The Ian Potter Foundation Children’s Garden

Ready Set Grow…Plantplay!

A visit to the Ian Potter Foundation Children’s Garden at the Royal Botanic Gardens Melbourne is an ideal experience for primary and early childhood groups. Children are immersed in the wonderful sensory and imaginary world of plants while looking at the role plants play in our lives.

Vision for the Ian Potter Foundation Children's Garden

‘The Ian Potter Foundation Children's Garden is a place where children can delight in nature and discover a passion for plants. It will be a garden that celebrates the imagination and curiosity of children and fosters the creative nature of play.’

For further information and bookings, please contact:

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Ian Potter Foundation Children’s Garden

Teacher’s Resource Book
This booklet provides information, suggested experiences, resources and references that will assist early years and early childhood educators to prepare for and extend on their excursion to the IPFCG.

Pedagogical overview
A visit to the Ian Potter Foundation Children’s Garden is an immersion into the magical world of a garden where experience-based learning creates connections through:

Real gardening
Life-long and life-wide skills include growing a garden that is also good for you; understanding the systems and cycles that make up a healthy garden. Asking ‘What is my role and where do I fit in?’ leads to critical thinking and the development of problem-solving skills.

Play and construction
“Children still need the peace of a long slow-paced active and engaged childhood with plenty of time to finger slime, peer into water and make hosts of new discoveries which consolidate the process of knowing self and the world.”

“Play is the perfect bridge between the world of nature and the world of others.”
Sally Jenkinson, The Nature of Play.

Sensory immersion in intriguing plant landscapes
‘In nature play, in which all the senses are active, a correspondence of feeling within the child, a symphony of responses to the world is aroused. Our first feelings are educated by our senses for it is our sense that begin the task of articulating and differentiating the feelings’. Sally Jenkinson.

Exploring the fantasy and imaginary elements of plants
A child’s imagination needs food; a garden is a place where the imagination grows!

The power of story
Landscape tells the most exciting stories because children can become a part of the story itself, meeting the plant and animal characters that live there.
The power of delight
“Surely a garden is not a success if it doesn’t bring joy to children.”
Edna Walling

When children develop a conviction that learning is satisfying and fun, they become lifelong learners. Pleasure, enjoyment, humour and laughter should be a part of each child’s day. We believe that teachers and parents should enjoy their visit also.

People passion
Share discoveries and creations with the gardeners, volunteers and botanists who work at the RBG, while finding out what they do and what drives them.

‘If a child is to keep alive his inborn sense of wonder…he needs the companionship of at least one adult who can share it, discovering with him the joy, excitement and mystery of the world we live in’.
Rachel Carson, A Sense of Wonder.

A ‘Hands…Heart…Head’ experiential approach
We all love to touch, to do, to make, to discover. Using our hands and senses connects us to our emotions where passions are ignited! Our passions lead to a thirst for understanding. The most effective learning experiences for children involve all three levels of learning and values the connections between them.

An integrated approach- Making plant connections
Although programs do have focus areas they are designed to support integrated curriculums through their content and strategies. Plants connect to everything about being human!

The child’s contribution
Whatever the child’s contribution, artwork, gardening, landscaping, sculpture, dance, mudpies, a scarecrow…it is the most significant part of a changing and dynamic landscape.

Multiple Intelligences: a Garden for All
Comprehensive planning allows children to exercise all their intelligences to create understandings, to seek challenges, to be creative.

All sessions blend the following 3 exploration types;
- Adult led e.g. a story telling.
- Structured activity e.g. ‘today in the Kitchen Garden we need to mulch the beds.’
- Play e.g. exploration with loose materials to explore floating or building for example.

In light of the New Victorian curriculum reform A Framework of Essential Learnings (VELS), explore how gardening can be used to;
- Develop values such as care, responsibility, respect and ethics
- Develop cross-curricular understandings and skills
- Give learners many chances to master and exhibit understandings
Keys to a successful visit to the IPFCG

Being prepared is the key...what you should know before you come
At the RBG we believe in giving children opportunities to experience the beauty of the weather!
The Ian Potter Foundation Children’s garden provides children with some shelter but because not all of the program time is spent undercover, we encourage you to give children the best possible experience by being prepared in the following ways;

In summer encourage parents to prepare their children for the hot weather. Please wear hats, sunscreen and bring your own water bottles. There are some drinking taps available, but at times we are out exploring the wider RBG.

