

British Cactus & Succulent Society

Southampton & District Branch Newsletter

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Editorial

January has seen a few cold days which have made it feel like winter, but we have also had a couple of spring-like days. Hopefully we only have one more month of cold weather to endure.

Announcements

If you haven't done so already, don't forget to renew your **BCSS membership** – this can be done using the form included with the CactusWorld Journals which were sent out to members in December - or you can renew from the BCSS website, at: <http://www.bcsc.org.uk/paypal.php>

At the last meeting Sue Wilson and Mark Larter mentioned that they were moving to the Isle of Wight and hence that likely to be their last meeting at our branch! Sue was the branch librarian so a new appointment will be announced shortly.

Last Month's Meeting

Members' Mini Talks

We started with **Angie Money**, who wanted to share pictures taken at three different places. We started with *Flora Koln*, at Cologne, her home town in Germany. This is a lovely garden which is well worth seeing. The main building is called the Flora and we saw picture of the building from a few years ago and a more recent view taken from the same spot, after it was refurbished and reopened in 2014. The building is used for various functions, conferences, concerts, weddings etc. Her last visit the gardens was in July last year, and we started with some red squirrels. She heard some sounds from the lake and found hundreds of frogs there,

along with some rather murky water. It seemed as if they must have hatched and developed as one large group.

There are lots of little gardens where you can walk through, and we saw a rockery, and a lake which was overgrown with water lilies and which contained some large fish. It was very peaceful, and there were benches where you can sit down and relax. There were some interesting trees she hadn't seen before, *Fraxinus caroliniana* (a type of ash) with pinnate leaves and a hanging clusters of blooms, and *Cornus asperifolia* (a dogwood) also with clusters of blooms. *Koeleruteria paniculata* had pinnately-divided leaves and panicles of bright yellow flowers. There were also palm trees, and flower beds containing lots of different flowering plants. In late summer, the cactus dahlias are in flower, but she didn't include photos of those, otherwise the talk would have been too long. Another pond had different water lilies (*Victoria cruziana*) and these have large flat leaves which can actually support the weight of a person. A few years ago she had taken a picture of a dragonfly, followed by a frog on the lily leaf – and a few moments later the frog ended up eating the dragonfly, unfortunately she didn't get a picture of that.

They worked their way round to the entrance of the cactus house. This is not the most brilliant design - they have recently installed glass all the way round to protect people from the spines, and photography is now almost impossible. There were some nice plants outside, and some of the plants are pots so that they can be overwintered inside. We saw *Cleistocactus* and an *Echinopsis* with pink flowers. An *Aloe* was almost the same height as her. There was a big *Stapelia grandiflora*, and luckily this was in flower. Some of these pictures were taken before the glass panels were installed. We saw *Trichocereus lobivoides*, with cerise flowers. With *Pereskia grandiflora* we saw a close up of the stem showing a spine, and it was in flower, with the flower showing some of the characteristics of a cactus flower. There was a statue in one of the lakes and we also saw a Sequoia tree, apparently the latest name for this is *Sequoiadendron giganteum*. This particular plant was a young specimen - in their natural habitat in America, they can be 100m tall

and 8m diameter. We saw some more flower beds, and a water fountain.

The next location was *Lotusland*, in Montecito, Santa Barbara, California. This is a large estate and botanic garden which was created by Madame Ganna Walska (1887–1984). It is composed of many smaller themed gardens and the County of Santa Barbara restricts visitation via a conditional use permit, so reservations are required. Different people designed parts of the gardens for her and we saw some palm fronds and clivias in the opening shot. Next we saw large sea shells and walls with *Dudleya* and *Graptopetalum/Sedum* plants growing on them. We also saw *Dracaena draco*, some of these were over 30 feet tall. There were large beds of *Echinocactus grusonii* and other plants of some larger Cerei and also a branching Saguaro (*Carnegiea gigantea*). Some “hairy” plants were probably *Cephalocereus senilis*. There were also other plants of *Cleistocactus* and we saw *Cleistocactus candelilla* with red flowers.

