

A Decrepit Old Propagator Found New Life by Going Back to Basics

Greg McPhee

Eco Petals, Lismore, New South Wales 2480, Australia

greg.mcphee@hort.com.au

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INTRODUCTION

Life Changes Forever

Friday, 13 August 2009, was not a good day for me. It started out okay as I was working on finishing our new house and had prepared a great dinner. About 6:30 PM I felt ill and took some advice from my daughter-in-law. For those that know me, this is unusual, but she is a nurse and knows her stuff. I went to the hospital to get checked out. I cleared the waiting room in a few seconds when I became violently ill and then collapsed. I got sicker, was intubated, placed on life support, and had emergency surgery.

I was sent home on New Year's Eve – some five months after admission. My life was changed forever. I was still very unwell. I had lost most of my memory and cognitive thinking skills. I was weak and unable to walk 100 m. I was back to basics!

A New Beginning

After months of rest (with unfortunately more operations) and plenty of thinking, my wife Lyndy and I (being the eternal

optimists) started a new garden. The new garden had to be basic as I could not handle anything else. My friend and fellow IPPS member Des Boorman built some garden beds based on a design concept by Jacob Mittleider. He called it “grow box gardening”.

Our beds are 2.4 m by 1.2 m (8 feet by 4 feet). The beds are 400 mm high and constructed from local untreated hardwood timber. We started at 200 mm high, but quickly realized 400 mm was easier on the back and reduced weeds enormously. Our soil mix contained one-part coarse river sand, two parts sandy loam, and two parts compost. To this we added 200 L of composted chicken litter per bed (about 10 tons per acre). It takes about 1.2 m³ of this soil to fill a bed. The garden started with 12 beds, which was enough to get us into production.

We deviated from Jacob Mittleider's method and grew organically. I was and still am immunocompromised. Spraying is not an option. Pests are an ongoing issue, but not an onerous problem with high garden beds and

regular maintenance. We started by growing salads for our own consumption.

Things went well. The beds grew all our salad needs, plus we had surplus and plenty of it. I was asked to sell at a local farmers market and we ‘launched’ our microgreens business in July 2012. You learn a lot when you speak with the people who use your product in their everyday life. We learned that being local, seasonal, fresh, and spray-free were important. Most important was trust. We found that many of our customers were buying our product for health reasons –they really needed to trust their suppliers.

We decided to keep things basic and only sell what we grow ourselves. We would pick fresh, would not apply insecticides or fungicides (spray-free), and used compost and manures for nutrients. We are still holding to this. Sadly, other growers were not. The lesson here is: BE HONEST (or DON’T SCREW THE LOCALS as they live close and have long memories).

Our salad business grew bigger. This created problems. To meet the increased demand, we needed more beds. Also, our bed arrangement was fine for a start, but it became apparent that ‘ride on’ mowing between the beds was needed. We decided to reconfigure the beds to make our life easier.

OUR PRODUCTION SYSTEM

Bed Layout

We have about 100 garden beds and the beds are still the same size as the original beds. The space between the beds is wide enough for a ute (our Australian term for a pick-up truck) to get to each bed and allow room for running a ride-on mower between the beds. We do not have bed covers or hot houses. We had an excavator expand our growing space slightly, but we have almost reached our limit.

Between the beds is a vegetation strip, mainly containing grass. We throw all old crop residues and weeds on this area, chop

this up with a mower, and then use a catcher to pick up the clippings for mulch. There is a drainage line between the beds to remove excess water when we have rainy weather.

Water

We have about 800 m² of available roof and with an annual rainfall average of 1.5 m that results in potentially 1.2 MI (megalitres) per year of fresh water. I have calculated that we need about 1 MI of water per year. So, we capture as much roof water as we can. Most of our rainfall occurs in the summer (sometimes 200 mm per day) and our spring is typically dry. This lack of regularity can leave us short on irrigation water. After drilling a few bores (one went below sea level!), we found a small supply. It provides enough water for a solar pump that delivers 3,000 L per day and currently trickle-fills a 250,000-L tank.

We mainly water by hand. There are spray systems for each bed for use in hot weather. I use my time while watering by monitoring and texting on my mobile phone.

Labour

Our desire is to have garden that we can work in without the need to regularly employ people. We were able to access support for our garden from the WorldWide Opportunities on Organic Farms (WWOOF) program (<http://wwof.net/>). Simply stated, we invited able-bodied people to help and exchanged their labour for our food, company, and accommodation. We received more than we initially bargained for and welcomed the enthusiasm and technical expertise given. Lifelong friendships have been made. I recommend you get involved if you grow organically.

Fertilizer

We are constantly adding compost and manure to the beds. As we run with very high amounts of organic matter (35%+), the soil level shrinks with decomposition. We add

more compost a every crop change. For more long-lasting crops, we cut back and fertilize regularly. This keeps nutrient availability high and we are getting increased crop outputs as a result.

