## In my greenhouse

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Like many members of our Society. I have enjoyed a lifelong fascination with succulent plants. I recall being shown what I now know to be an Opuntia by my late father outside a florists around 1965. For much of my life, growing up and then raising a family in south London, meant keeping a few plants in pots on window sills, but always admiring succulent plants when I could. One day I looked carefully into the face of a Lithops dorotheae and became entranced. I challenge any artist to produce a better colour palate, and so my liking for this genus grew. Over the years I gradually obtained more windowsill specimens, until one day space became available in our easterly facing porch, where all the plants were then accommodated together. Although conditions there were not exactly perfect, mainly due to a lack of ventilation and a solid roof, the plants did very well, partly I suspect because I used to carry them outdoors whenever I could. Whilst it was a satisfactory arrangement at the time, the occasional unexpected shower when I was away from home was always a concern. Gradually my plant numbers increased, but never dramatically, and that was my set-up until 2019, when my wife and I upgraded our tiny, ramshackle garden shed to a 2.4×1.8m (8×6ft) grow-house, complete with glass roof and electricity. More on that shortly.

I suppose everything changed when I purchased Lithops - Flowering Stones by Professor Desmond Cole in 1988. I still have that original (now signed) copy, very well-thumbed and surpassed only by the second edition Des jointly wrote with his wife Naureen in 2005

(also signed). I kept meticulous notes about updates and new discoveries within the genus Lithops, which eventually morphed into www.scrapbooklithops.com but not before I made contact with the Coles themselves (a whole different chapter). It was my wife who badgered me into contacting them (via post), and hand on heart I never thought I would receive a reply. However, not only was that forthcoming, but it kick-started a long friendship and numerous field trips to see Lithops in the veld. The rest is history, but it has had a major effect on the way I maintain records and look after individual plants within my collection.

Our greenhouse, or semi-grow-house to be more precise, is situated in our small, terraced garden in the south-west London suburb of Kingston-upon-Thames (Fig. 1). In general,



▲ Fig. 1 The grow-house at the end of the garden



it is a nice area, but along with the rest of south-east England, land is at a premium and much green space has been swallowed up in the name of development. Nevertheless, our personal outdoor space has remained undiminished, and is tended by my wife and me who both enjoy horticulture. Our garden is westerly facing when viewed from the back of our house, and the glass area of the grow-house looks directly back, so faces east. As previously mentioned, space is limited, and items associated with everyday living and general garden maintenance have to be accommodated somewhere. Our solution was the aforementioned grow-house, a wooden structure sited on a concrete base with a roof split lengthways 50-50 between glass and a conventional shed roof (Fig. 2). On one side there is a bench for plants (Fig. 3), the other being open plan to allow for general storage.



▲ Fig. 3 The Lithops collection in the morning sun

Whilst I have a passion for Lithops and have travelled extensively to photograph them in habitat, my living collection only averages around 100 specimens (not including the occasional small pots of seedlings). Small can be beautiful, and most certainly makes for easier maintenance and record keeping. I number every pot so as to keep a database of the plants concerned. Many are old friends, having been with me for decades, whilst others are remnants of batches grown from seed but mostly given away to other growers. Most I confine to 5cm (2in) square BEF pots, where many plants have lived long lives (Fig. 4). The pots are slotted into some trays I constructed for the purpose a long time ago (Fig. 5). In habitat it is not uncommon for Lithops to have their roots restricted by rocks and the like, and in cultivation they seem likewise content. I do have ten 8.9cm (3.5in) terracotta pots with Lithops in them (Fig. 6). I have let them grow larger, but they are exceptions to my usual growing practice. Long ago I decided to house a concise collection with one of each species of Lithops (whatever their subspecies, variety or cultivar rank within that), an ethos I have continued to adhere to, although with increasing plant numbers. Some Lithops form clumps more readily than others, but it is easy to split any up that become overly big to share with fellow growers. I grow my *Lithops* in a 50-50 mixture of peat free compost and coarse grit, top dress with coral sand and a couple of pebbles, mostly for effect, but also to give a little extra sun protection as happens in habitat. I am quite meticulous with

the labels, each printed and displayed in a uniform way for an overall enhanced appearance. I only water when the plants look like they really need it, and do so by bottom watering. I have learnt through observing *Lithops* in habitat that they can survive quite well wrinkled up for extended periods. If in doubt, do not water. When I do give them a drink the plants are immersed up to the top of the pot for a few minutes, then removed and allowed to drain. Rarely do I give them plant feed, but when I do it is much diluted.