Ganna Walksa liked mass plantings of cacti and these were not sorted by continent or species, it was just whatever looked nice to her. A tree opuntia might be the one from the Galapagos Islands. *Espostoa melanostele* was in flower and we saw some light blue stemmed *Pilosocereus*. When they visited it was raining and it got worse during the day. This actually provided some different opportunities for photography, and many cacti actually look better after a watering. We saw the buds and seed pods on the blue-bodied *Pilosocereus pachycladus*. There were also little lakes and ornamental areas.

Euphorbia ammak cv. *variegata* was almost yellowish in colour. Another large clump of an *Euphorbia* featured a snail perched on top of one of the stems. We also saw *Euphorbia horrida* covered in spider webs, with the droplets of water making the outline of the web visible - this probably wouldn't be visible if it had been dry. We also saw *Notocactus (Parodia) magnificus* with over a dozen heads covered in webs. Another part of the garden had some garden gnomes and steps, and there was also an outdoor theatre area. We saw a mass planting of *Beaucarnea recurvata* (the pony tail palm). There was a topiary with a floral clock as the centrepiece. The clock dates from the 1950s and each hour is signified by plantings of different succulents. A memorial plaque said “designed expressly for Madame Ganna Walska May 1955”. Nearby were some huge plants of yuccas and agaves.

Angie's final location was the *Minack Theatre and Gardens* in Cornwall. The theatre was set up by Rowena Cade (1893-1983) in 1932, and since then the gardens have been developed into quite an impressive collection of plants. We saw *Aeoniums* with heads a foot across and flower stalks up to 5 feet tall. It was November, but we still saw a bumble bee in the middle of an *Aeonium* head. We also saw *Aloes*, and mixtures of other plants, including thistles, and anemones. The views looking out over the sea are attractive. There are stairs all the way down to the stage, and you can see nice plantings as you descend. Angie said the plants seem bigger and have better colours than what we can produce in our collections. Although there were one or two tender plants, it seems that due to the mild climate, most of the plants can stay outside all year. We saw a view looking down at the sea. Climbing back up the stairs, there were more plantings round the corner and we saw *Cleistocactus straussi*, along with an opuntia and agave. A view down over the terraced seating showed they were made from stone, topped with grass. There were more mixed plantings and we saw pansies and other bedding-type flowering plants which were all very colourful. Angie said Cornwall is only 5 hours from here, there's no need to fly anywhere and this has become one of her favourite places. We saw *Crassula coccinea* (these self-seed after they flower), and also a couple of specimens of *Crassula ovata*, the money tree. We also saw a *Protea* in flower, this was growing next to the car park. We ended with a nice view of a sunset.

Next was **Paul Klaassen** and we heard guffaws of laughter, without Paul even having said a word. This was because the title page of his presentation featured a cat seemingly strapped on top of a drone. It turns out this was a picture from the Internet. The Dutch artist Bart Jansen owned a cat called Orville who died after he was run over by a car. Bart decided to have Orville stuffed and then mounted him to a drone, thus producing the ‘Orvillecopter’.

Paul said in September 2014 he was invited to talk in Brisbane, Australia and there he met a botanist Pablo Weisser, from Chile. They ended up deciding to visit Chile together. Pablo is an environmental botanist, and he wanted to study an invasive non-native plant, *Cylindropuntia tunicata*, and he wanted to produce a paper to say why this plant was dangerous, but you need to some studies, and Paul thought that using a drone to fly over the area and take measurements might be a worthwhile idea. Paul thought we'd like to see some of the preparations and problems involved with using drones.

Firstly, they are not cheap - the unit they used was a DJI Phantom 3 Advanced drone and these will

easily set you back by several hundred pounds, and more when you factor in a few of the accessories. He didn't have a lot of time to practice with the unit and enlisting the help of Jonathan Clark who teaches technology at Surrey University was vital. A week before Paul was due to fly off to Chile, he went up to Jonathan's on a Sunday, and they opened the manual and started learning about the unit. Apart from the flying unit, there is also a control unit and a mobile phone or tablet. This is all leading edge technology and firmware updates were being issued by the Chinese manufacturer almost every other day.

