**Chairman’s Notes**

1. Here at Timau, maintaining and weeding continue. It hasn’t actually stopped raining since the last newsletter in August and this month it’s much heavier – 75mm in one day last week. Some trees have literally doubled in size. Most aloes have grown so fat that they need thinning – - - - but one dares not move or take cuttings lest fungi infest them. In my imagination I see the neighbouring elephants critically sizing up my acacias – wan sticks for the last four years – and thinking: aye, they’re almost big enough.

2. Len Newton and Bob Webb have described another new sansevieria species, a dwarf variety named *S.arborescens var. bhwirei*, in the 40/2019 issue of “Sansevieria”; a briefer description and photo are included here. Len, thank you again for sharing this with us. Those who attended the AGM at Diana Shaw’s house at Limuru in May 2018 will remember the fascinating talk on “Sorting out the genus Sansevieria” given by Bob Webb and also being introduced to Bhwire Bhitala, who hails from Tanzania and is an expert plant hunter. An earlier find, *S. var. bhitalae* had already been named for him.
3. I have made no attempt to precis the excellent article written by Suzannah Goss on the recent trip by members to Magadi. Not too much of it relates to succulent plants, but then it seems that there weren’t many of these to be found. She has very ably described many other features concerning local natural history and also ancient history of the area, all of it very interesting and I’m sure you’ll enjoy reading it. Thank you, Suzannah; and thanks again to you and to Gail Pail for submitting the accompanying photos.

4. Gail Paul has described the very recent members’ excursion to Peter Paterson’s garden at Mutamaiyu Estate, Karen in a second article below. Our thanks go to Peter for allowing this visit.

Future events

1. The members’ Christmas lunch will be held on Thursday 5th December at Susie and Ted Alleyne’s garden at Koitobos Road, Langata: note Thursday, not a Saturday, due to Sue’s absence at the weekend. Andrena Low will provide more details nearer the time.

2. A day visit to Waridi near Athi River, possibly in February 2020. Waridi is a major horticultural business, but also has a nursery area where many succulents and other plants are propagated for sale at Plants Galore at Runda. Barry and Andrew Cameron have kindly agreed to a tour round the greenhouses, the rose grading and packing halls and the nursery. Having visited Waridi before, I can recommend this as a most interesting and worthwhile trip. Numbers will be limited to about 21 members. Updates and more details will be issued in due course. This item is repeated as still relevant;

3. A visit to Soysambu near Lake Elementaita on Sunday/Monday/out Tuesday, 1st to 3rd March 2020, staying at the Mbweha Lodge, Congreve Conservancy. Despite the forward date, members have leapt at this trip and it is already fully booked. There might, might, be cancellations, so please register your interest with the functions committee if you are keen.

Happenings

Succulenta weekend to Lake Magadi/environs, 14-17 September, 2019

Olorgesaille

Twenty-two members scattered among eight vehicles met at Olorgesaille, on the floor of the Eastern Rift valley on Saturday 14 September for a weekend of succulent discovery. Sheltering from withering 36º degree temperatures in a large open shed for a picnic lunch, most commented on the last time they visited the world-famous Lower Palaeolithic archaeological site. We benefitted from Biddy Davis’s and Narinda Heyer’s observations, as they had been on many excursions to the area on previous occasions.

Olorgesaille – inhospitable now, a palaeolithic hominid site then.

Diatamatisus soil heated to high temperatures turning a red hue.
While not everyone took the tour around the archaeological site to the well curated sheds, most of us had energy enough to visit the small museum and learn from the informative displays. A British geologist, John Walter Gregory, first discovered numerous Acheulean hand axes made by hominins 600,000–900,000 years ago, in 1919, but it was not until 1943 that excavations were begun under the direction of the Leakeys, with the assistance of paroled Italian prisoners of war. Glynn Isaac took up the excavation in the 1960s and in the 1980s, research was continued by Richard Potts of the Smithsonian Institution in conjunction with the National Museums of Kenya.

Acheulean hand tools were made by taking rocks and striking sharp flakes off other rocks—which could be used as cutting tools and according to research the hominins responsible were likely to be *Homo erectus*.

The artefacts were left beside what was then the shore of a now dried-up lake. Preservation of the Acheulean hand axe culture was made possible by heavy falls of alkaline ash from volcanoes near the site—Mounts Suswa and Longonot—which were active at the time. Subsequent sedimentation covering the site has preserved the fossils and created a stratigraphy, which helps age determination. Of the artefacts, 99% were made from locally derived lavas, particularly trachyte, although small amounts of quartzite and obsidian have been found, indicating transportation of over 16 to 40 km. Fossils of various animals have also been found, including those of extinct species of hippo, elephant, zebra, and giraffe likely butchered onsite by hominins.

Research reveals that the climate was humid during the middle Pleistocene and Lake Magadi was a much larger fresh water lake surrounded by swamps with tropical vegetation.