In cold wet weather the Gardens are a wonderful place to explore but encourage parents to dress their children appropriately. They need to know we will be outdoors! An umbrella walk through the gardens is a magical experience!

We also believe that getting into the elements is wonderful fun!
In warmer weather the experience may involve exploration of water and children could get wet. They may also find that at any time of the year that they are getting dirty. Worrying about this spoils the experience.

Please encourage children to wear clothes that are able to get wet and dirty. Plastic aprons or art smocks are also encouraged. We discourage use of school blazers and other expensive clothing items. T-shirts and shorts or long-sleeved T-shirts and track pants are perfect, and preferably a change of the same.

We believe that preparing the parents is vital to the child’s enjoyment of the experience!
Explain to your parents and the children that being outside and exploring the elements and living things is an adventure and that getting dirty is a part of the garden adventure.
That means we must be prepared for adventure!

We believe that your visit is a great opportunity to have a picnic.
Please bring a snack to eat prior to a morning session and lunch for the end of the session. Children need to snack before the session starts as they can tire quickly without it.
Children need to bring adequate drinking water.
Lunch baskets and tubs can be stored at Observatory House.
Please cover them with a tarpaulin or lid when not in use as the birds are very cheeky!

And to learn about recycling...
Please take your rubbish back to school and talk about how we can have less rubbish by recycling. Fruit scraps only can be fed to our worms!
‘My rubbish is my responsibility’ is a good motto. It’s also a great opportunity for finding out where our food comes from and where the waste goes.
What parts of our lunches and packaging were made from plants?
Making the most of your experience... information about your session

We believe that people connections are an important part of the learning experience...
Therefore all programs are 2 hours in duration providing for an interactive connection with Education and other RBG staff and the resources of the IPFCG and RBG.

We believe that the IPFCG experience is a stepping stone...
A stepping stone that provides keys to independent interpretation and discovery.
Therefore all IPFCG programs spend half of the session (one hour) in the wider Royal Botanic Gardens making connections and discoveries that hone skill development such as observation, drawing conclusions, questioning. For this reason we see the children’s own gardens, school gardens, local parks, reserves and gardens as further stepping stones.

We believe that we all need to take responsibility for caring for our environment and ourselves... and that we learn to do this through the understanding that comes from direct experience with situations and environments that have risk potential.
The IPFCG is a safe environment where risk potential is controlled. The following guidelines will keep your class and the IPFCG safe.
Please remember that the plants of the IPFCG need our care and we can help look after them.
- We encourage the children to have eyes in their toes to watch where they are standing.
- ‘Treasures’ that have fallen from plants can be collected, but we explain that plants as living things, just like us, need all their parts to survive.
- At certain times and in particular programs picking and harvesting is an encouraged part of the experience.
- There are many opportunities to be involved in the real work of the garden, working with the gardeners and botanists to keep the garden healthy.
Please remember that we need to know how to look after ourselves and one another at the IPFCG. The children will have the opportunity to develop the following skill areas during their visit but please introduce safety and hygiene as preparation for their experience.
- It is vital that we follow the safety and hygiene ‘do’s’ in the garden.
- Do have fun and be careful near water.
- Do have fun and be careful when climbing.
- Do use the gardening tools with care and put them back where you found them.
- Do touch the plants with care.
- Do touch little animals such as worms gently and put them back where you found them.
- Do wash your hands after touching soil, plants or little animals, particularly before eating.
- Do use all the equipment such as the microscopes, ponding equipment, art supplies.
etc. carefully and take turns with each other. Please put them back where you found them when you have finished using them.

- Do use any loose material such as soil, sand, leaves, stones, and other plant material where relevant. Do be careful how you use it. Encourage children working with sticks and bamboo poles to keep one end on the ground and the other end in their hand.

- Do work together to be safe and watch out for one another.

We hope that your visit will provide post-visit investigation and memories to treasure ...

- Please do bring digital cameras to record your group’s experience.

- Use the plant ‘treasures’ your class collected in art or sorting activities back at school. Bring a bag to take them back to school with you.

- The excursion experiences are designed to initiate and inspire ongoing investigation back at school. Please take advantage of any take-home items such as the plants the children have propagated.

- Please also take home their ideas, imaginings, comments and favourite experiences. They will be most meaningful to the children and we’d love to hear about them!