Seemingly ignoring health and safety considerations, their first attempts at powering on were close to a glass house in the garden! This is where Paul learnt that the screen of his android smartphone wasn't very readable outdoors. Jonathan is also into photography and he took some pictures using his 3D set up. They finally got the thing fired up and with the light fading fast, they managed to get it to take off and fly up a couple of metres. Given the fast spinning blades, Paul wondered whether he could perhaps charge Jonathan for mowing his grass in the garden! He has not really played computer games, so was not used to joysticks. With the flight to Chile happening on the next Friday, on Tuesday they went for another test flight, at a private sports field. It was quite windy and one of the warnings is to not fly the drone when it is windy. They hadn't got the camera working on the Sunday, but they got that working and the drone was remarkably stable in the air, despite the wind.

This success meant that Paul decided it was worth taking the drone out to Chile. The drone would go into the hold as his check-in luggage, meaning that 5 weeks of clothing had to fit inside his carry-on luggage! They were using the unit on beginner level, which meant it shouldn't stray more than 30m from the start position. Paul said at those sort of distances, you can't tell which direction the drone is facing. Jonathan had mentioned there were different coloured lights on the unit to help with this, but if you're colour-blind (as Paul is) that isn't so good. Also, for landing, Jonathan had guided the unit towards Paul and he would then grab it from the air. Landing on rocky terrain could be more problematic. Also, Jonathan hadn't got to use the joystick and at the same time control the camera via the phone, although it did turn out that the iPhone app was better than the Android version. When the drone is filming, you can see the images live on the mobile phone.

Out in Chile, before we saw any footage from the drone, Paul got Angie to do a simulation of remote

filming by using a phone attached to a stick! In the meantime, he and Pablo tried to get the drone up and running, but they failed miserably without Jonathan present. They would have to make a trip back here, at the edge of the tunicata area, when Jonathan was with them. Halfway through the trip, Angie flew back to England and Jonathan came out to Chile. He installed some firmware updates and they went back to the location and finally did a successful flight near Taltal, the locality for *Copiapoa cinerea*. They were also with Bart and Marijke Hensel at this time. Excited with this success, they rushed back to the hotel - and then realised they had not switched on the camera! They returned, for another accident to befall them - if you fit the rotor blades incorrectly, the unit flips over and crashes. Fortunately they did have spares with them. Bart and Marijke left, and they now had Brian Bates for company. They finally got the unit flying around and taking pictures and made 2-3 flights. The unit has a 20 minute flying time, although this also depends on wind conditions. If you need to fly for longer, you can spend £300-£400 for a car charger or just carry spare batteries. Meanwhile Brian was excited because he had found a plant that was completely out of place amongst all the *Copiapoa cinereas*. So what had Brian found? The bonus of the day! Among some million plus *Copiapoa cinerea* plants of all shapes sizes and ages stood a plant that was best called *C. krianziana* or *C. albispina*. They all took many pictures of the stranger in a strange land.

Paul concluded by saying that the drone was fun to play with and he was impressed with the ability of the 4 GPSs (one for each engine) keeping the unit so stable in the air even in bad conditions. However, there's a lot of work and care involved to fly one of these things so before you decide to get one do think carefully. He ended with three photos of the mystery *C. krianziana* in the middle of the *C. cinereas*.

Next was **Miranda Stevenson**, to talk about the cacti that she encountered on a trip to the Galapagos Islands in November 2014. The Galapagos are an archipelago of islands, sitting right on the equator and about 1000km to the west of the coast of Ecuador. They are volcanic in origin and the youngest islands are to the West and are still forming. There was volcanic activity in 2009 on Fernandina, and on Isabela in 2015. There are 18 main islands, 3 small ones and some smaller pieces of rock. It's a biologist's absolute dream, and a lot of research is done there. Of course, it was the flora and fauna here inspired Charles Darwin to formulate his *Theory of Natural Selection*.

