Cactus Country

Guidebook

Information

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Garden Trail Instructions

Just follow the green arrow and you will enter the first trail. Look for the small coloured rocks on the trail and find the corresponding information about the cacti in the guidebook.

During your walk we ask you to stay on the designated paths. DO NOT TOUCH ANY CACTI!
Even if you might not see the spikes they are definitely there. Children must be supervised at all times!

Make sure you wear suitable footwear.

Never pick fruit or seed pods from cacti,
they have vicious spikes.

Dogs are welcome to accompany you on your walk. Please make sure they are always on a lead and don't forget to clean up after them.

It's prohibited to smoke inside the garden, café or courtyards. Please use our designated smoking area in the car park.

Enjoy your walk and please leave this guidebook at reception before leaving Cactus Country.

Jim, Julie and John

Welcome you to Cactus Country

The History of the Garden

The garden you are about to encounter is the result of 'One Man's Dream' and a lot of hard work and determination. Jim Halls' passion for cacti was initiated by his father's collection when he was a child. He perceived there was a genuine fasciation for people who came to his father's garden who were amazed by the different shapes and colours of the plants in his collection. When Jim's father decided to sell his collection in 1979, Jim decided there was no way anyone else was going to buy them, this was an opportunity not to be passed by! So three months before Jim was going to marry Julie, a local schoolteacher, with no gardening background what so ever, they purchased the collection. For the next four years they looked after the plants on their 3-acre property, slowly propagating new seeds and planting bigger specimens in the ground to allow them to grow faster.

Of course they still had to make an income, so Julie continued to teach and Jim picked fruit at local orchards and pruned in the winter. This was a frustrating time for Jim, because he could envisage a great opportunity to develop a cacti and succulent garden for tourists, but he and Julie didn't have the finance to back up the plans.

Four years later, after a lot of hard work and focussing on their dream, Jim and Julie purchased this property which was a peach orchard. They bulldozed the trees and began setting up the gardens. In 1984 they purchased a second collection which had belonged to Mr. Ed Kroemer, a bachelor from Loxton in SA who had travelled the world collecting cacti. When he passed away, he requested in his will that his collection be kept together. His brothers and sisters took over a year to find someone who would fulfil their brother's wishes. We hope that Ed is happy with the home they have come to.

On the 21st of October 1988, Mr Ken Jasper officially opened "Spikes and Blooms". Since then the gardens have grown from ½-acre to over 12-acres and the name has been changed to "Cactus Country".

It's not only 'One Man's Dream' anymore, nowadays Jim, Julie and their sun John have joined forces to develop Cactus Country every day. You will notice the new expansions that are taking place on the outer edges of the existing garden. We're sure you'll hear a lot more about Cactus Country in the future. We hope you enjoy your visit and leave with a greater appreciation of these fascinating plants called Cacti and Succulents!

Cheers, the Hall Family

Green Trail

"The Cactus Reef"

"The Cactus Reef" is made up of plants that resemble coral under the sea. They are referred to as 'Montrose' or 'Tortured' Cacti, and are plants, which are not growing normally.
Succulents are very unstable plants and the monstrous growth can occur in nature as a result of chemical build up in the soil, damage to a plant or severe changes in its' environment. In the wild a mutant form is normally at a disadvantage and will usually die out before it multiplies, but in cultivation, they are nurtured because of their rarity and are sought after by collectors. On some cacti you can see the normal growth and the "montrose" form on the same plant. Wherever possible we have an example of the "normal form" as a comparison.

1. Monstrous Form
This is one example of the Monstrous Form, they vary in size and form and they are genetically unstable.

2. Cristate Form
This is the "Cristate Form" of the Monstrous. They are cut off the Monstrous plant as they appear and propagated to grow, as they are quite rare. If the plant starts to grow a section in the "Normal Form", we prune it off to leave only the "Cristate Form". These plants are not growing as normal cacti, but in all sorts of different angles.

3. Golden Jade
This lovely crassula can be grown outside or inside in a pot. They are considered to be a symbol of good luck. "Have one at the door and you'll never be poor".
(Worth a try)

4. The Snake Plant
This unusual looking plant has no spines. Can you see why it is called "The Snake Plant"?

5. Teddy Bear Cristate
Once again we prune off the flat leaves, which is the normal form, as they appear. The normal 'Teddy Bear' form is found in the North American section of the garden.

