

Volume 23 - JULY 2019 Issue 7 GARDENING IN WINTER

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OUR NEXT MEETING: Thursday 15th AUGUST 2019

Notice Board

- 1. To promote organic sustainable food raising for home gardens and farms.
- To foster research into improved methods of organic farming and gardening.
- 3. To provide information and support to all those interested in the various aspects of organic growing.

Meetings Held:

3rd Thursday of the Month

The Meeting Place, Cnr Guineas Creek Rd and Coolgardie St, Elanora.

Doors open: 7:00 pm. **Begin at 7:30 pm** Entry is \$2 members, \$5 visitors.

(No meeting in December)

Annual Membership Fees:

Single: \$20. Family: \$30.

To renew or start memberships please transfer funds directly into our bank account, send cheques (payable to GCOG) to Diane Kelly, or just pay at the door.

Name: Gold Coast Organic Growers

Bank: Suncorp BSB: 484-799 Account: 0014-21651

Seed Bank:

Packets are \$2.00 each.

Members' Market Corner:

Please bring plants, books and produce you wish to sell or trade.

Raffle Table:

This relies on the kind generosity of members to donate items on the night. Tickets - \$1each or 3 for \$2.

Library:

Books 50c, Videos, DVDs \$2, Soil Test Kit \$2. Available to members for 1 month.

Advertising: (Note 11 issues/year) 1/4 page: \$15 an issue, or \$145 per year, 1/2 page: \$25 an issue, or \$250 per year, full page: \$40 an issue, or \$400 per year,

W: www.goldcoastorganicgrowers.org Facebook: www.facebook.com/gcorganic

2018 -2019 Committee

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| Librarians | Evelyn Douglas | | |
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| Supper Co-ordinator | Paul Roberson, Deb Phillips, Bev Geraghty | | |
| Veggie Swap Co-ordinator | Dorothy Coe | | |
| Nowaletter Contri | | | |

Newsletter Contributions are welcome. Send in a photo of what's going on in your patch. Deadline for contributions is one week before the meeting. Send your content to Jorge C. at: jcantellanoc@gmail.com

Notice Board

Membership Renewals

NEW: You can now pay your membership fee directly into the GCOG bank account.

Name: Gold Coast Organic Growers

Bank: Suncorp BSB: 484-799 Account: 0014-21651

Remember to put your Name and Membership Number in the comment field.

Note the number in brackets after your name is your membership number - you will need to quote this number in the comment field, if you pay via online banking.

Membership Renewals

Overdue: Kerstein Trueman (346), Barbara Talty (58). Karen Hart (198), Dorothy Coe (253), Ron Campbell (255), Shem Pireh (361), John Trama (437)

July: Justin & Jerry Rogers (275), Ann Brown (329), Liliana Morgan (438)

August: Warren & Beverly Carlson (87), Murray & Judith Olver (105), Ian & Margaret Lee (118), Gordon & Dorothy Singh (241), Jill Barber (290), Lyn Mansfield (306), Jan Guest (307), Dayne Petersen (377), Robyn Penfold (439), Melanie Strang (440)

Latest newsletter can be downloaded from the site at **goldcoastorganicgrowers.org**

Thanks to Contributors this month: Cathie Hodge, Diane Kelly, Jorge Cantellano, Leah Johnston, Terry Lewins, Jill Barber.

Upcoming Guest Speakers

August 15 -GCOG President Maria Roberson 'Seed Saving Masterclass'

September 19 - Mark Pritchard 'Permaculture Fundamentals'

We are currently seeking Guest Speakers for throughout 2019. If you have an idea for a potential speaker, or a topic that you think would interest our members, please contact Leah Johnston at leahbryan@gmail.com

View our Newsletters On-Line or Collect at our Meetings:-

www.goldcoastorganicgrowers.org.au/

Workshops

Gardening Lunch – all welcome
We meet monthly for lunch and have a chat.
11 am to 2 pm – at a trendy café somewhere
(any recommendation welcomed)
If you would like to know when the next lunch
is on email Lyn Mansfield
Lynmansfield14@bigpond.com
Mobile – 0409 645 888

EdibleScapes

Working bee/workshop 2nd Saturday of each month - 8:30am to 10:30am

<u>Edible Landscape gardens Project.</u>

http://ediblescapes.org/

Peachey Community Garden

Friday Gardening and Chat
Fri Jul 26 2019 at 9 am
13 McCreadie Rd Ormeau Hills
Friday meet up to do some gardening and
get to know each other. Everyone is welcome.