They went on a tour of various islands, using a yacht. You stay on the yacht, since you are not

allowed to stay on the majority of the islands. They transferred to the islands using zodiac dinghies. To protect the environment and wildlife, you are also only allowed to walk on certain paths.

They went there primarily to see the wildlife and we saw images of sea lions, marine turtles, the Galapagos hawk, blue and pink footed boobies and crabs. We also saw a marine iguana eating algae underwater. The cold currents around the islands also allow Galapagos penguins to survive here. There are lots of finches, and the great variety of finches and beak size and diet was one of the strong inspirations for Darwin's theory of natural selection. The impressive frigate birds follow the boats and we also saw boobies diving vertically for fish. However, once she got there, she became quite interested in the cacti.

There are three main species. *Jasminocereus thouarsii* a candelabra cactus which can grow to 7 metres high – this is a single species with three varieties. The lava cactus coloniser of the fresh lava flows is *Bachycereus nesioticus* – a very interesting plant that breaks up the lava to allow colonisation by other plants. There are also various species of Opuntias - mainly *O. echios*, *galapageia* and *helleri*.

The candelabra cactus can be spectacularly large, and we saw a shot of the tree like form of *Opuntia echios* - with the *Jasminocereus* in the background. On a patch of fresh lava flow, there were some crabs and animals on it, but not much in the way of plants apart from the lava cactus, which seems to be able to colonise quite well. We saw different colours and hues of this species.

The Opuntias have interesting theories about them. There is a great amount of variation between the Opuntias on the different islands, including variations in height, and length and degree of spination. One of theories suggests that they are more tree-like and taller on the islands which feature tortoises and iguanas. Others say that it's the competition with other vegetation that drove the tree-like growth and hence there is discussion whether the prostrate form or the arborescent form of the Opuntia is the derived form. The tortoises do eat the spiny pads. The Opuntia seeds vary tremendously in size, from 3-5mm to 17mm. The main pollinator of the yellow Opuntia flowers is the carpenter bee. Lots of wildlife eat various parts of the cacti, including flowers, nectar, pads. The cactus finch is a seed predator because it digests the seed, but the other finches do eat and spread and seed.

The Galapagos are famous for their giant tortoises - there are 11 species with 2 main shell shapes - dome

and saddleback. The latter has a shell with a raised plastron at the front, meaning that the neck can reach higher up, allowing them to get to the Opuntia pads on the more tree-like forms. The Galapagos mockingbird eats various parts of the cacti. Land iguanas are perhaps more interesting than the marine ones - they are large animals and only occur on a few of the islands. They do eat the pads and the fruit of the Opuntias and disperse the seeds.

They visited Genovisa - one of the smaller islands. There have never been tortoises or iguanas on here and you find the low growing shrubby *Opuntia helleri*. It grows out of the rocks and is not particularly spiny. Now on to Santa Cruz, which features both tortoises and land iguanas. The Opuntias here are much more tree-like and spicier, and *O. echios* var. *gigantea* can grow from 3-12 to metres in height. It can form quite a spectacular plant. She found the iguanas interesting. We saw a heap of iguana droppings and the finches forage in this, so you have dispersion by the iguanas and further dispersion by the finches, so there can be some fascinating interactions between the various species of animals and cacti.

Now they went to Isabela, which is one of the largest islands and also fairly new. We saw a group of the tall tree-like *Opuntia insularis*. This island has both iguanas and tortoises. Next was tiny little Rabida island which has red coloured soil. There are no tortoises now, but the island did have them in the past. We saw *O. galapageia* v. *profusa* which is a shrubby little cactus. The reason it's called profusa is because of the high number of flowers and fruits on each plant. It grows into a small tree-like form eventually. David asked "What had wiped out the tortoises?" The answer was man. They were not been re-introduced from the other islands because they were a different species. We saw a close up of some Opuntia pads with the remains of the flowers, followed by a final view of a landscape of tree-like Opuntias.