6. Grafted Cacti
Jim has been having a lot of fun in his laboratory learning how to graft 2 plants together. We have a new title for him now, he's called a "Cactologist". By grafting a special plant on top of a stock plant you can grow the special plant much faster. You cut each plant and then put the 2 together and tension them with a stocking pulled tight over the top.
Eventually the top plant will send its roots into the stock plant and start growing.

Kids Spotto Trail:
The answer to number 2
can be found on this trail.
See if you can spot Nemo, number 1.

Green Trail

"The Cactus Reef"

7. Cereus Cristate
This is the monstrous form of the Cereus cacti.

8. Echinopsis Cristate
This cristate form has a 'slug like' appearance. You can see the normal echinopsis growing on top of the plant.

You will now enter the undercover Cactus Reef where artist Jay Trapp (@jay.mt) has painted an underwater mural to complement the plants that could easily resemble creatures under the sea.

9. Aloe Plicatilis (Fan Aloe)
A unique fan like leaf arrangement.

10. Pilosocereus
These Pilosocereus genus are one of the most spectacular, columnar, tree-like cacti. They can grow up to 10m tall and have these striking blue colour branches which can wash off if grown outdoors.

Pink Trail

"The Andes Walk"

It's interesting to realise that cacti can exist in extreme cold conditions such as the mountains in The Andes. These plants have made many interesting adaptions to survive in these harsh environments.

1. Hybrid Cactus

This cactus is a cross between the hairy plant on the right and the tall plant behind to the left. Hybridisation is another adaptation of succulent plants to increase their survival, if a species is becoming threatened in its' environment.

2. Lobivia & Echinopsis

Many of the more common looking cacti are either lobivia's or echinopsis. They produce masses of large flowers in varying colours for 3 months of the year. The survival of the plant is dependent on attracting insects to their colourful, fragrant flowers to pollinate them.

3. Soehrensias

Fat Clumping Trichocereus. The ribbing common in cacti is to allow the plant to expand and contract as water becomes available, without splitting the plant.

4. Aloes

This large specimen does not actually belong in this section, however it has become too big to move. When we started the gardens in 1985 we did not have the plants divided into their countries of origin. This plant had to be dragged by a tractor from 2 kilometres away to be brought here originally.

Notice how thick and fleshy the leaves are, another adaptation to prevent dehydration. The bottom leaves die as new leaves grow at the top, and dry off to form a protective sheath up the stem.

5. Espotoa

This Stem Cactus originates on the dry mountain slopes from Ecuador to Central Peru. Some varieties can grow as high as 6 m/20 ft. The green body is completely masked by the dense covering of white silky hair. This plant has reached maturity, and has the top of the stem from which the flower comes.

6. Matucana

Mountain plants from Peru, where they occur at altitudes of between 400 and 4,500m above sea level. The average annual rainfall in this area is less than 300mm and usually falls during only 3 months of the year. The temperature fluctuates, depending on the time of day and the season : snow, frost and day-time heat can alternate within a few hours of each other. Icy cold nights (temperatures down to –20C), can be followed by warm days with low humidity. Another example of the harsh conditions that these plants can adapt to.

Kids Spotto Trail:
The answers to numbers 4,5,7 & 8 can be found on this trail.

Pink Trail

"The Andes Walk"

7. Stetsonia Coryne

This plant is referred to as the "Argentine toothpick", its' spines can exceed 15cm/6in in length.. Cacti are simply "Prickly Succulents". Succulents covers a huge range of plants which are able to store water in their fleshy bodies and resist loss of water through special adaptations. Cacti developed spines as one such adaptation to prevent grazing animals from eating it.

8. Cereus

Tree forming cacti with an edible fruit, which is very nutritious. The sweet tasting fruits are called 'Peruvian Apple' by the native inhabitants, and are the most important fruit in their diet and are considered a delicacy. This is the fruit we use in our delicious icecream and jam made at Cactus Country. Cacti can grow as large as a tree, but with several important differences that allow it to grow where other plant life cannot. Notice the cactus does not have leaves like "normal" plants. The stem or trunk of the plant has the green colour of the leaves to take over the role of 'photosynthesis', which is the essential food making process that happens in plants.