- The pre and post excursion experiences have been designed to support an integrated, child-centred approach to planning.

- Please provide us with feedback on your program experience as we are constantly refining our programs.
For Pre-schools
Select from the following programs that provide experiences designed to give children opportunities to be immersed in the different features of the IPFCG.

Call the Education Service on 9252 2454 to find out what program is available.

‘Minibeasts’
Investigate the creatures we share our garden with, exploring how they live and how they help our gardens grow. Discover why plants attract and repel little creatures.

Experiences: ponding, worms, discovery-walk, animal observations, sensory exploration of plants.

‘Wonderful Water’
Exploring the connections between water and living things, delighting in water’s value as a resource and its varied nature.

Experiences: Floating plant materials, sensory exploration, discovery-walk.

‘Food for Life’
A hands-on organic gardening experience where children do the real work of a Kitchen Garden with the gardeners. Explores connections between plants and food.

Experiences: gardening (depending on season, planting, digging, harvesting) tasting, kitchen or café play eg mud pies or ‘pumpkin scones’.

‘Homes and Hideaways’
Exploring the ways that plant material is used as homes, for ourselves and other animals, including as cubbies for us.

Experiences: Discovery-walk, cubby building, animal observations, sensory exploration of plant material.

‘A Garden of Rhythm and Rhyme’
An exploration of the connections between music, sound and plants including responses to the landscapes through movement and music-making, and an exploration of plants as instruments and rhymes inspired by them.
For Primary Schools

N.B. Not all programs will be available at the time of opening.

Call the Education Service on 9252 2454 to find out what program is available at the time of your visit.

PlantMagic
An arts-based program giving students opportunities to respond to inspiring environments and garden experiences, creatively, cooperatively, imaginatively. (Focus: The Arts)

Food Forest
What is food and where does it come from? This program explores connections between food and plants and ways to grow healthy food in healthy gardens. Get to know the Children’s Kitchen Garden and meet the gardeners.

(Focus: Health, Science, SOSE)

Sustainable Gardening
A full-day program that gives students more intensive gardening experiences, exploring organic methods, worm farming and meeting the RBG gardeners. Students will consider ideas for designing or developing their own gardens.

The Magic Garden (a suggestion for special schools)
With a sense of adventure and weaving their own magic, children meet the plants who live in the garden and find out what they have to say! (Focus: Plant Diversity and Survival)

Goethe’s Garden
Discover a new way of looking at plants and their relationship to ourselves and other living things. Children respond artistically to plant observations and delight in the story of a little girl who gets to know Goethe in his garden. Available as a Steiner program or as German LOTE.
Teacher Professional Development

Introduction to the IPFCG
Tour the IPFCG with RBG Education staff, gaining an insight into the design, development and pedagogies behind the programs. Discover ways to maximise your students’ experience.

One per term for Early Childhood teachers and one per term for Primary teachers.

Free

How does your Garden Grow?
A supportive approach for teachers developing integrated curriculum around a garden, including strategies for using outdoor environments. Includes skills and tips for getting your garden growing with an emphasis on food. Pick up tips from RBG horticultural staff and the landscape architect.
Site Overview – The features of the IPFCG
And how to make the most of them.

Education Reception and Observatory House: Group arrivals
Please gather here to check in at the Education Office at Observatory House. It’s a good spot for snack, drink and a toilet stop before you start. Ask the Education staff for a tarpaulin for your group to sit on if the ground is damp. If there is no room for snacking on the lawn try the Serpentine Wall. You can leave your lunch baskets, cubes and bags on the verandah. Please take valuables with you during your session.

Spiral Entry
A major feature of the entry point is a spiral that is inlaid into the existing path and garden beds. At the centre of the spiral is a circle that forms the starting point of the journey that invites children toward the Children’s Garden. Symbolism of the stone includes the significance of the river redgum (*Eucalyptus camaldulensis*) to Indigenous Australians and the ability that children have to ‘see’ with their hands.

The design has been created by Koorie artist, Glen Romanis.
Lavender Labyrinths

According to Celtic folklore where there is lavender there is faerie activity…

Lavender brings you sweet dreams. Among the many uses of lavender, it calms the senses and helps you sleep. Because it is also connected with love, the perfect gift for under the pillow of someone you love is a ‘sweet dreams lavender bag’.