Next to present was **Tom Radford** who mentioned he has a miscellany of material from the past couple of years. We started with Mexico. He had initially dismissed it as a dangerous and uninteresting place but changed his mind when he learnt there were 340 species of bird there which he hadn't seen. So he visited and found it to be a fascinating country with mountains and spectacular ruins. Along with the ruins, you quite often found plants and we saw an example of a decent sized clump of *Mammillaria* heads growing on a roof. David thought it might be *Mammillaria nejapensis*. Perhaps it's birds that deposit the seeds up there.

Down near the Guatemala border, he found a bulb with unusual red flowers. This looked like the plant which Ben had brought in last year (*Bessara elegans*). The flowers point downwards so are best viewed from below. There are lots of bromeliads in certain areas, and we saw an *Aechmea* in flower, the plant and spike being nearly a metre high with the planted perched on the branch of a tree. Some of the Maya ruins are spectacular, and we saw one of the large buildings from the south eastern part of the country (at Palenque). It's amazing to think these large buildings were built with no mechanical equipment.

Last year he went to Chile, mainly looking for birds, but he did find a few cacti, and we saw a trichocereus covered in buds. Paul thought it might be *T. chiloensis*. Next was one of the endemic plants of Chile, *Araucaria araucana*, better known as the monkey puzzle tree. There was a national park devoted to this plant, and there were some really tall specimens. He managed to take some nice shots, with volcanoes in the background. He mentioned that he went within 30km of the volcano that exploded last year. Next was a picture of some bamboo, in flower. This also meant that the plant was dying. Bamboo, depending on the species lives for 50-100 years and then flowers and dies. What happens is that quite big areas all flower and die at the same time, and this causes problems for animals like the pandas in China, when all the bamboo just suddenly disappears.

Tierra del Fuego in southern Chile/Argentina is home to the most northerly colony of King penguins. He didn't see any cacti there, and he mentioned the penguins were just stood there, doing nothing. The picture did look a bit artificial prompting David to ask whether it was really taken there or if it was just a scene from the New Forest with the penguins photoshopped in! Going to the other end of the country, in the Atacama Desert at 3000m, he found some scraggy looking plants. This was the candelabra cactus of Chile, *Browningia candelaris*. Conditions were very bleak and it can get chilly, he didn't get a chance to take better photographs. Further up was the main road to Bolivia. There is a tremendous amount of traffic through here since Bolivia is land-locked and this is the main route into that country. It wasn't very pleasant and at nearly 4000m he took a picture of a straight-billed earthcreeper which didn't look particularly happy. All around here were lots of small cacti, including some sort of *Opuntia*. There were quite a few mounds of this around, even at this altitude. Another interesting plant is *Azorella compacta*, a member of the carrot family. The plant forms large green mounds which consist of lots of

small bodies and some of these were in flower. The bodies are very tough and you can stand on the plant without damaging it. Tom said there are 8-9 species in the Azorella, but most have an open growth and it's only this species which forms these tight and compact mounds. It can be found in Chile, Bolivia and northern Argentina at 4000m+.

Tom mentioned he had given us a talk on photography previously, and he showed us some pictures of a South African bulb *Ammocharis coranica* flowering in an 8 inch pot, taken in his living room. Rather than using plywood as he has done before, he said you can buy large A3 sheets of black cardboard from artists' shops and these make a good background. The picture he took on automatic settings was quite bright so he stopped it down to underexpose the image and this resulted in a more detailed picture of the flowers. The plant did well for him and it flowered 2-3 times in the summer. David said black cardboard never comes out fully black, black velvet cloth seems to be best if you want a dark background. He sometimes uses a light reflecting screen to improve the images. Sometimes when you take pictures from above, plants look very flat, and you can tilt them to give the image a bit of depth. He had done this with *Ariocarpus fissuratus* in flower and the pictures had come out well - again stopping down the camera produced a better image.

