

Trinity College Botanic Garden

Transcripts of Sensory Trail Stops

Sensory Stop 1 – Lavender

As you walk through the front gate, on your left you will find a small rockery and a large patch of lavender. Lavender smells the strongest when it is flowering in spring and summer. Are there any flowers on the lavender plant when you visit? Research has found that the smell of lavender can have calming effects on humans and other animals and has also been found to reduce anxiety and decrease stress. How are you feeling today? Do you feel any different after smelling lavender for a moment or two? If you like the smell, break a small sprig off the lavender and carry it round with you while you explore the gardens.

Sensory Stop 2 – Bees

Located in a small hut in the Walled Garden, you can peep in the windows and watch honey bees crawling in and out their hive and listen to the faint buzzing. These are one of the main pollinators for the gardens and the reason the trees in the Gardens are so full of fruit every autumn. Note how you feel when you watch bees. Some people find watching beehives calming and hypnotic, others feel uncomfortable and nervous. How does watching and listening to the bees affect you? If you enjoy watching the bees and you are visiting in summer months, look for the tall plant with pale yellow flowers (meadow rue) by the entrance to the South Arboretum. and you should find it teeming with white-tailed bumble bees. Take a moment to watch the bees flit from flower to flower and listen to their gentle buzzing.

Sensory Stop 3 – Ancient Plants

Cycad house is filled with living fossils and some of these plants evolved more than 250 million years ago. How do you feel standing amongst plants that were a popular food with vegetarian dinosaurs? What does it smell like in the house? Cycads reproduce via cones which are either male or female, and male cones which contain the pollen use different scents to attract and repel pollinators. What does the house smell like to you on your visit? Carefully (they can be sharp) touch some of the leaves. Mature leaves are tough, smooth and often very sharp to deter herbivores. Look around and see if you can spot any cycads growing new leaves. What do they feel like? New leaves on cycads are feel much softer / velvety. This house can be visited all year but the greenhouse is heated in winter to protect these tropical trees from the cold, making it the perfect place to visit if the winter blues have you feeling down. You can visit the heated greenhouse, listen to the rain on the roof, smell the trees, touch the plants and enjoy some outside time in the warm.

Sensory Stop 4 – Exotic Plants

The Gardens contain approximately 4,000 plant species from every corner of the world, meaning that you do not need to travel further than the Gardens to meet some unusual plants you would rarely see in Dublin. Stove house, the long greenhouse and the cycad house contain tropical plants that thrive in the heat. Sensory information of exotic plants can invoke many feelings. If you are feeling homesick, you can search for familiar plants from your home country and enjoy looking at them, touching them or smelling them. If you are stressed from writing or marking essays you can wander around the exotic plants and reminisce about past holidays or plan your next. Missing your home in the countryside? Go and visit the Irish greenhouse. Which plants from which region are your favourite? How do they make you feel? If you could travel anywhere in the world, where would you go?

Sensory Stop 5 – Aloe Vera

In the Long House greenhouse you will find the collection of Aloe plants. One of these plants, the Aloe vera, has been designated to let visitors take a section of leaf from and explore the tactile sensory aspects of this plant. Do not take a leaf from the wrong aloe vera plant – if unsure always ask one of the staff! How does the liquid inside the leaf smell? Some describe it as a savory smell, similar to garlic or an onion. Do you like the smell? Many people are aware that the sap inside this plant can soothe sunburn, but it's also a very effective moisturiser for dry skin and a historical treatment for acne. Some people enjoy rubbing Aloe on their hands as a sensory stimulant for touch and smell. Please note: If you decide to use this as a moisturiser / spot treatment you do so at your own risk, allergic reactions are possible and if you get aloe vera in your eye it can be very painful! So approach this sensory station with caution and take care of yourself.

Sensory Stop 6 – Teas & Trees

Herbal teas have many different flavours and tastes but they also have many other properties such as boosting the immune system, aiding digestion and hydration. Many of the plants and trees in the gardens have historically been used to brew different herbal teas. Mulberry tea for example has properties which reduce inflammation, regulate blood sugar and improve heart health. Tea made from pine needles is high in vitamins C and A which aid your immune system, eyesight and skin and hair regeneration. Gingko tea is high in antioxidants and some research shows that tea made from Gingko trees reduces symptoms of psychiatric disorders and dementia. Gingko tea may also improve brain function and reduce anxiety and / or depression. If you are feeling curious, there are plenty of simple recipes online for you to research how to brew tea from these plants. You are welcome to harvest a few leaves to try making your own tea at home.

Sensory Stop 7 – Fiddleheads on Ferns

In the Stove House and Long House glass houses you can sometimes see fiddleheads growing on the ferns. These are very young fronds that haven't unfurled yet and they look completely different to the rest of the plant. What do they remind you of? How do they feel to touch?

Sensory Stop 8 – Catnip

Catnip is not just for cats. While it won't have the same psychological effects on humans as it does on cats, it has a unique minty smell and pretty purple flowers in summer. Catnip and Lavender belong to the same family but they smell different. Do you like the smell? Rub some leaves between your fingers - can you tell the difference between lavender and catnip by smell alone?

Sensory Stop 9 – Wintersweet

Chimonanthus praecox (wintersweet) flowers in January and February. Look out for the pretty yellow flowers blooming on the tree near the Irish House in the middle of winter. The flowers smell quite strongly, so you are likely to smell it before you see it! What do they smell like to you?

Sensory Stop 10 – Witch Hazel

Throughout history witch hazel has been used as a treatment for many skin conditions such as stretch marks and acne, due to its exceptional anti-inflammatory properties. Break off a leaf and sniff it. Some describe it as fresh and lemon scented. Witch hazel concoctions are available to purchase commercially, however if you are unable to afford it, you can research online how to forage and prepare acne treatments from witch hazel you have foraged yourself.

