

Observational Walk

Notes and map to assist you on your visit to the Garden

LESSON PLAN: **Observational walk**
DURATION: **Typically 40 minutes**



Learning Objectives

To talk about this Garden and what grows here.

To use the senses to appreciate the living environment of plants and animals in the Garden.

To make close observation of parts of plants that may be collected and used for further study using magnifying lenses.

To begin to appreciate the diversity of living things, from the smallest moss to the largest tree.

Introduction

Introduce to the group the idea that the pupils are going on a collecting walk, to explore the Garden. As part of this exploration they are going to find small interesting parts of plants that have fallen to the ground and collect them. Emphasise that the pupils are only looking for small things that will fit into their bags. i.e. nothing too big. Do not collect stones or pick any part of any plant. Try not to collect mini-beasts – give these back to the Garden where they will have a better home.

Main Task

Take short routes through the Garden stopping at places with something interesting to talk about (e.g. Feeling the bark of the Giant Redwood, or items to collect such as cones under the pine trees). Let the pupils be free to explore but still be within a small radius of their group leader. Ask questions and be prepared for the pupils to find things that you may not know about.

Can they identify what it is? What part of the plant is it? (A leaf, a stem, a flower?) Which plant has it come from? (Usually the parent plant is nearby.) What kind of plant is it? Why is there a name label on the plant? What is special about this kind of Garden compared to a park? (People come to learn about the plants. Having the proper Latin name helps to track down information on the plant and how and where it grows - especially useful for internet searches.) You can visit the points on the map in any order you like and do as many or as few as you wish.

Plenary

Organise a show and tell session where the pupils show others some of the things they have found. If different groups are taken on different routes through the Garden many different items can be found and compared.

Resources

You will need a map of the Garden with annotated points and collecting bags (one per person).

Vocabulary

Look, observe, see, find, explore, leaf, stem, pod, cone, catkin, flower, root, twig, tree, trunk, bark, shrub, herb, grass, lichen, moss, fern, algae.

Notes to accompany your observational walk

1. Lime Tree: This is officially the first tree planted in the Garden when it opened on this site in 1846. When, many years later, it was decided to produce a logo to represent the Garden a pen and ink drawing of a Lime leaf was chosen.

2. Giant Redwood Tree: This tree on the main walk is the tallest tree in the Garden at 31m. Giant Redwoods are native to northern California. They form the most massive trees in the world. The world's largest is known as the General Sherman and is 83m high and 13m in diameter.

3. Beech tree with grafted trunk: Notice the distinct line around the trunk of this tree at about 1.5m above the ground. This is the scar from a young shoot being grafted on to a different root stock. This tree has arisen from a mutation, the leaves have a serrated edge unlike the conventional beech with smooth or entire leaves. The tree is very unusual and rare. In order to reproduce this tree, a vegetative process must be used; cuttings were taken from the original mutated variety and grafted on to a normal root stock when the stems were very young and immature.

4. Grass maze: Turf mazes were a common feature of villages in Mediaeval England. This grass maze is modelled on the double spiral, follow one path in to the centre and another path out. Its walls are composed of the New Zealand grass *Anemanthele lessoniana*. This grass is known as 'bunch grass'.

5. Bricked-up pear tree: People used to think they could help damaged trees to heal if they filled the wound to keep out infection. We now know that trees have their own very effective first aid treatments. This tree was bricked up during the 1960s.

6. Persian Ironwood Tree: This tree is very beautiful. It has an amazing bark that looks like 'army' camouflage. If you look closely at the branches you will see they interweave and join together as they grow. It has very pretty tiny red flowers in Spring.

7. The Bee Borders: Bees visit flowers for food – nectar provides sugars for energy and pollen provides proteins essential for growing. All the plants in these beds have been chosen because they offer food for bees. Watch the bees visiting the flowers.

Map for Observational Walk



1	Lime tree: first tree planted in the Garden
2	Giant Redwood tree, tallest tree in the Garden
3	Beech tree with grafted trunk
4	Grass Maze
5	Bricked-up pear tree
6	Persian Ironwood tree
7	The Bee Borders