This evolutionary change has significantly reduced the surface area of the plant to keep water loss to a minimum. Stomates, the small breathing pores in plants which are found in leaves, (if you hold a leaf up to the light you can see these tiny holes), are found in the stem of the cactus.
The stomates allow the plant to breath in carbon dioxide, which is needed for photosynthesis to occur, but it also allows water to escape from the plant. If you were to tie a plastic bag over a branch with leaves on it during the day, you would find the bag would accumulate water. To reduce this water loss, the succulents have once again been very clever. They actually 'hold their breath' during the day and then open their stomates at night to acquire the next days' supply of carbon dioxide. The following day when the sunlight is abundant, which is essential for photosynthesis to occur, the plant uses it store of carbon dioxide without the risk of losing valuable water.

Pink Trail

"The Andes Walk"

9. Oreocereus

Also known as The Old Man of The Andes. The thick hair covering these cacti protects them from the fierce elements where they grow up in The Andes Mountains. They can be covered with snow for 6 months of the year in this habitat, and the hair forms an air pocket between the snow and the flesh of the plant. The hair also shades the plant from the high ultra violet light at high altitude. Rainfall is negligible on the Western slopes of The Andes, but heavy coastal fogs provide just enough moisture for these amazing plants to survive.
This cold desert environment plant will be about 25 years of age before it will produce a flower.

10. Pasacana

A Pasacana similar to this one was transported from our garden to The National Museum of Canberra. It was a feature in the foyer of the museum for the Atacama Desert Exhibition. We were not able to find a transport company willing to transport a 3 metre cacti, so Jim and Julie had to deliver it and Jim had to supervise the planting procedure in a specially built wooden pot.
This one is a Monster and even has a face.

Blue Trail

"The Wedding Walk"

Watch your head as you enter this walk between two large Cereus plants!

The fruit from this plant is called "Peruvian Apple" and is used in our Cactus Ice-cream and Cactus Jam.

Maybe you wonder why this trail is called The Wedding Walk, just have a look and you will understand!

1. Echinopsis

There is a large area planted out to different species of Echinopsis in this section. They have fantastic flowers if you're lucky enough to see them. Because of the large size of the flower they don't stay open very long – maybe 1 to 2 days, depending on how hot it is.

2. Trichocereus Tercheckii

One of the very large trichocereus, growing up to 10 metres high. The juicy flesh of such a cactus would be welcome to quench your thirst or satisfy your hunger if you were stranded in the desert. Most cacti are not poisonous and the inside flesh is comparable to a juicy apple, although without the pleasant taste.

3. Notocactus Magnificus

A beautiful plant with magnificent yellow flowers, as the name suggests.

4. Trichocereus Species

The central bed in this garden is mostly composed of Trichocereus species, except for a couple of Cereus plants. They have magnificent flowers and there are new hybrids being developed which are bringing some unique colours to these plants. It's amazing that these plants thrive in altitudes of 4,500 metres high, yet they can acclimatise to our conditions without any problems. Very adaptable plants.

5. Gum Trees

This is a good opportunity to compare trees and cacti. There are many differences and they are all adaptations to enable cacti to grow in the desert conditions where other plants can't survive. The most important survival adaption is to reduce water loss. They have done this by having a green trunk instead of bark. It is still very woody underneath to support the plant, but the green colour allows it to photosynthesise to be able to convert sunlight into food. If cacti had leaves like a tree, it would lose too much water through its leaves. Try an experiment at home by tying a plastic bag over a branch with leaves for a few hours during the hottest part of the day and see how much water collects in the bag.

Kids Spotto Trail:
The answers to numbers 6 & 10 can be found on this trail.

Blue Trail

"The Wedding Walk"

6. Oreocereus
These cute little hairy plants look like the "Cousin It" Family. They grow well in a pot and have a beautiful red flower.

7. Cleistocactus - Silver Torch
Notice how this plant has horizontal flowers which only appear on the North side of the plant. This is the side which gets most of the sun.

8. Tephrocactus
These strange looking "Alien" type plants grow high on the Andes. They have ribbon-like spines. They are related to the Opuntia.

9. Notocactus
Magnificent flowerers and is easy to grow.

White Trail

"Theo's Walk"

Turn left and walk up the hill to find the next trail in the garden. The white trail takes you onto a lower path which blocks the view of the gum trees and farming land so you can really immerse yourself amongst the Cacti. In 2015 we purchased a collection from Theo and his wife in Monbulk, VIC. The couple immigrated from Germany and shared a passion for gardening and in particular, cacti. Amazingly they grew everything from seed and nurtured them for over 60 years. They decided to retire to warmer weather in Queensland so we bought what was left of their collection. John had many trips back and forth with the trailer to move them all. We have dedicated this walk to Theo's Collection

1. Notocactus
The Notocactus is also known as the Golden Torch. This has beautiful large yellow flowers on top.

2. Opuntia
Can you see the enormous big spikes? While we're talking about Spikes, people often ask if they are poisonous. There are no poisonous cacti, but if you get a spike stuck in you it could become infected from the dirt. Use tweezers, if you don't get it all out it will fester and eventually come out. Best not to touch them though.