Another South African plant in a 2¾ inch pot produces a long flower spike a foot tall, with small flowers. It's tricky to take pictures of this. To take a close up of the flower, he put another lens on front of the main lens and this allowed him to get some magnification and capture some good detail. The plant was *Eriospermum erinum*, and once the flowers die, a leaf appears, and it's quite an intriguing leaf when viewed in close up, with the leaf surface covered in pointed structures tipped with small bristles. He had taken pictures of another *Eriospermum*, and you could see part of the tuber under the soil. This also had bristles on the leaf, but the pointed structures were much flatter.

Next were some pictures from **Sue Wilson**. David mentioned this was her last chance to impress us before she left the branch!

Sue and Mark went to the island of Madeira last December and we saw some maps. They stayed in Funchal and mainly visited the eastern side of the island. We saw a picture of the place they stayed at. Funchal Botanical Gardens was the first place they visited and there was some amazing bedding, and some fantastic Aloes, with one of the plants having a cristate flower. The bark on a large specimen of

Aloe plicatilis was amazing. The cactus garden was good. A stapelia was growing well and was in flower. There were some beautiful euphorbias and also a tall plant of poinsettia, *Euphorbia pulcherrima*. There was also a planting of various Sansevierias, and we also saw *Euphorbia trigonus*. Sunlight shining on the long spines of an opuntia produced a brilliant display. They walked down an extremely steep hill to an orchid nursery, run by a German family who had set it up in the 1970s. This was Jardim Qrquidea. They cultivate a lot of plants and also had a fantastic collection of bromeliads.

They then went to the ancient laurasilva forests, and did their Levada walk #1 (Ribeiro Frio). The forest goes down to the sandbanks and the harbour and bay. They found their first succulent, an Aichryson. There were also plants of *Sonchus fruticosus* which were large leaved and a few feet high, and they found a small orchid *Gennaria diphylla*. The flower spikes were forming but were not open yet. There was a sheer drop down the side, so it was just as well that there were railings and a metal rope to hold on to. The lichens were fantastic and they also saw some oversized ferns - Mark said this was *Woodwardia radicans*, which is endemic to Micronesia. We saw a general view of the scenery.

On another walk, it was rather wet up and we noticed that Mark's beard had merged with the lichen and gone green - perhaps he had been standing still for too long! There were echiums here and we saw *Echium candicans*. They walked down to the peninsula of Ponta de Sao Lourenco and there were some beautiful views from there. They saw a young canary palm. An unidentified plant had yellow flowers and felty pale green leaves. There were plants growing in the lava, and they found their first Aeonium, although there weren't too many of them. The sea stock *Matthiola maderensis* had pink flowers and the leaves are furry, rather like foxgloves. The terrain consisted of volcanic rocks. On the pebbles on the beach, they found an unusual little fish which had been washed up. Along the track, they found *Mesembryanthemum cristalinum* - this had white flowers and the leaves had taken on lovely red colours due to the sun.

They took another Levada walk (Canical) and this featured monarch butterflies, originally from North America, which have naturalized here. Aloe x spinosissima was planted all over the place, it was growing along the road edges, cliffs, everywhere. They didn't see too many Opuntias, but did come across *Opuntia ficus-indica*. A view down showed terraced slopes - this was similar to what they had seen in Greece last year, and there's extra interest in the farming due to the economic climate.

Moving to the north of the island, Sao Vicente is on the north coast and here they found a wall covered in *Aeonium glandulosum*, which was very similar to plants they had seen in the Canaries. Another Levada walk was *Boca da Encumeada* - responding to a query, Sue explained that the levadas were water channels which brought water to the towns. They came across an agapanthus and huge plants of *Geranium maderense*. Some of the water channels go through tunnels which are dug through the rock - she's claustrophobic, so let Mark and his brother go through one of these and explore the other side, where they found ferns, including tree ferns.