As previously mentioned the growing area faces east, with the plants on the bench getting full sun until early afternoon. They also receive a good deal of reflected sunlight from the windows towards the evening, quite enough to open any flowers at the right time of year anyway. In the height of summer, temperatures within the grow-house can skyrocket, but I hardly use any shading these days. This was something learnt through trial and error, after having a terrible flowering season in year one. I had been overcautious with the use of my shade-netting that year, but subsequently I realised that air movement and maximum light were key. There are windows I can open at either end of the growing area, although on still days, air movement through them can be minimal. Unventilated, under glass, Lithops can rapidly scorch, but I have found the use of small fans (Fig. 7) powered by little solar panels connected via a USB port to be a complete success. There has been no scorch during some very hot heatwaves.



▲ Fig. 4 My standard method of display ▼ Fig. 5 The BEF pots slot right in





▲ Fig. 6 Some of the larger Lithops in terracotta pots ▼ Fig. 7 The grow bench in its entirety. Note the solar powered fans



even with occasional outside temperatures topping 35°C. The fans cost nothing to run, and rotate faster the stronger the sunlight becomes. Above that level I also have the option of net curtain shading, but I do not recall using that during the last couple of years. At the other end of the seasonal scale, there is a thermostatically controlled, electric, tubular heater underneath the bench that I have set to click on between 5–7°C. The upshot is that even during the coldest days plants are frost free, and the lowest I have ever seen the thermometer drop to was around 0°C. Kept dry, Lithops can cope with cold surprisingly well, something they often put up with in the veld.

We grow a few *Haworthia* and the odd cactus in there too. not to mention the occasional tray of annual seeds for the garden. A massive cactus flower opened over a May night recently, so clearly that plant was and is happy in its situation.

Extensive collections of succulent plants are wonderous things, but small can be beautiful too. My setup mostly lets the plants look after themselves, so after a week at work, especially during the spring months when *Lithops* renew their plant bodies, a weekend visit often holds a surprise or two. The same can of course be said during the flowering season. when often I note a familiar aroma on opening the shed door. Some say it is like almonds, but I am not so sure.

Other than occasional evidence of western flower thrips, and a once-found caterpillar that had munched its way into a Lithops



▲ Fig. 8 The general effect

plant body, I have suffered little with pests and diseases. The growing area does get a fair smattering of spiders, especially during September, but they seem to do little if any harm. Just recently however, I noticed a number of midges (probably sciarid flies), and was advised by a fellow grower to use yellow fly paper to get rid of them. The sticky paper worked remarkably well, and I was amazed and slightly horrified to see how rapidly the corpse count mounted. Then I realised the source of the infestation was a bag of compost stored under the grow bench, and removal of the bag solved the problem.

My fascination with succulent plants and *Lithops* in particular has been a constant source of enjoyment to me for more years than I care to count, and my small, easy-to-maintain set-up has, and still plays, an important part in that. If I am overly attentive and detail-obsessed about the way I display my plants (Fig. 8) then so be it, it works for me. This I feel is the crux of cultivating succulents; whatever works for us all as individuals, be our plant numbers high, low or even single. Perhaps my cultivation methods will further evolve in the years to come, but quite how I cannot imagine at this time.

## LITERATURE:

Cole, DT (1988) Lithops Flowering Stones. Acorn Books. Randburg. Cole, D T & Cole, N A (2005) Lithops Flowering Stones. Cactus &



▲ Fig. 9 The camera-shy author (Photo: Christopher Green)