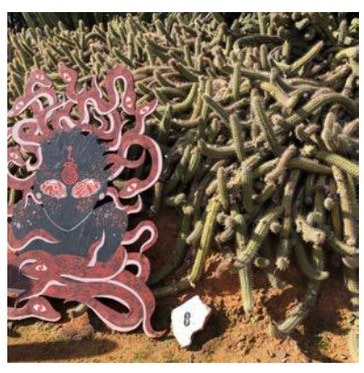
3. Cactus Country
Trichocereus Hybrid
Also called "Binnies Blush". This was one of the first Cactus Country Hybrids that Jim named, after his niece. It has a beautiful large pink flower. Since then there have been a lot of different species that Jim has been able to name. There are CC series after Cactus Country, the J Series which are Jim's Trichocereus species and JP series, Jims Pasacana species. Cacti are very unstable genetically and cross very easily with other species.

4. Oreocereus
"The Hairy Ones", typically grow in The Andes in very high altitudes.

5. Fat Trichocereus Bruchii
We call this the fat cactus!

6. Golden Torch
Also known as Webero Cereus, it has magnificent yellow flowers on top of the plant.

7. Denmosa Species
They lean and flower towards the sun.



8. Medusa Snakes
We thought this bank of snake-like cactus resembled the Medusa Snakes.

White Trail

"Theo's Walk"

9. Cereus
You can see the growth rings on this plant. Notice how this plant is growing out of a branch that has fallen over. This is typical of how cacti spread over a larger area. Notice how woody the plant on the ground is. Like a trees branch.

10. Cactus Country Hybrid
This is a cross between a pasacana and an old man oreocereus.

11. Oreocereus
Also known as Espotoa Cross

12. Neocardensia Species
These cacti grow in Peru and Bolivia in the mountains.

13. Theo's Collection
Most of the plants in this area came from Theo's collection.

14. Gymnocalycium
They are referred to as The Orchids of Cactus. They have magnificent flowers.

Organge Trail

"The Valley of the Giants"

It's incredible to see how fast these plants have grown. We have had to prop some up because they are growing so fast their root system is not well established enough to keep them upright.

1.Trichocereus - Pasacana
The gateway to the Valley of the Giants has 2 very impressive Trichocereus - Pasacana crosses. The one on the left is the High Mountain Type and the one on the right is the Low Mountain Type.

2. Trichocereus
Purple flowering – very unusual as most trichocereus have white flowers.

3. Oreocereus
Hybrid with much longer and more open flowers than the normal variety and grows more prolifically.

Continue on the path to the right.

4. CC Trichocereus Bridgesii
In this garden there are a number of smaller Trichocereus which are all hybrids developed at Cactus Country.

5. Echinopsis
Grown from our own seedlings collected over the years.

6. Cactus Overboard
The result of too much rain has caused a lot of the larger specimens to fall over. They are growing too fast for their root system to anchor them into the ground. It is going to be a difficult task to stand them up. Some break into several pieces so they will be dried out and replanted. They probably weigh a couple of tonne.

7. Cactus Country Hybrid
An interesting hybrid with very long spines.

8. Super Hybrid - Pasacana
These species grow super-fast and you can see it has similar characteristics to the Low Land Species.

9. Golden Oreocereus
Is also known as Pasacana Hybrid.

Yellow Trail

"Little Mexico"

Welcome to Mexico and North America where Cacti feel very much at home. It is not unusual for certain cacti to dominate the landscape in abundance in their natural environment. Many different forms of cacti can be found in Mexico, due to the varying climatic and soil conditions of this large country, however you would need to travel many 1,000's of kilometers to see the diverse variety growing here.

1. Ferocactus

The Aztecs referred to this magnificent Ferocactus as the "Sacrificial Table". The Aztecs of Mexico had many gods whom they felt dependent upon for their day to day existence. For example, they believed if they did not worship the God of Sun, "Eros", the sun would not continue to rise each day. They offered every imaginable sacrifice to satisfy their Gods. In Tlaxcala, these massive barrel cactus, were used as sacrificial altars. The Aztec religion demanded that the priest should cut out the heart of the victim, lying on his back on top of the plant, with a stone knife, so that the heart could be offered to Huitzilopochtli, the God of War. The Spanish conquerors found 136,000 human skulls in one temple alone, dedicated to the God of War.