By mid-afternoon we arrived at Lake Magadi and were offered cold hand towels and colder drinks as welcome refreshments at the Magadi Sports Club. Soon we were checked in to the recently built tented camp run by Lake Magadi Adventures. We were delighted to see that the air conditioning worked well and many of us enjoyed a cool shower and siesta, while others enjoyed a quick dip in swimming pool. We were back in our vehicles by 5.00 pm for a tour on the lakeshore to see the lesser flamingos which have been amassing in healthy abundance on all of Kenya’s soda lakes. There were also a few avocets, pelicans and other wading birds.

Dinner was served back at the Clubhouse, after which we retreated to our air-conditioned tents.

Lake Magadi

Lake Magadi – shores encrusted with soda

Air-conditioned front and back

*Lake Magadi/ Lale’enock Research Centre/lunch in the foothills of the Nguruman escarpment*

While we passed several enticing ridges, gullies and ravines on the descent to Lake Magadi the heat was off-putting to most and the succulent expedition began in earnest the following day before temperatures became debilitating.
Duncan, a Maasai guide from the community, started our tour with a brief introduction of the operations of the Tata Soda plant itself. In 1902 rights to mine the soda lake were acquired from the Maasai and activities began in 1911. The lake water, which is a dense sodium carbonate brine, precipitates vast quantities of the mineral trona (sodium sesquicarbonate). The original plant (Standard ash manufacturing or SAM for short) is still in operation, in fact essential to the existence for processing soda ash as the newer Pure Ash Manufacturing (PAM) plant developed a technical problem a while ago and it is yet to be fixed. 3,000 tonnes is processed daily and poured in to wagons takes the 604km rail journey to Mombasa port for global distribution. Soda ash is used for the manufacture of glass, laundry detergent, as a whitener for clothing and paper and as a food/drink preservative. 2,500 personnel are employed at the Tata Chemicals owned plant, providing employment for 75 per cent of the entire populace of the Magadi township/environs.

Lake Magadi is 600m a.s.l and lies in a vast depression whose bed is made almost entirely of solid or semisolid soda. This saline, alkaline lake of approximately 100 square kilometres in size is a saline pan, quoting from Wikipedia:

“In places, the salt is up to 40 m thick. The lake is recharged mainly by saline hot springs (with temperatures up to 86 °C) that discharge into alkaline "lagoons" around the lake margins, there being little surface runoff in this arid region. Most hot springs lie along the north-western and southern shorelines of the lake. During the rainy season, a thin (less than 1 m) layer of brine covers much of the saline pan, but this evaporates rapidly leaving a vast expanse of white salt that cracks to produce large polygons.”

Following Duncan’s brief talk we crossed the main saline pan on a raised causeway and headed towards the Nguruman escarpment. The colours of the dry season were diffused by the heat, haze and dust: slate, russet and bleached tussocks of grass. Most of the green flora was provided by the greyish-olive-green *Boscia coriacea*. The leaves are lanceolate-elliptic, narrow, commonly ± 6 cm. long, 1.8 cm. wide, and rigid and leathery. And while it was difficult to see succulents due to the lack of blossoms, the bird viewing was rewarding and we saw two large flocks of ring-necked doves, quelea, egrets, namaqua doves, kori bustard, wood hoopoe, morning thrush and various sunbirds.
We stopped to listen to a talk by Sam Du Toit at the Lale’enock Research Centre, located 35km beyond Magadi township. The Centre is a collaboration between the South Rift Association of Landowners (SORALO) and the African Conservation Centre (ACC) and is owned and operated by the Olkirmatian Reto Women’s Group. Lale’enok provides a base for all research in the region, and there is a strong link between research, community interests and human-wildlife coexistence.

Most interesting was their small but impressive collection of dried/preserved flora samples, in this case Acacia thomasii.

Following recent population counts (in 2017 and 2019) the area is home to populations of lion (25 est.); zebra (4,680 est.); wildebeest (2,300 est.); giraffe (600 est.); other carnivores including a pack of painted dog, and elephant. There are an estimated 7,500 cattle in the area and all seemed to be thriving due to a carefully monitored zoning system of the “grass banks” situated near the escarpment and fed by its rivulets and a wetland.

Our lunch stop was at the water intake, sitting on opposite sides of a channel of clear water coming off the Nguruman escarpment.

Sarah (Grant) summed our day up well: “As we all realised, it is quite hard to find succulents close to Magadi itself, especially in this dry dusty weather, but we did manage to find about 10 different species—although I am sure we missed lots! It was a pity that we did not have a succulent ‘expert’ with us but Betty Archer was particularly sharp-eyed and found quite a few for us.” The most easy to see were the following: the flowering and cerise Adenium obesum, Aloe Secundiflora, the ubiquitous Cissus quadrangulis adorning many trees, Cissus cactiformis, Cissus rotundifolia, Sanseveria robusta, Sanseveria frequens or rafili, Kalanchoe lanceolata, and near the water channels where we stopped for lunch, Desmidorchis foetida (or speciosa).