Pre-exursion: Sweet Dreams Story and Snooze

Use mats to allow children to relax and smell the fragrance of lavender oil by heating the oil in an oil burner. Ask the children to close their eyes and listen to a story about going to sleep or happy dreams. Afterwards ask them how they enjoyed the fragrance of the lavender oil and how it made them feel.

Or make a sweet dreams tussie mussie (posy of herbs that dry and remain fragrant tied with ribbon) to hang near your bed. Many children have herbs such as lavender, rosemary and pineapple sage growing in their gardens that can be brought to school for propagation or for drying.

Pre-exursion: A Garden of Rhyme

Lavender Blue Dilly Dilly, Lavender Green, you shall be King, Dilly Dilly and I shall be Queen

Make a collection of nursery rhymes that feature plants in them. Children can choose a nursery rhyme to illustrate, highlighting the plant featured. Use the rhymes to inspire discussion about what plants will be growing in the IPFCG. (Warning: Some nursery rhymes such as Oranges and Lemons and Ring-a-Rosy were inspired by historical events that although fascinating for older children may frighten young children if their derivations are discussed.)

During the excursion

If your children have the opportunity to explore the IPFCG lavender labyrinths, be prepared for them running the labyrinth rather than walking!

Encourage them to be careful of one another and include some quiet time watching the bees pollinating and looking for their sacks of gold (pollen sacks on their back legs).

Post excursion: Labyrinths

Labyrinths and mazes have been used as features in gardens and other natural places for centuries. Ask your children about their own experiences in mazes and explain that a labyrinth is different to a maze. Whereas a maze is like a puzzle to be solved a labyrinth has no dead ends. It has only one path that leads you to the centre and out again. Whereas a maze requires logical thinking, a labyrinth involves intuition, creativity and imagery. An ancient symbol that relates to wholeness, it can be seen as a metaphor for life’s journey. Children may wish to colour or decorate the labyrinth found at the end of this kit. Labyrinths come in many forms and the lavender ones at the IPFCG are different again. Allow children to discuss their experiences in the labyrinth.

Making a labyrinth

Using a small model first, try and create your own labyrinth with stones. Draw the design first and place the stones over the lines. Children may create or source simple labyrinth designs. Find a place in the schoolground to create a temporary or permanent labyrinth with rocks or plants (or drawn on a large tarp). When the children walk their labyrinth, use music, scarves, colourful scarves or musical instruments to celebrate their creation. Always ask them what they discovered about walking the labyrinth.
Potting Shed and Glasshouse

The potting shed and hothouse provide opportunities for children to do real gardening work such as sowing, propagating, and learning about what plants need to survive. Much of this real gardening work will be in the Children’s Kitchen Garden.

During the Excursion

Tools and gardening equipment are kept in the Potting Shed and there are safety do’s for children who use them. (Please see section Making the Most of Your Experience; Information about your session.)

IPFCG teachers, gardeners and volunteers will be happy to answer any questions about using the gardening equipment. Please ask first about the what and how of gardening tools.

Post excursion: Lavender propagation

Lavender is a great plant to grow at school for many reasons. Having originated from the Mediterranean it is a good water-conservation plant. Because it has many uses children can use it to make items such as lavender bags. It attracts pollinators such as bees and butterflies which keep your garden fertile. It adds a wonderful fragrance in your garden and looks beautiful. And it is easy to propagate!

Lavender grows in many gardens. Ask children to bring a cutting of lavender from home if they can. Follow the instructions to propagate lavender (and other herbs) but remember to explain that propagation by cutting is like magic because you get ‘free’ plants. Be prepared for that fact that you won’t have 100% success rate.

See the herb propagation guide at the back of this kit.
**Children’s Kitchen Garden**

The children’s Kitchen Garden is a place where children can immerse themselves in the world of food plants. They will be able to explore a variety of fruit, vegetables and herbs: from the familiar to the unusual. Vegetables and herbs are a focus and the children will get their hands dirty and discover the joys of gardening as they get involved in seed sowing, planting, composting, creating structures and harvesting, and working alongside RBG gardening staff and volunteers. Children will be encouraged to express themselves creatively in these activities and to work together as a team.

**Pre-excursion: Gardening Tools**

Discuss the children’s gardening experiences together, what plants they have helped to grow, who they worked with and what tools they used. Did they eat their produce?

