

The green ark



Botanic Garden Lesson Plan

Lesson title	The green ark
Learning objective	<ul style="list-style-type: none"> ● Pupils learn about the concept of the Green man, and find their own Green man by exploring the environment. ● Pupils learn about the sacred groves and their role in plant conservation
Pupils will:	<ul style="list-style-type: none"> ● Understand that the Green man symbolises the unity of humans and the environment and that this concept appears in different faiths and folklore but it can also have a personal meaning to them. ● Understand that sacred groves are groves of trees of religious importance that nowadays have conservation value for the high biodiversity that they sustain within their boundaries. ● Understand that deciding how to conserve plants and their habitats is a complex issue.
Key words	Green man, sacred groves, conservation criteria

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Introduction

Explain to the pupils that today they are going to go on a quest for the Green man in the gardens, learn about the sacred groves that can ensure plant conservation and look at different trees in the gardens to create their own imaginary sacred grove.

Show the pupils different images of the Green man (**Resource 1**). Ask the pupils to describe the images. Explain that these images are representations of the Green man. Ask pupils if they have ever seen the Green man and say where. Ask the pupils what the Green man symbolises?

Explain to the pupils that the Green man can be found in different places and have different forms e.g. it can be a sculpture, or a drawing; it can be a foliated head completely covered in green leaves, or it can be a human face where foliage emerges from the mouth, nose, ears, or eyes even, and grow to surround the whole head.

Images of the Green man can be found in churches, temples and folk art, tree legends, and folk customs. Images of the Green man can be traced back to

Resource 1: Images of the Green man



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<p>Roman times, they can be found across different cultures throughout history and during the Middle Ages thousands of Green men were put in churches. It has been argued that the Green man appearing on tombs and in churches represents the Christian hope of new life, as green leaves are sprouting from a dead head.</p> <p>The Green man has also been interpreted as a symbol of fertility, representing the cycle of growth each spring, it is regarded as a symbol of our unity with Nature, and it may also represent a wood spirit, creation or protection.</p> <p>The Green man nowadays has inspired many artists around the world who create images of the Green man on wood, stone etc. to decorate places such as gardens, and many open public spaces (show the image of the Banksia man by an Australian artist who has decorated the Green man with native Australian plants (see Resource 1).</p> <p>Explain to the pupils that the concept of Green man can be found not only in Christianity but also in other religions as well such as Islam. Show the pupils the image of Al-Khidr “the Green One” (Resource 1) who is a highly regarded figure in Islam representing eternal life, regeneration, a great source of knowledge, and the freshness of spirit.</p>	
<p>Activity 1 Explain to the pupils that now they are going to go on a quest for the Green man in the gardens. Ask the pupils to express where they think they may be able to locate the Green man? Where should they look for the Green man?</p> <p>Show pupils an example of a Green man at another garden, The Lost Gardens of Heligan, Cornwall (Resource 2).</p> <p>Explain to the pupils that they are going for a walk in different parts of the garden to find and capture on paper their Green man. They will spend 5-10 minutes in each area, so that they will have time to make a quick sketch of the Green man and/or collect plant materials fallen on the ground to create their own Green man.</p>	<p>Resource 2: Examples of Green men</p> <p>Materials required: Rectangular frames made of cardboard for drawing. Pencils or crayons, drawing paper and clipboards.</p> <p>Short sticks (max 20cm length), plasticine or clay</p> <p>Elastic or string to hold mask on the head, mask template on cardboard (see Resource 2), plant material, glue, double sided tape</p>



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<p>Nb: Highlight to the pupils that they should not lose sight of the adults while they will be wondering around, looking for their Green man.</p> <p>Provide the pupils with the materials to capture their Green man. They could take a picture or they could draw their Green man. You could provide the pupils with a view finder (frame) made of coloured cardboard that will help them focus on and draw their Green man.</p> <p>Give the pupils sticks with plasticine on the top (see example Resource 2), which they can use to create their own Green man with plant materials that have fallen on the ground. Alternatively, pupils can create a mask of their Green man by sticking plant material on a cardboard mask (you may use the mask template in Resource 2).</p> <p>Take the pupils for a walk in different parts of the garden e.g. water garden, Pinetum, glasshouse with tropical plants etc.</p> <p>At the end of the trail ask the pupils to tell the group where they found their Green man, present their drawings and describe what the Green man is made of and what do they feel when they look at the Green man. Do they feel different about the environment? Does the Green man bring them closer to the environment? Does the Green man remind them of something personal?</p>	
<p>Activity 2</p> <p>Remind the pupils that the Green man often symbolises the unity between humans and the environment, represents new life and he can also be regarded as a tree spirit. Explain to the pupils that the idea of looking for the divinity in nature is very evident in Hinduism. In particular Hindus recognize individual plant species as objects of worship and forest areas have been preserved and protected because the local inhabitants believed that the deities live in these forests.</p> <p>These areas are described as sacred groves. According to a Hindu quote: "It was through worship of trees that man attempted to approach God". All forms of</p>	<p>Resource 3: Images of sacred grove in the East Khasi Hills, State of Meghalaya, North East India</p> <p>Materials required: Map of the garden with marks indicating the location of the trees the pupils will look at (garden educators need to provide this resource using their garden map)</p> <p>Papers and crayons to make trunk and leaf rubbings and jot down information about each plant.</p>



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vegetation in the sacred groves are supposed to be under the protection of the reigning deity of that grove and nobody is allowed to remove plants or even a small twig from the grove. As a result sacred groves have come to preserve not only specific plant species but their ecosystem as well and are now recognised for their role in the conservation of biodiversity. Tell the pupils that currently it is estimated that in India there are 19.000 sacred groves.