The tropical gardens at Monte Place are very interesting. Also contained within the gardens is an unusual gem museum, where there are small pieces on display and some enormous pieces 3-4 feet tall positioned round the edges. One of the pictures showed a chicken sitting in some bamboo. There was also a garden with various water features. There were some lovely begonias, ferns, and cymbidium orchids on display - the latter were in pots on raised platforms. We also saw a group of three plants of *Dracaena draco*. One of the gardens has an oriental theme and they found some lion sculptures hiding in the grass. The Madeiran Chaffinch was seen here, it is an endemic species.

They did another little walk in the opposite valley, after going over by cable car - this was Levada walk #4 (Joao Gomes). There is quite a big problem with Eucalyptus trees which had been introduced to the island. They grow fast and also extract large amounts of water from the ground, thus depriving other plants. The bay leaves used in cooking could be found growing in the forests. They did a high walk from the highest spot on the island (Pico do Arieiro) which is at 1818m - the wind can be strong up here, but the views and colours are lovely. They found a little alpine, *Saxifraga pickeringii* and another plant with strange white flowers.

Near here is also the nesting site for Zeno's petrel. This had thought to become extinct, but it is making a comeback. There are no mammals on the island except for those introduced by man, but the presence of mice and feral cats had harmed the population of the birds, although they were now breeding again. We also saw a red legged partridge.

On Levada walk #5, they found plants of *Aeonium glandulosum* which were just enormous - Mark's hand gave a context of how big the heads were. It had seeded everywhere and in some cases the heads looked just like *A tabuliforme*. *Aeonium glutinosum* was also here. It had been raining here, and on the wet cliff surface all the mosses looked beautiful.

Their last stop was at Porto da Cruz. There are hydrangeas everywhere - some had been planted out and had spread into the wilderness. A shrubby mesemb was growing under the protection of a rock ledge. A tall succulent plant looked like it was a *Ceropegia*. They walked back through the village and saw a dragon tree bearing fruit. On their last morning they saw the Queen Mary 2 - that was quite a coincidence, they are more used to seeing it on their door step back at home!

The final presentation was from **Paul Klaassen**. Back in 2014 two years ago he had given a talk to our branch at the equivalent meeting. The featured plant was *Eriogyne napina* ssp. *riparia*, with a picture from the collection of Juan Acosta where it had been grafted onto *Pereskia*. The plant was described in 2006 in *CactusWorld* by Helmut Walter, and Paul showed us the latin description. It grows in an extremely small area near Trapiche. It has always been very dry when they have been there before. A pylon near the colony is numbered 227 and it's only found in a small area there. Other plants found here are *Copiapoa coquimbana* and *Eriogyne heinrichiana* which at times looks very similar to the *riparia*. *Eulychnias* also grow here and we saw *Eulychnia acida* x *Eulychnia chorosensis* and their fruits.

When they visited the site in 2013, they were horrified to see that the Pan America highway was being widened, and the *riparia* site had turned into a parking lot for the heavy lorries doing the road building. Would the tiny plants survive this? This year they went back and they got to the site. Close to the electricity pylon, they found one plant. It had been a very wet year in Chile due to El Nino, and as a result annuals had done well, and the ground was covered with dried up or dead annuals, so it was hard to spot the small bodied cacti. The brown bodies are also hard to see against the brown soil, and when conditions are dry, a contractile tap root pulls the plant into the soil. They are even harder to see later in the year when the plants sink into the ground.

Paul mentioned they did find another plant 4.5km away that looked similar. There is still some controversy on whether it's a good species or just a local variation on *E. tenebrica*. We saw some pictures of their visit in 2013 – it was a weekend and the large trucks were parked here.

Paul mentioned normally there's a Chilean organisation (Conaf) which looks after conservation issues and they are supposed to scout ahead of any major construction projects and spot endangered species. Paul mentioned that the plants Juan has

classified as JA40 and that Juan has propagated the plants by grafting and causing the plant to offset profusely as well as bloom well. The grafted plants look very different from the plants in habitat. Juan has produced a large number of seeds and so there is the possibility of one day re-establish the plant, once the dust had settled.