Their memories could make a class book ‘In my Garden’. Ask the children to draw the tools and explain how they were used. Were there any safety rules and considerations? Children who have not had any direct gardening experience can describe what they love about their garden. Bring a treasure (leaf, flower, bark, stick, fruit, cone, vegetable, soil, mystery object) from their own garden to make a class floor collage (non-glue so that it can be played with) to inspire their drawings.

Explain that they will be using tools in the Children’s Kitchen Garden at the IPFCG. Brainstorm ways that they think the tools can be used safely. It may help to have some on hand for the children to demonstrate with. Ask your school or centre’s gardener to lend you some or bring them from home.

Mention that safety in the garden also means washing your hands after touching soil, plants and animals.

**Where does our food come from?**

Many children are not aware that our food comes from plants, that we eat plants! A simple activity is to ask where does your lunch come from and together work out where the food items or their ingredients come from. Almost everything we eat can be traced back to plants. They will love to find out that even foods like lollies, chocolates, biscuits and cakes are all made from plants.

**During the excursion: Working Together**

Gardening experiences in the Children’s Kitchen Garden will vary and be determined by the seasonal amongst other variables. Your group will be divided and possibly rotate between gardening experiences. Teachers and parents will work closely with the children to encourage safe use of tools and good team work. IPFCG staff and volunteers will provide support and guidance. Children will propagate their own plant to take with them.

**Post excursion: Yummy Vegetables**

Ask the children about their favourite (and not so favourite) vegetables

Plant radish seeds for a very short wait to harvest time. Or beans or peas to grow over teepee frames. Invite children to bring one vegetable each from home to make mystery vegetable soup or salad. Invite parent helpers to help children with chopping. Read Yucky Vegetables by Grace Lin, A Talewinds Book, 1999.
**Discovery Shelter and Pond**

The Discovery Shelter will inspire children and adults to explore the plant world with tools and resources such as microscopes to assist their investigations. Children may have the opportunity to work with RBG botanists, using the Discovery Shelter as a work-station to explore aspects of botanical work. The shelter leads out on to a decked area, which is closely connected to the wetland and provides a point for observing the wetland ecosystem.

**During the excursion**

Children working in and around the Discovery Shelter are in easy access of a watery environment that includes tall reeds, swamp, stepping stones and a bridge and boardwalk. Children will be encouraged to use the equipment in the Discovery Shelter and explore the pond area in their investigations. Encourage children to be mindful (though not afraid) of moving safely around the water and to use the resources carefully, returning them to the Discovery Shelter when not in use.

**Story Tree**

The Cork Oak provides a setting for story-telling but also for exploration of the unique qualities of cork bark; flexible, impermeable, elastic, compressible, light, resilient, and environmentally friendly! Cork oaks live for 150-200 years and every nine years the bark is stripped off for cork production, which does not harm the tree.

**Pre-exursion: Plants can Float**

Ask the children to bring corks to school for boat construction. Bring any constructions to the IPFCG on your excursion day so that the children can race them down the rill.

**During the Excursion: Hands on Cork**

If you pass the Cork Oak make sure you give the children the chance to feel the bark. If you have made boats from corks ask your RBG teacher to give you the chance to race them on the rill. During autumn look for the cork oak acorns.

**Post excursion**

Bark Diversity Encourage children to collect bark from home, parks or street-trees that has fallen on the ground. Children can also collect at the RBG and the IPFCG from the ground. Ask what purpose bark plays for tree survival and how different bark types serve different purposes. Discuss ways that humans and other animals take advantage of the qualities of bark. If you have a nest collection look for bark in the nest’s construction. If the nest has been found locally see if the tree that produced that bark can be found. Some barks such as Paperbark (Melaleuca species) have multiple uses in food preparation and shelter construction for Indigenous Australians. Sheets of bark were used as waterproof blankets to wrap babies.

*Is there a special tree at your school/centre that could become a ‘Story Tree’?*
Rainforest Ruin Garden

The Ruin Garden is suggestive of the relationship between the human landscape and the wild landscape. The stone imprint of an ancient building reflects our dependence on the use of the earth’s resources for building and shelter. It provides a framework to grow a jungle of plants over, under and around it. It reminds us of our dependence on plants, the abundant rainforest, the diversity of life, necessary for our survival. It reminds us that our lives are inseparable from the lives of plants.

