

AUSTRALIAN ORCHID FOUNDATION ESSAY COMPETITION 2022

EQUAL 2ND PRIZE WINNER

Managing an Orchid Addiction by *Stephen Cox*

Two of my favourite adages in the orchid world are –

1. You can never have too many orchids
2. There's always space for one more ... until there isn't!

I love my orchids and I love buying things. Probably a troublesome combination. My wife goes to Myer, I shop orchids. A harmonious relationship as long as the right hand doesn't quite know what the left hand is doing (and vice versa). Eventually things come to a head. After growing orchids for decades, you accumulate plants and your taste changes. Added to that is many people, including myself, live on smaller and smaller plots of land. Yard space is at a premium. In fact, we have no grass at all at home; courtyard/driveway out front and deck with pool out the back. Inner city living has its advantages, space isn't one of them. Still, when I see that beautiful plant, well, it comes home.

Initially I commandeered part of the front garden and built an enclosed, climate-controlled greenhouse. That filled in no short time ... seedlings, not surprisingly, get bigger. Then the side of the house had a nice little area (wife doesn't really need a clothesline). Weld mesh, shade cloth, sprinkler system and benched. Voilà! Darn. Full again. Of course, that doesn't stop the Bower Bird in me buying more plants.



The new glasshouse gets good sun!
Use the space you have available.



Where there's a will
4m X 3m shade cloth with Aluminet
removable cover to help with summer
heat. Evaporative cooler, also.

Eventually every bench is over full. Packing more plants onto benches has its negatives for light availability and air movement, both very important for good growth.

After deciding that 'cutting back' wasn't an acceptable option I needed to develop some strategies for maximizing space and still maintain reasonable growing conditions. Here are my thoughts –

1. **Culling.** If the flowers aren't too your taste, then get rid of the plant. No point keeping something you don't enjoy. The garbage bin, plant sales at your local orchid show or eBay remain options. If the flower is attractive, then it could make a nice gift to a friend and might even spark 'the orchid bug'. Next, if the plant doesn't grow well for you it's not worth keeping. Weak or recurrently diseased plants just aren't worth the effort. Garbage bin. Don't pass it on. Lastly, if it won't flower or flowers every few years it's time to go. Of course, try more light or a different area of the orchid house, first. If it's something special, ask another grower if they would like to try flowering it.

2. **Hanging.** The benches are full but the 'air space' above isn't. Hanging light loving plants is an option especially for light loving plants. Cattleyas, Vandas and Dendrobiums are usually suitable candidates. Be careful with shade preferring plants like *Paphiopedilums* (though some do well) and *Phalaenopsis*. Either hang directly from the roof weldmesh or string a length of barbed wire across the orchid house. Why barbed wire? All wire sags and the plants will slide together in the middle of the line. The barbs keep the plants separated. Use pot hangers; the wire ones or plastic pot clips. Use old coat hanger wire, cut to length, to adjust the height of the plant from the roof.



Above: Cut lengths of coat hangers and suspend the plants at the best height.

Barbed wire keeps them apart.

Right: Hung along the southern wall minimises the shade cast by the hanging plants.



3. Make sure they still get watered if you use a watering system. Ideally, hang the plants east-west to minimise shadow on the plants below. Along the southern wall also minimises the shadow they cast. You don't want the hanging plants causing too much shade. Think about where the hanging plants will drip when watered. Hanging over soft leaved orchids like *Paphiopedilums* might encourage fungal and bacteria problems. Don't hang plants where you'll bang your head on them.

Small plants can also be hung with wire hooks onto a walls. Again, the southern wall is ideal, but you can use the 'hot' western wall if the plants are heat tolerant. This works for small plants and seedlings. Again, be sure they get watered.



Left:
Small plants hung on the back
(southern) wall
of the orchid house.

4. **Tiering.** Many 'pre-fab' orchid houses have the option of double tiered benching. Perfect if you grow shade loving indoor plants on the bench below. Not ideal for orchids; a bit too shady and too wet. There is a way around the issues if you need to grow 'shade tolerant' plants like *Paphiopedilums* on the bench below. Firstly the bench above needs a plastic liner to prevent dripping on the plants below. Black builders' plastic works well. You can add coarse river sand to improve humidity or outdoor plastic matting. At the lowest part of the bench you need a drain hole so a swamp doesn't develop.



Left:
Plastic matting over black plastic
on the top shelf
and river sand over plastic
on the bottom shelf.
Gravel on the floor for humidity.

Below:
Light availability.

The major issue for the second shelf is light availability. If the orchid house is in a very sunny position for most of the day and your shade cloth on the sides of the house isn't too dense (consider 50% vs 70+%) you should be ok. Cattleyas, Dendrobiums and Vandas won't do well on the bottom tier. Paphiopedilums should be o.k. You can combat the low light issue with supplemental LED lights. Hang them under the plastic lined bench above. Use a timer for 12 hour day length. Be



CERTAIN that you maintain electrical safety. All switches and connections need to be kept dry. Use a Ground Fault Interrupter ('Safety Switch') for all electrical devices in the orchid house. Although LED light bars are energy efficient there is a cost involved.

5. Mobile Benches. The commandeered side of the house has a tiled floor. It's relatively flat so 'mobile' benches are an option. If you've seen pictures of large commercial greenhouses you will notice that they don't have an aisle on each side of the bench. They have one or two aisles and benches that move. This saves a lot of floor space for growing plants. Now, commercial rolling benches aren't likely to be an option. Plastic 'blow mould' foldable tablets can be adapted. This allows you to carefully place plants, in trays, on the table and move it side to side for access to the bench plants.

Left: Plastic table covered with a tarp or plastic to channel water run-off away from the legs. I elevate the pot trays so the plants don't sit in any pooled water. Smaller plants are less likely to topple over when the mobile bench is moved..

To prepare the table for use you need to buy heavy duty wheels. Remove the leg end caps and attach the wheels inside each leg – they have self-expanding fasteners. A word of advice. The bottom of the table legs can rust in the wet environment – I found out the hard way when one gave way and the bench toppled; repotting wasn't fun. I spray the inside and outside of the legs with primer, then insert the wheels. I cut 25mm irrigation pipe into 100mm lengths and split down the middle. Two pieces are wrapped around the leg and secured with stainless steel clamps. Extra security. A twice-yearly spray of the axle and roller with WD40 keeps them lubricated. Just move the table with two hands and keep the floor clean to prevent snagging. Inspect the legs and wheels carefully twice a year for instability due to corrosion or part failure.

Right:

Two pieces of irrigation plastic, clamps and WD40 work a treat. Clean, flat surface aids moving the table smoothly.



I hope these tips and tricks have sparked your imagination for space efficient solutions. The addiction isn't curable. Eventually, the depressing reality strikes and it's time to dispose of more plants than you purchase ... or move to a lovely suburban location with space for more orchid houses! I wish (wife says NO!).