Present to the pupils an example of an Indian sacred grove called Ka Khlan Kyntang in the state of Meghalaya, North East India (**Resource 3**). Tell them that the local Khasi culture has preserved this 50-hectare (124-acre) grove of Khasru oak trees (*Quercus semicarpifolia*) which are more than 200-year-old. The local people use this forest for prayers and religious rites. The Khasis preserve this forest "because it was created by God". Many of the oaks are festooned by orchid epiphytes not found in the surrounding disturbed environment. Tell the pupils that sacred mountains, rivers, forests and groves are now recognised as a special category i.e. Sacred Natural Sites to be protected by International agreements (Convention of Biological Diversity).

Explain to the pupils that the sacred groves may include rare, endemic (exclusively native to an area) and endangered plant and animal species. The trees that comprise the sacred groves have been important not only for their role in supporting their ecosystems but also for their economical and medicinal uses. Point out to the pupils that the concept of a sacred grove which is a grove of trees of great religious importance is not unique to Hinduism but appears in various cultures throughout the world; e.g. In Islamic countries in northwestern Africa (Morocco, Algeria, and Tunisia) the wooded areas surrounding the tombs where Muslim saints are buried and which are also used as cemeteries by local Muslim communities, are holy forests that are protected from clearing for religious reasons.

Tell the pupils that they are going to go on a trail to explore a variety of trees in the gardens, and then they will have to discuss with each other and decide which species they would chose to include in their sacred grove so that both the species and its habitat will be protected.

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Resource 4: Information cards about trees (this information is indicative, educators can create their own information cards depending on the plants they would like to include in this trail activity)



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Explain to the pupils that they will have to work in pairs to find the trees using maps (**Resources**) and when they find the trees they will have to look at the information labels attached to them (**Resource 4**). When they find each tree they will make their leaf and trunk rubbings so that they will remember it, and also jot down information that they found interesting about the plant which will help them decide which one to include in their sacred grove. This information can be based on their own observations of the tree or on the information they will find attached on it.

At the end of the trail gather the pupils and ask them to discuss with their pair which plant they will choose for their sacred grove. Tell them to look at all the evidence they collected and decide only one tree they would choose to be protected in their sacred grove. Ask them what criteria they will use to make their decision. Expected answers may include aesthetic value, economic use, medicinal use, religious importance, historical/cultural importance, ecological/environmental importance, endangered status. At the end of the discussion they will have to justify the criteria they used to make their decision.

Highlight that the decision is theirs and there is no right or wrong answer.

At the end of the discussion gather the pupils' justification of their choices and make a bar chart to show how many pupils used each one of the criteria to make their decision.

Remind the pupils that the sacred groves were natural areas that included trees and their habitats in which the local people believed the deities lived. At the same time these forests of trees have been recognised and protected as sacred because of their values e.g. economic and medicinal. Most sacred groves also have practical day-to-day benefits, such as providing sources of food, or fuel.

Unfortunately although these places have been preserved for their religious importance, they are currently under various pressures because of human activities such as deforestation, urbanization, intensive agriculture, overexploitation for the timber and other resources. The inclusion of sacred



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<p>groves in International Conservation Agreements such as the Convention for Biological Diversity (CBD) is aiming at protecting these areas of both religious/cultural and environmental importance.</p> <p>Nowadays deciding how and why to protect species and their habitats is a complex issue that concerns the international community. Deciding which criteria to prioritize in order to make decisions for environmental conservation is challenging. Ask the pupils to discuss who should make these decisions.</p>	
<p>Plenary Tell the pupils that the last thing they will do for this lesson is to play the game: “Beat the educator”.</p> <p>Draw up a grid on the board. Tell the pupils that you are going to ask them questions about the Green man and sacred groves. Any of the pupils can answer the questions and they will be playing against the educator. They should put up their hands to answer the questions.</p> <p>If three of the pupils get the question correct they will get the point. If they get the question wrong, or they do not have an answer the educator gets a point. The winner is the team with the most points when all the questions have been asked.</p> <p>Questions to ask:</p> <ul style="list-style-type: none"> ● What is the Green man? ● Which religion is the Green man linked to? ● Where might you find the Green man? ● What are sacred groves? ● In which parts of the world can you find sacred groves? ● Why are sacred groves important for conservation? ● How many sacred groves are in India? <p>Give 3 examples of criteria for species conservation.</p>	