2. Opuntia

There are many different forms of Opuntia, which you may notice in this section of the garden. Many people enjoy the fruit of the Opuntias, which can be eaten raw or used in the manufacture of jams, fruit paste, honey and beverages. The inside of the leaf can also be eaten raw in salads, fried or pickled.

A spineless Opuntia is very popular in America and can be bought in the vegetable section of the supermarket.

The "Prickly Pear" is the most popular of edible succulents, and is raised commercially in America for its sweet "fruit-salad' tasting fruit, resembling a plum colored pear. Captain Arthur Phillip introduced this species to Australia in 1788, hoping to establish a valuable industry in NSW. A parasitic insect of this plant (called Cochineal) was able to produce a valuable dye. Whilst the Prickly Pear thrived in our conditions, unfortunately the Cochineal Insect did not and the idea failed. This resulted in the spreading of this Opuntia at astonishing speed in NSW and QLD. Because of the plant's spines, it could not be grazed by animals and by 1925, over 60 million acres of land had been conquered by the plant. Over its entire range it was devouring up to 100 acres of land per hour. 600 different schemes were tried to stop the invasion, and finally the larvae of a tiny insect from Mexico, (Cactoblastis cactorum) was discovered to consume a large quantity of Prickly Pear after hatching..

Kids Spotto Trail:
The answer to number 9 can be found on this trail.

Yellow Trail

"Little Mexico"

To combat the “Evil Cactus”, 3 billion insect eggs were brought to Australia and the incredible appetite of these tiny larvae consumed the plant at incredible speed. The battle was won and millions of acres of formerly useless land was brought back to cultivation, and the Queensland people, anxious to show their gratitude to the Mexican Insect, erected the Cactoblastis Memorial Hall in the small town of Boonarga

3. Creeping Devil
Notice the beautiful white spines and the purple crown. This plant creeps along the ground, re-roots and then shoots up again, a very effective way of spreading.

4. Pony Tail
This is another example of how plants have adapted to survive in the harsh desert environments. They store their water in their trunk. Further along the path there is another specimen with multiple branches.

5. Mammalaria
The Mammalaria family are the most collected genus of cacti because of their prolific flowering and very interesting spine formations. They flower in a ring shape and are sometimes referred to as the “Bridal Veil” cactus.

6. Stenocactus Multicostatus
Sometimes referred to as the “Wave” or “Brain” Cactus. This is an easy plant to care for, it is frost tolerant and flowers early in the season.

7. Neobuxbaumia Polylopha
These solitary columned light green cacti can grow to 13 m tall and up to 35cm thick at the base. Their flowers range from light to dark red. Notice how the spines point towards the ground, this is so valuable water that forms as dew on the spines will drip to the ground at the base of the plant and be quickly sucked up by the fibrous roots just under the soil. This is one of the adaptations of cacti that have evolved to starve out competing plant life in their environment.

8. Dwarf Agave
This is one of the smaller growing Agaves which have a great sculptural look without growing too big in the backyard. They also do well in a pot.

9. Golden Barrel Cactus
This is probably the most popular of all cacti because of its beautiful golden colour. The largest of the plants in this area are in excess of 40 years old. They can live to be several hundred years old and can grow to over 1 m high and 1 m wide. The golden yellow flowers appear in the crown of the plant.

Yellow Trail

"Little Mexico"

10. Ferocactus Mexican Fire Barrel

Ferocactus range from small (30 cm wide), to plants that can form single bodies of up to 10 ft high. A large ferocactus needs a powerful taproot to anchor their weighty bodies. In addition to the taproot, they also develop a dense lateral root system, which can spread to 30 meters long. The purpose of these rambling root systems, which are close to the ground surface, is to absorb vital moisture, even when it is only in the form of dew or fog. There is often heavy dew in arid regions, and where soils are gravely or without a hard crust, the moisture penetrates very rapidly to reach the roots. It's because of the cacti's ability to adapt its structure in this way that has enabled it to survive, where other plant life has become extinct.

The flesh of some Ferocactus is very edible, and taste like raw potato.