Sensory Stop 11 – Frost on Grass

Listen to the crunch sound as you walk on grass, admire the crystals and colour.

Sensory Stop 12 – Summer Storms

The Irish House, the Long House and the Australia House are coolest in the summer, making them an ideal space to spend time in during rainy days. One plant in the Irish House, *Equisetum hyemale* (horsetail), is a living fossil which evolved tens of millions of years ago. *Equisetum* has tiny leaves that are joined at the colourful stripes on the stem. Take a moment and look at how differently shaped this plant is to many others at the gardens. Most plants have curves created by the stem and leaf shapes, this plant is linear and vertical. What do the contrasting colours remind you of? Stroke the stem. Does it feel rough or smooth? Does this plant remind you of any other plants at the Gardens? You will find tree stump seats in the Long House where you can sit and wait for the storm to pass while you smell the rain and listen to the sound on the roof.

Sensory Stop 13 – Tree Canopies

The South Arboretum is full of trees and is a cool shady spot, ideal for hiding from the sun on a hot summer day. If it is warm and dry try lying on the grass under the Black Walnut tree and looking up at the canopy, watching the leaves move in the wind across this sky. This activity can be a very grounding exercise, so if you feel like your head is spinning, your thoughts are racing or you are struggling to concentrate then it is worth trying this. When you are lying on the grass pay careful attention to the sensory information around you. What does the ground feel like on your back? Can you hear the birds or the leaves rustling in the breeze? What colour is the sky today? Can you smell the wild garlic?

Sensory Stop 14 – Wild Garlic

In spring and early summer you will find wild garlic growing in the South Arboretum. Search for it in the spring under the trees near the bluebells. What does the smell remind you of? Garlic contains Allicin, a Sulphur compound, and some find the smell relaxing and, whilst not proven, an old remedy for insomnia is to put a garlic clove under your pillow as the smell is said to relax people. Why not sit down on the bench in the corner of the Arboretum while you decide if you like the smell from the wild garlic or not? When picked at the right time, the entire plant is edible including the leaves, stalks, bulbs and flowers. Past visitors to the gardens have harvested this and used it in a variety of recipes including pesto, lasagna, and as a herb in many other recipes. As well as being a sensory stimulant, eating garlic has other benefits for physical health as it boosts the immune system and can help reduce high blood pressure and high cholesterol. If you catch the common cold, eating garlic is thought to hasten the recovery time. Visitors are allowed to collect wild garlic if they wish, but please note if you decide to consume it you do so at your own risk and it is your responsibility to ensure that you are not allergic and that it is washed and prepared correctly.

Sensory Stop 15 – Fruit Trees

Dotted around the lawn are fruit trees including a pear tree and two apple trees, one which produces exceptional eating apples, and the other exceptional cooking apples. In the spring these trees are filled with fragrant blossom, in the summer you can see baby apples beginning to grow and in the autumn the trees are full of fruit. We encourage you to visit these trees and engage with the visual and scented stimuli they provide across the seasons. No one will stop you harvesting fruit from these trees, stewed apples and poached pears are a delicious way to incorporate vitamin C and healthy fibre into your diet. Foraging local apples and pears has many benefits, both for individuals and the environment, but any food gathered is consumed at your own risk. Wash everything thoroughly before eating and do not consume anything unless you are 100% sure the fruit is edible. TCD is not liable for any adverse effects from eating fruit grown at the Gardens.

Sensory Stop 16 – Baby's Tears

In the east of the gardens, near Liz's bench, you will find instead of grass covering the ground here there is another plant, commonly known as Baby's tears. *Soleirolia soleirolii* is in the nettle family but it won't sting you, it is actually very soft to touch and cushiony to sit on. Can you see any flowers? This flowers between May and August but the flowers are so tiny you might not be able to see them. If it's a nice day, take your shoes off and walk around the Baby's Tears barefoot. Many people find walking outside with bare feet is a very grounding experience and soothes anxiety. Part of this is because when you are walking barefoot outside you watch carefully where you step meaning your eyes are absorbing a lot of green light waves. Green environments are soothing and research shows they can induce a reduction in the human heartrate which has a calming influence on the body. In addition to this, there are pressure points under your feet that connect with the eye nervous system, and pressure on these points can ease eyestrain. So sensory information received by walking around barefoot outside might actually improve another of your senses - eyesight.

Sensory Stop 17 – Snowdrops

Snowdrops contain a compound called galantamine which is used in modern pharmaceuticals to manage Alzheimer's disease and is also used to relieve traumatic injuries to the nervous system. A lectin (carbohydrate-binding protein) in common snowdrops called GNA is being studied for its potential use against HIV. The same lectin is an effective insecticide against a variety of pests, including beetles, butterflies, moths, and aphids. Research has suggested that the GNA gene could be engineered into crops such as rice and tomatoes to increase their resistance to pests. Snowdrops should not be eaten as they contain a poisonous compound, lycorine, which can cause diarrhea, nausea, and vomiting.

Sensory Stop 18 – Log Seat

While enjoying the colors, some may not know exactly why the leaves change their color. As temperatures cool, some plants stop making chlorophyll, the green pigment found in almost all plants. It acts like a solar panel, capturing energy from sunlight. The cells of the plant then use this energy to produce sugars to feed the plant. As days shorten from fall into winter, there is less sunlight for the chlorophyll to absorb. For example, it would take too much energy for trees to keep their leaves healthy, so in winter, deciduous trees drop their leaves and go into a state of dormancy.