Again we arrived at the Club by mid-afternoon where the swimming pool tempted several of us and we diverted to the Club veranda. The hot springs and bird watching were additional activities, although the latter group forgot to mention that they were detouring to do this, but all forgiven once Sarah had learned that they were safe. That evening we had a BBQ at the camp under the stars.
The Sundowners proved to be the most popular activity of the weekend, most likely attributable to the slight drop in temperature with the waning sun, but also because of the spectacular desert setting and full moon rises, including a blood moon on the second evening. Thank you to Sarah and fellow-members for a lovely weekend encompassing archaeology, desert scenery and learning more about Lake Magadi itself. (Thanks also to Sue and Dinah Alleyne who offered me a lift there and back, and for the interesting conversations we had en route). © Suzannah Goss

Visit to Peter Paterson’s garden at Karen on 9th November, by Gail Paul

18 members thoroughly enjoyed a visit to Peter Paterson’s garden on a lovely cool but sunny day. Peter started by telling us how he had set about landscaping and building his garden. The one acre plot is quite flat, but he has developed it and created great variety in a very short space of time. The garden includes a lovely lawn, an indigenous forest area, water features, planted beds both indigenous and exotic, a vegetable garden and 2 succulent areas, where he has made raised beds using rubble left over from the construction of his house. The interesting varieties of succulents are all set in lovely river rocks and stones.

He has also built a natural swimming pool (no chemicals) fed by two ponds which are full of indigenous water lilies and other water cleansing plants. The garden is full of unusual trees – all well grown, and the house is already covered with a variety of creepers. One can scarcely credit that the garden is only four years old.

We had expected to be escorted around by ‘Mwadime’, who has produced an excellent book on the Mutamaiyu property with wonderful illustrations. His considerably delayed arrival was a great pity as, when he finally did arrive, he proved to be a fount of knowledge.

Nevertheless, the morning was enjoyed by all and we did manage to identify some of the succulents. It was an inspiration to see how much can be developed in a garden in such a short time.

Flower of the Euphorbia frieseorum, an interesting tree from Ukambani
New Literature


Yet another novelty in this genus was found by Bhwire Bhitala in the Tana River delta area. It produces an inflorescence like that of *S. ascendens*, with the side branches curving upwards, but the plant is much smaller. *Sansevieria ascendens* has leaves up to 60 cm long, but the new variety has leaves only 15–20 cm long. The inflorescence of the new variety is also smaller, only half the length and with fewer branches. This new variety is therefore a dwarf version of the species, and is named for its discoverer.

Book review – by the editor


How often have we wandered abroad, seen a plant we suspect may be a succulent, but been frustrated by our inability to identify it? Or even plants in our own gardens? Would that we had a book such as this, covering all families of succulent plants in East Africa, or even Kenya alone, in a single volume!

This is a very good, easily portable field guide, measuring cms 14.6W x 20.7L x 2.5 thick, printed on good quality paper in a durable cover. The photographs are excellent, illustrating plants not only in wild habitat but also in close detail. The descriptions of individual species are concise but informative, covering growth habit, appearance and geographic distribution, the latter augmented by thumb-sized maps as shown below. The book does not attempt to describe all of the 4,700 succulent plants in Southern Africa, but does cover those most likely to be seen.

The authors are experts in their fields, being professors of botany and related subjects; all are prolific writers: clearly, they know whereof they speak. (cont’d below)
The foreword, preface and introduction provide very useful context, explaining how and why the contents are presented as they are; all are peppered with intriguing facts.

These pages are followed by chapters defining succulent status and the varying succulent plant forms that have evolved, all very well illustrated by photographs and diagrams, then several sections discussing the increasing relevance of succulent plants in horticulture and gardening, given climate change and other factors, medicinal uses, conservation matters and the threat from invasive plants.

Preceding the pages covering over 700 individual species there are summaries, each comprising just a few lines, describing the key features of 47 families of succulent plants. This is a most useful feature, facilitating rapid identification of the family, thence species, under review. The inclusion of some families might surprise readers – who knew that amaryllis and arum lilies, certain daisies, begonias, the geraniums (pelargoniums) and strelitzias, among others, qualify as succulents?

Members

Looking very much forward, the 2020 Annual General Meeting is likely to be held on 10th May 2020: a date for the diary in your Christmas stocking presents.

Questionnable! Plants

During a recent KHS Nanyuki trip to Mpala Ranch research centre the Director, Dino Martins, took members to an area where a dam was shortly to be constructed and encouraged plant collectors to remove and conserve valuable succulent plants that would not survive subsequent flooding. They included the two specimens below, a dwarf Plectanthus species and what may be Edithcolea grandis. Len Newton ventured an identity for the latter when it looked like a shrivelled caterpillar. Can anyone identify them positively?
Succulenta East Africa Newsletter is produced four times a year. Contributions are most welcome and should be sent to the editor.