At the base of the 'ferocious' fishhook spines is a gland containing a sweet sap which the ants milk. In return for the food source, the ants keep the plant clean of bugs, scale and other pests. This variety has beautiful red spines and at sunset they glow like the plant is on fire.

11. Ferocactus

This ferocactus has become so heavy we have had to prop it up with a post. In their natural environment they would just fall over and then new plants would grow along the side of it. After recent rains the post has slipped away. The number is underneath it but no one is volunteering to stand it up. It would weigh about 2 Tonne.

12. Echinocereus "Hedgehog Cactus

This specimen has beautiful purple flowers. I don't think any animals would feast on this one.

CAFÉ BREAK

This is a good time to take a break in the Café for a drink, Corona or refreshing Margarita, or try our "Hand Roasted Organic Coffee" and our famous Cactus Cake and Ice-cream..

Have a look at our souvenir shop as well! You will find all sorts of great things.

Red Trail

"The Arizona Walk"

As you might know Arizona is well known for its Saguaro Cactus, the big cactus with arms. It's definitely not the only beautiful cactus you can find inArizona, so have a wonder around on the red trail.

1. Astrophytums – Bishops Cap

These "sea urchin" looking plants resemble a Bishops Cap in shape. This is a Hybrid variety, notice the beautiful white markings. There are 3 other varieties in this section, see if you can find them. Their form is so symmetrical and they have large yellow or white flowers.

2. Agave

There are more than 300 varieties of Agave, all having the unique characteristic of dying after flowering, which can occur between 7 and 100 years of age. Depending on the species, the flower can attain heights from 1.5m to 11m. Producing such a huge flower stalk, which looks like a tree trunk is so exhausting for the plant that soon after flowering it begins to wither and die.

Agaves are popular ornamental plants, particularly the dwarf forms, and many are notable for the magnificent blue-grey bloom on their leaves.
The leaves of the Agave are equipped with sharp spines at the top, which may be lethal to grazing animals – a survival characteristic for the plant.
The Mescal Agave is a valuable source of an intoxicating beverage. The sap is drunk fresh as 'Agumial' (honey water) or fermented as 'Pulque' (the alcoholic national drink of the Mexicans).
The sap is also used in the manufacture of Tequila. The source of the sap is in the heart of the developing flower. The flower shoot is prematurely removed, creating a depression in the centre of the heart. The sap collects in this depression and is removed daily by suction over a period of several weeks. Sturdy plants in a good habitat location can supply up to 800 litres of sap, with a daily yield of 3 – 5 litres.

Apart from the Agave's importance for sap, there are some varieties that are of value for their fibre. The Sisal Agave is the source of the famous sisal hemp. Harvesting can begin when the plants are 5 years old. Two to four cuttings are taken a year over a period of 15 – 25 years. Once harvested the leaves are crushed by machine and the raw fibres are washed, dried and cleaned mechanically. Sisal hemp is used for the manufacture of ropes, nets, hammocks, brushes and paintbrushes.

3. Agave Victoriae Reginae

This Agave has a dense cabbage form and is signified by its white line formation on the leaves. It almost looks like someone has painted them on with white paint.

Kids Spotto Trail:
The answer to number 11 & 12 can be found on this trail.

Red Trail

"The Arizona Walk"

4. Ferocactus rectispinus
I wouldn't argue with this plant if I were you. It is one of the longest spined cacti that you'll find, particularly for its size. In spring you can notice the brilliant red colour of the new spines. Can you find the "tortured" spine specimen nearby?

5. Dwarf Agave
This is one of the smaller growing Agaves which have a great sculptural look without growing too big in the backyard. They also grow well in a pot.

6. Ferocactus Horridus
Long strong central spines. I don't think its too "horrid' at all, do you? Notice the bright yellow fruit which is unique to this plant.

7. Agave Parryi
One of the most sought after of all the Agaves.

8. Mammalaria Compressa Longispina
You will notice lots of different Mammalarias on this walk, they all flower in a ring shape and are sometimes referred to as "Fairy Cactus" or "Bridal Veil". This species grows in a clump with many different heads. Some of these very old specimens have up to 50 heads. Most of the other Mammalarias are single headed plants.

9. Pachycereus Pringlii - Cardon
This plant is referred to as the Elephant Cactus. It is the tallest cactus species in the world with a maximum recorded height of 19.2 metres with a 1 metre diameter trunk. This magnificent specimen weighed in at 25 Tonne. A symbiotic relationship exists with bacterial and fungal colonies on the roots of this plant which enable it to grow on bare rocks where no soil is available. The bacteria can fix nitrogen from the air and break down the rock to produce nutrients.