Paul's presentation contained a few more pictures of another story. While travelling in the vicinity they found a large group of *Copiapoa hasseltoniana* plants which appeared to have been dug up and just left by the roadside. Rudolf Schulz was with them and he wanted to stay there all night to catch whomever had dug up the plants. Later, on the way back to Taltal they met a lady walking along the road who was a botanist employed by Conaf and she mentioned that they knew about the plants and they were actually rescued plants which were waiting to be collected and re-planted elsewhere.

Vinay Shah

Table Show Results

There were 9 entries in the January table show, and 3 entries for "Plants in Flower".

	Cacti – Echinocactus	Succulents – Aloe
Open	(1) B Beckerleg <i>Leuchtenbergia principis</i>	(1) B Beckerleg <i>Aloe haworthioides</i>
	(2) -	(2) I Biddlecombe <i>Aloe erinacea</i>
	(3) -	(3) A Mant <i>Aloe distans</i>
Intermediate	(1) B Beckerleg <i>Ferocactus fordii</i>	(1) B Beckerleg <i>Aloe erinacea</i>
	(2) I Biddlecombe	(2) I Biddlecombe <i>Aloe mitriformis</i>
	(3) M Stevenson	(3) A Mant <i>Aloe variegata</i>

Cacti/Succulent in Flower
(1) B Beckerleg <i>Crassula</i> cv. "Celia"
(2) B Beckerleg <i>Aloe</i> sp.
(3) M Jakins <i>Crassula</i> cv. "Celia"

Ivor Biddlecombe

Aloes & Lily book

Richard White found a PDF copy of the book "Aloes and Lilies of Ethiopia and Eritrea" by Sebsebe Demissew and Inger Nordal (2010) is available for download from the Internet. Here's a short cut to the download.

<http://bit.ly/1KUvoFg>

(if you can't type that link correctly, just search for the book title in google and you should end up at the same place)

Next Month's Meeting

Our next meeting will be held on the 1st of March and will feature Cliff Thompson who will talk about Patagonia. This is an interesting and beautiful part of South America and hopefully we'll get to see some of that scenery.

The March Table Show will consist of the **Opuntia** group (cacti) and the **Haworthia** group (succulents). Please note that members can submit more than one entry in any of the classes, and that points will be earned for each placed entry.

The table show classes use the classifications from the *Guide to Shows 10th Edition* (contact me if you don't have a copy of this).

The Opuntia group includes *Austrocylindropuntia*, *Cylindropuntia*, *Grusonia*, *Maihuenia*, *Maihueniopsis*, *Nopalea*, *Opuntia*, *Pereskia*, *Pterocactus*, *Puna*, *Tacinga*, *Tephrocactus* and *Tunilla*

The Haworthia group includes *Astroloba*, *Haworthia*, and *Poellnitzia*

Forthcoming Events

Sat 13 th Feb	Isle of Wight	Plant Auction, Members' Slides
Sat 20 th Feb	Portsmouth	Mesembs (Eddy Harris)
Tue 1 st Mar	Southampton	Patagonia (Cliff Thompson)
Wed 9 th Mar	Southampton	Branch Committee Meeting
Sat 12 th Mar	Isle of Wight	Branch Quiz & Members' Talks
Sat 19 th Mar	Portsmouth	South Africa Part 1 (Tony Roberts)
Tue 5 th Apr	Southampton	What's New (Stuart Riley)
Sat 9 th Apr	Isle of Wight	Succulent Survivors in my Greenhouse (David Traish)
Sat 16 th Apr	Portsmouth	Bring and Buy Auction
Tue 3 rd May	Southampton	Succulents other than Mesembs (Suzanne Mace)

Branch website: <http://www.southampton.bcsc.org.uk>

Facebook : <https://www.facebook.com/southamptonbcsc>