?	<ul style="list-style-type: none">• Welcome remarks• PPT on importance of conservation of forests• Activity• Break• Walk• Lunch• Afternoon activity

Educational Facilitators (Scouts)

From the group of Scouts allocated to Karura Forest, we selected a small, highly dedicated team of dedicated who have received (and continue to receive) training in order to facilitate the education sessions for CBC pupils. This is a dedicated and passionate team who are critical in ensuring the success of this programme.