CROP CHOICES

From Greens to Color

Our first choice for selling was salad greens. We were growing for ourselves and salad greens give a high return per kilogram. We looked closely at the harvest from each bed to see which crops we should expand. Cut-and-regrow lines, such as rocket, basil, chard, and spinach were winners. Sadly, shallots, carrots, and beetroot were not. Kale was a real winner, but next year we were swamped by competitors who were copying our crop choices and undercutting our prices. Our garden bed system is relatively expensive to establish and is a high labour-use system. Things needed to change.

Lyndy said we should have more colour on our salad stall. My comment was that salads should be green, since that is what people expect! So, after discussion we added flowers to the mixed salad bags and had some bunches of garden blooms on the bench. I had argued that, since Lismore is not a rich town, no one would be interested. Let me tell you about Lismore. Lismore is a university town with about 50,000 people and no major industry and a high level of unemployment. Flower sales grew as salad sales declined. Lyndy was right and I was... well, not right. Let the market decide. We knew that our advantage would be short-lived if we grew the easy-to-grow flowers. We needed to seek out the more exclusive varieties and grow them better than others who copied our new crops.

Edible Flowers

One of our salad customers (who owned a restaurant) wanted to add flowers to his dishes. Edible flowers were quite novel in

Lismore at the time. They have been a good addition to our operation as we now have a use for smaller cut flower stems. We even sell flowers to a vegan cake maker!

Our customers for edible flowers all require that the flowers be perfect, non-sprayed, colourful, and do not collapse when chilled. Some customers require that the flowers look good when frozen. It can be very time-consuming to pick and package flowers, which is not always worth the effort.

We dealt with a middleman who procured produce for high-end resorts. The prices paid were higher, but this was negated by the extra demands from super-picky and temperamental chefs. My suggestion is that you stay away from Rockstar chefs. The lesson we learned is that chasing chefs' demands can break your heart. It is good for your image, but hard on the pocket.

Chefs are not gardeners and (despite what they say) have no idea of the difficulty of growing plants. Chefs demand quality and consistency. Also, they want unique products and always something new. Edible does not mean they taste nice. It probably means non-toxic. I could not find figures on the number of people poisoned or killed from eating flowers. I assume it's not very significant. No one seems to eat flowers placed on their food anyway.

OUR CURRENT PRODUCTION SYSTEM IS STILL BASIC

We are still using and enjoying our grow boxes. We have found that 2.4 m by 1.2 m boxes to be ideal. Our planting and flower support grids fit perfectly. It makes our calculations easier because all beds are the same size.

My original calculations were based on 20 ML of water per hectare. As our garden has grown, so too has our need for water. We now hold a 3-month water supply and have increased our bore-pump size. Most of this is fresh rainwater harvested from our roof. I

sleep better at night if I do not need to contemplate running out of water.

Salads are almost gone from our garden as they cannot match the returns from cut flowers. Likewise, easy-to-grow flowers are gone as they are not ‘special’ enough. We are moving more towards flower crops that are ‘protected’, i.e., require written contracts before we can purchase plugs. Most are tissue-cultured and expensive. The real benefit of this is that competitors cannot chase us as easily and we can offer better flower choices.

We have become much more seasonal. It’s an advantage to have ‘something new’ each season or month. Teaching customers to wait is difficult, but the offset is that they buy in season as they learn that some flowers won’t be around for long. Seasonality (in my opinion) is the next big thing in fresh produce and flowers.

Our garden soils are improving. We add compost and manure (100 L per bed) at every crop turn. We also mulch with lawn clippings. It’s common to have four bed turns per year, so we really have rich soils. Our production per bed is increasing and the weeds are pretty much gone.

We no longer make our own compost. Our local council has invested in a large-scale, organically certified composting ‘factory’ and we buy it from them. I have converted my ute to a tip tray, so getting the compost is very easy. We hold compost and manures for a few months before using it. This allows for composting to settle and for beneficial microflora to establish. For more information on

this, I suggest you read some of the work done by Harry Hoitink.

Our garden waste and the few weeds go under our mowers when we mow (which is done regularly to limit flowering) and the clippings are used as mulch.

I am also experimenting with ‘grass alternatives.’ Since it is easy to harvest lawn clippings, I have aimed at growing plants that will enrich the nutrient value of our mulch. So far, I have planted clovers, medic, pinto peanut, and Wynn (round-leaf) cassia. All have their positive and negative points.

Insects and diseases are minimal. We do regular monitoring and have many beneficial insects in the garden. If a crop is weak or infested, we will quickly remove it. We rotate crops. I am amazed at how well we do. We are the only spray-free flower growers we know of.

We monitored crop volumes and are increasing bunch output per bed per annum (our measure of success). We are now also selecting crops to ensure year-round production and easier bunching labour.

Demand is changing. Posy tins are current a hot trend, as are wedding-u-pick. We have converted to compostable or recyclable packaging.

It was a good idea to start a garden. Not only has my health improved, but it provides for luxuries and fills a local demand for quality, just-picked flowers. We do have some pretty amazing, regular customers.

So, I suggest you consider going back to basics. Don’t let a near-death experience be the reason you change your lifestyle.