Take a walk up to the lookout from here to get an overview of the whole garden!

10. Mammalaria Fragilis
Fragilis stands for "Fragile". Little pieces of this plant drop off very easily and then root to grow another plant, so it tends to spread out making a nice white colour border.

11. Ferocactus Coloratus
"Fero" for short, stands for Ferocious. The very red spines on this species make it one of the most colourful Ferocactus.

Red Trail

"The Arizona Walk"

12. Carnegia gigantea - Saguaro

Saguaro (pronounced suh-wah-row), meaning "the big cactus", is the State flower of Arizona. This plant can grow to a massive height of 12m (40ft), but is not a fast grower. This specimen was 18 cm's high when we planted it in 1986, it has grown much faster than we expected and in 2010 it flowered for the first time. From our research we believe it is one of only 3 Saguaro's to have ever flowered in Australia

In ideal conditions the plant will start to branch at 20 – 30 years, if conditions are not ideal it can take up to 40 – 60 years.

These branches appear about 3 m (10ft) up the trunk, and the trunk can be about 60cm (2ft) in diameter. This tree shaped plant has an incredible ability to store water to survive drought periods lasting months and sometimes years.

A mature Saguaro can store up to 3,000 litres of water, 'A Living Water Tower'.

In Arizona, "a cactus cop" enforces laws to protect saguaros against removal from public lands, and developers must attempt to save as many specimens as they can. "Saguaro Rustlers" sell mature Saguaros for as much as $35 per foot.

Newly planted Saguaros must display permits to show they were legally obtained. The fruit of the Saguaro have helped people survive through droughts in desert regions. When other food sources are scarce because of the heat and lack of rain, the Saguaro will still produce its' moist nutritious fruit in abundance.

The arms of the Saguaro are like apartment buildings in the Arizona's Sonaron Desert. Many birds make their home there, as most predators are unable to climb the prickly surface. The Bobcat is the exception who has the miraculous ability to climb over the ruthless thorns without harm, and uses the cacti as a lookout tower to pounce on its prey

13. Stenocactus Marginatus Mexican Fence Post"

In very poor areas in Mexico this plant is commonly used to make a fence. A large plant is cut into lengths, dried out so the flesh won't rot, and then planted along a trench. As the cuttings grow it makes a very effective fence. This plant has fallen over and you will see that it is already shooting baby plants from its' stem. This is exactly what is does in the wild.

14. Totem Pole Cactus

This is a unique cactus in that it has no spines. The stalk is smooth to touch and can grow up to 10 ft tall. This is a naturally occurring mutation.

A show stopper in any garden

Purple Trail

"The Land of Succulents"

Succulent is derived from a latin word meaning juicy, fleshy. Cacti are simply succulents with spines. Common to all succulents is their ability to survive extremely dry conditions, even in strong sunlight. These plants have adapted their form and function to be able to absorb vital water supplies readily, store the water in special organs, reduce evaporation to a minimum, and deter animals from grazing on them. The entrance to the purple trail is to the left of the hot house, behind the shade cloth fence.

1. Gazanias

This is a wildflower from South Africa. It is very easy to grow and spreads easily, displaying many different coloured flowers in the Spring.

2. Crassula or 'Silver Dollar Plant'

The family name of this large species of plants is derived from the Latin word 'crassus', meaning 'thick', because of their fleshy succulent leaves. They are easily grown and are generally propagated from leaf cuttings. Masses of small pink starry flowers adorn the shrub in late Autumn to Winter.

3. Lampranthus or 'Ice Plant'

The generic name is a union of two Greek words 'lampros' and 'antos' which mean 'bright' and 'flower' respectively. They are ideal for low maintenance gardens in areas with low rainfall. They are best known as a creeping or trailing plant used as a ground cover, and ideal for binding soil on banks. The daisy like flowers which only open in full sun, are shiny, brilliantly coloured and bear in such profusion that the foliage and stems are sometimes hidden.

4. Aloe

Aloe species can vary in size from a plant no bigger than your hand, to one as tall as a three storey building.

Aloes have moisture storage tissues in their thick succulent leaves. This stockpile of water is very beneficial during drought periods, and it also has the ability to heal itself very quickly when leaves of branches are damaged or broken, so it doesn't lose its valuable supply.

This healing effect has long been recognized by humans, and has been referred to as 'the medicine plant', 'first aid plant' and even the 'plant of immortality'.