The plants selected are rainforest species, providing opportunities to look at adaptations of rainforest plants, plant and animal connections and human uses of rainforest plants. Weird and wonderful plants such as carnivorous plants and plants with interesting fruits such as the banana passionfruit will provide children with amazing discoveries throughout the year, as will the giant leaves of Gunnera, the fragrance of frangipani flowers, the giant flowers of Solandra maxima, the creeping roots of walking figs.

Pre-excursion: Rainforest Foods
Bring some chocolate, bananas, vanilla, sugar and nutmeg to school. Ask the children what they have in common. They may guess that they all come from plants. But more than that, they are all from rainforest plants. Ask the children to design a recipe using the ingredients eg a thickshake or pancakes….

During the excursion: The Fossil Tree
If your excursion includes a visit to the Rainforest Ruin Garden give your children the chance to investigate the fossil tree, an ancient River Red Gum.

You will notice its black colour which has not been burnt but is ebonised. This means that the tree has taken up chemicals from the soil and groundwater that give it a jet black colour, significantly changing the original wood. The tree comes from the ancient shorelines of the Murray River and lived at a time when the climate, the pattern of the river and its vegetation was completely different to what we see today. Its estimated age is close to 10 000 years.

Post excursion: Plant Journeys
Ask the children to research rainforest plant foods to follow the journey of a particular plant from its country of origin. Some rainforest plants such as coffee, tea and sugar have literally made history.

Stories can be told in first person and titled ‘What am I?” for the other children to try and guess the plant.

Some plants travel of their own accord. A coconut is a giant-sized seed with a very effective life-jacket, so that they can travel across seas to colonise other tropical beaches. Experiment with seed cases and fruits to find out which ones float and can therefore travel in water. Ask children to describe the adaptations that have helped them float. If you would like to bring your seeds/fruit to test their floating ability at the IPFCG Rill on the day of your excursion, arrange this with your RBG teacher.
Bamboo ‘Wildwood’

The Bamboo Wildwood was inspired by the response of children to the bamboo forest near Oak Lawn. During Education programs children love to enter it to hear stories, feel the atmosphere, be enclosed by plants, hear the wind pass through the leaves, find and feel the roots and runners, find the hollowness of old stems that have been chopped down, explore the sounds of bamboo, find out about the plant of 1000 uses, learn about the Chinese symbolism of the 3 Friends of Winter and especially the bamboo’s strength but flexibility, feel the smooth, cold, hard, shiny trunks, imagine pandas, and look at the variety of colour. Children are fascinated to discover that bamboo is in the grass family and is the fastest growing land plant.

Children may get the opportunity to paint with bamboo, sit on bamboo mats, construct shelter, teepees, furniture, play bamboo instruments and generally love bamboo to bits. The Bamboo Wildwood is designed to offer children the following activities in both school and general public programs:

- Hiding, exploring, ‘finding yourself’ alone.
- Exploration of sound
- Building, construction and cubbies, kitchen garden constructions,
- Working together
- Exploration of texture
- Exploration of light and shade
- Making and playing musical instruments
- Study bamboo structure and adaptations
- Learning about bamboo use in other cultures eg Indonesian and Chinese.
- Measuring growth
- Using bamboo in art and sculpture.
- Eating bamboo shoots

_Pyllostachys heterocycla pubescens_ ‘Moso ’, this is the giant timber bamboo, it has thick green culms that get up to 18cm in diameter and it grows to 20 metres high. It is also known as the timber bamboo or mountain bamboo and is a cool climate running bamboo. 

_Originally from China and Japan it is one of the most useful bamboo species for paper-making, fences, furniture, woven articles and implements and young shoots are edible._

**During the Excursion**

If your excursion takes you into the Bamboo Forest take a sensory approach to exploring the bamboo. Your group may have the opportunity of exploring the musical instruments and creating a soundscape for the bamboo wildwood.

**Post excursion: Bamboo homes**

A set of bamboo poles is a wonderful resource. Try gardening suppliers (Bunnings have them) or even advertise in your newsletter that you are looking for donations of bamboo. Use 4 lengths of 1.5metre to tie together to form a teepee. Teepees are wonderful as a starting point for cubbies or as a growing frame for peas and beans. Discuss safe handling of the poles. Drag them along with one end on the ground and the other end covered by your hand. For filling the cubby walls use donated prunings from gardens in your centre/school community.