Although there are over 450 species of Aloe, there are only 3 or 4 with medicinal properties. The gel from the leaf can be taken internally for its nutritional and antioxidant effect, or externally for the treatment of burns and wounds. We use our own Aloe Arborescence to make a moisturiser. Sample it when you return to the café.

5. Aeonium "Zwartkopf"

A striking succulent with its' dark purple (almost black) rosette leaves. It has large clusters of bright coloured yellow star shaped blooms.

Kids Spotto Trail:

The answer to number 3 can be found on this trail.

Cactus Country

Purple Trail

"The Land of Succulents"

6. Euphorbia's

There are over 2,000 different forms of Euphorbia ranging from non-succulent weeds to huge trees, they are succulents, not cacti, even though they often have spikes. All the organs of Euphorbia's have a white milky sap, and any injury to the plant causes heavy bleeding. This sap is poisonous and if it touches sensitive areas of the skin it will cause inflammation. The sap is very dangerous and painful in open wounds, the nose, mouth and it can cause temporary blindness to the eye. Animals also quickly learn to leave this plant alone.

One species of this family of plants has recently attracted the attention of scientists who have discovered that the dangerous sap contains large amounts of hydrocarbons, which may be changed into a petrol like product. It is extraordinary to think our future cars may run on plant material. It has been calculated that 1 hectare of plants could produce 125 barrels of pure petrol.

7. Gasterias

These dwarf succulents are very similar to Aloes although the leaves are not prickly and they tend to form their leaves in pairs from the central stem. The genus gets its name from the flower which has a swollen base like a belly (gaster= a belly). For the collector they are all attractive unassuming, undemanding plants with a great variety in the shapes and markings of the leaves, which are often splashed with paler patches.

8. Cushion Spurge (Euphorbia polychroma)

A great Spring perennial which is very drought tolerant and cold hardy. It's bright yellow flowers last for weeks.

9. Pig Face

This very large group of plants can give the appearance of being almost dead in areas where no abundant rain has fallen for four – five years. As soon as penetrating rainfall occurs, however, the appearance of the landscape is transformed within a few days. Everything begins to turn green and to bloom with unimaginable splendor of colour. Animals are no longer a threat to them as there is plenty of green grass for them to graze, so it is safe for them to flower and reproduce. Many other succulents adapt their form and colouring to mimic the rocks and soil around them to camouflage their existence.

Purple Trail

"The Land of Succulents"

Continue along the path and enter the hot house to contintue the trail to the right.

10. Wild Grape / Tree Grape (Cyphostemma Juttae)

A slow growing succulent with a huge swollen trunk (caudiciform), which is a water reservoir in times of drought. This succulent grows in Nambia and has evolved and adapted to the very hot dry conditions. The white drooping papery pieces of bark helps to reflect the sunlight and keep the plant cool.

11. Elephants Foot (Dioscorea elephantipes)

This plant which is native to South Africa is fascinating. The large tuberous stem can grow to 3 metres in circumference and has a deeply fissured surface, resembling an elephant's foot. In the summer months the plant sheds its green leaves to conserve energy. There are male and female plants which are pollinated by bees. It is believed that African natives used to bake the starchy bread – like trunk for food.

12. Aloe Barberae (Tree Aloe)

This is the largest growing Aloe and can grow to 15 metres high. It has a smooth grey trunk and a massive base similar to a huge Elephants foot. It is a striking sculptural tree which looks spectacular if given the right position.

13. Stapelia

To ensure pollination, this plant has a strange way of enticing insects. The plant bears an attractive star shaped flower with reddish – brown spots, resembling meat. This resemblance is strengthened by a disgusting odour of rotting meat, not a good one to plant next to the BBQ. The reason for this strange adaptation, is that where this plant grows in Africa, there are no bees, so the plant needs to attract flies. The appearance and smell attracts crowds of blowflies, which lay their eggs in the flower, in the belief that the hatching larvae will have food. Unfortunately for the "poor maggots", the plant has misled them and they crawl around desperately in search of food, and eventually starve to death. This is an example of one of nature's incredible adaptations to ensure its' survival.

14. Hoodia Gordonii

This species is listed as one of 400 medicinal plants at risk of extinction from over collection and deforestation by the Botanical Gardens of Conservation International. It is native to the Namib Desert and is harvested as an appetite suppressant. The stems can reach up to 1 metre high and have a pink or purple flower.