Discuss our reliance on plants as shelter and for homes and furniture. Ask children to identify ways that other animals rely on plants for homes and shelter. Gather pictures to make a display showing how plants provide homes.
Meeting Area and Bottle Trees

A place to gather and sit just inside the spiral entry (the entry for general public). The maturing forms of the Bottle Trees (*Brachychiton rupestris*) will enchant children and provide the opportunity to discuss their significance as a resource for Indigenous Australians.

The softwood was used to make fires and shields. Aboriginal people would obtain water from roots, and also chew the softwood and jelly-like mucilage from the trunk when water was scarce. The sap, new shoots and young roots were eaten. Seeds were pounded into flour to eat - many seeds were collected from crows' droppings.

Water as a resource for the survival of living things can be discussed through the Bottle Tree's adaptations for survival in a dry habitat. The emergence of water in a playful way from this dry environment reminds us of its precious nature.

N.B. Children may get wet and need a change of clothes by the end of the program.

During the excursion

Encourage children’s observations of tree form and character and to model them with their own bodies. Use your digital camera to photograph the children in front of ‘their tree’.

Post excursion: Tree Silhouettes

Trees make wonderful patterns and distinct shapes. Ask children to model the tree forms they remember from their visit to the RBG using their own bodies. Play a tree identification game by guessing the tree the children model. (See p. 83, Tree Silhouettes, *Cornell. J. Sharing Nature With Children*, Dawn Publications, 1998)

Ask children to draw tree shapes they remember from their visit to the RBG or to observe some from the school ground or local reserve. They might like to use written or spoken words that their tree brings to mind. Encourage children to see that poetry does not have to rhyme or follow rules.
Pines

During the excursion
Visit the Pines to see that not all plants make flowers, some have cones.
Look out for fungi that grow here in symbiosis with the pines.
Children may like to look for clues to find out who comes to feed on the pine seeds found inside the cones (sulphur-crested cockatoos and yellow-tailed black cockatoos).

Flax and Tea Tree Tunnels
The tunnels have been designed to immerse children in plant landscapes that also provide child-sized play-spaces, hidey-holes and opportunities for cubby construction.
Flax is a wonderful soft fibre plant and children may have the opportunity to use it to create string, crowns, weavings and discover why flax is so significant to the Maori.

Rocky Gorge
A place where children can feel the leathery leaves of the Snowgums, *Eucalyptus pauciflora*, and experience the swirling mists and rocky landscape of the high country.

The Blossom Fields and the Rill
Rolling down *hillocks* has always been popular at the RBG and the gently rolling mounds around the lawn encourage physical exploration. The rivulet or *Rill*, provides opportunities for early childhood groups to play with water, for example to explore floating and water flow. Older children may experiment with seed dispersal, looking at seeds that can float and travel by water.
The Blossom Fields will also provide a place to reflect upon and enjoy the movement of the seasons, a symbol of growth, change and the dynamic qualities of the living world. In spring cherry trees (species) excite the senses, inspire discussion on seasonal change and the role of pollinators, and provide an atmospheric setting for stories.

During the Excursion: Safe Water Play
Children may have the opportunity to play at the rill, exploring the floating abilities of plant materials and seed cases. Children may need to be reminded about caring for each other and will need to be watched as they play. Although the rill is shallow children could get wet. Encourage parents to watch children but to allow them freedom in their play.

Post excursion: The Water Table
The rill is reminder that water exists under the earth (as it emerges from the rocky cairn) and that it can emerge to flow over land and downhill towards the sea or larger bodies of water (the pond). The rill can be adjusted to a trickle or a torrent to reflect changes in the amount of water available in the soil. The vital role of plants in regulating the water table (and therefore the water cycle) by reducing soil erosion and therefore holding water in the soil can be illustrated by looking at parts of the school-ground (or local reserve) where erosion and compaction occur compared with areas where plants are growing.

Landscaping Play
Allow children to play with piles of soil, sand, to shape their landscape. Provide children with seedlings and ask them to plant one of their valleys and leave the other without plants. Invite children to water using watering cans and watch the effect of ‘rain’ in each valley. Observe the flow of streams into rivers and lakes. Compare the soil erosion and soil dump in the two valleys and the amount of runoff (water not absorbed by the soil). This can lead to discussion of how floods occur and their effects.
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