June Speaker - Notes -Cathie Hodge

Lasagne Garden?

A lasagne garden is basically a 'no-dig', layered garden. Like a lasagne, the garden is constructed by the layering of different materials. Some notable influences on this approach to gardening include:

Masanobu Fukuoka of Japan, particularly though his 1953 book "The One Straw Revolution".

Ruth Stout & her deep mulch system. Her books include "How to Have a Green Thumb Without an Aching Back" & "Gardening Without Work".

Esther Deans, an Australian gardener. Her books include "Esther Deans' Gardening Book: Growing Without Digging" & "No-Dig Gardening & Leaves of Life".

Soil Biology!!

Abundant soil biology, with a multitude of micro-organisms like bacteria, fungi, protozoa & beneficial nematodes, is *vital* for growing healthy plants that are also resistant to pests & pathogens.

Large populations of soil organisms + a complex diversity of soil organisms drive soil functions. This will benefit: soil structure, soil fertility, soil moisture, & promote disease suppression

Assembling a Lasagne Garden

- It involves layering organic materials on top of the ground, or in a container.
- Possible containers include chicken wire with stakes to form it and hold in place, or a bathtub, or bricks, or timber.
- The area should be level. The width should be no wider than your reach.
- Layering will consist of "brown" (carbon) layers & "green" (nitrogen) layers, plus other additives.
- There are many ways to build a no-dig garden. The lasagne garden is a gourmet version.

Layer 1: Cardboard or a thick, wet newspaper barrier

You do not need to remove the grass or weeds, as they will die off under this barrier. Water well. Worms will be attracted to this layer.

Layer 2: Woodchips

These will contribute to...

- long-term soil carbon
- energy for microbes (as fungi are attracted to this layer)

the humification process - i.e. the way that dead organic matter (leaves, twigs, etc) is converted to humus by the action of decomposers such as bacteria and fungi

Layer 3: Blood & bone/chicken manure/ urine

These will provide the following benefits

- activators for the woodchips
- long-term fertility
- slow release of nutrients to the plants
- increased earthworm activity

Layer 4: Green layer

Green organic matter support bacteria Examples include

- · water weeds
- garden weeds
- lucerne hay
- veggie scraps
- lawn clippings
- raked leaves

Look for diversity & use small sizes

Layer 5: Rock dust (fine)/coffee grounds/ ash

Encourage the slow release of minerals & nitrogen.

These ingredients are also attractive to worms & involve good recycling of 'waste' products.

Layer 6: Well-rotted manure

Find someone with horse, or cow, or sheep, or goat or llama poo!

This layer will provide a range of microorganisms which will "infect" the other layers.

Layer 7: Good quality compost

This layer will provide live & active microbes. The compost should be high in bacteria which will aid in the process of mineralisation.

Either make your own, or purchase. (*Red Soil Organics* at Wongawallan make & supply bioactivate compost).

Layer 8: Feeding mulch

e.g. mushroom compost or lucerne hay The mushroom compost is sterile, but still contains some nutrients.

Again this involves recycling 'waste' products & sequestering carbon.

Layer 9: Worm extract

Worm castings + oxygen + water, with the addition of kelp, fish emulsion & molasses = a perfect breeding ground for microbes. Wormtec Worm Extract Liquid Microbial Fertiliser (made on the Gold Coast) is a live product, full of dormant micro-organisms.

Microbes are vital in a garden! Assembling a Lasagne Garden

If you have all the materials on hand, it takes only 1 – 2 hours to put it together. (It's a wonderful group activity! Gather your neighbours or friends for a working-bee).

And remember, there isn't only one way to make a no-dig garden. There are numerous variations.

The basic concept though is to layer in "brown" and "green" which builds a compost factory. The materials will compost & feed the plants while building nutrient-packed soil.

Why No-dig? Why compost

Compost is a fundamental plant food that emulates & assists the natural processes of enriching the soil from which plants draw their food/nutrients.

To perform well, compost needs a balanced diet – just like you and I do. Feed someone McDonald's on a regular basis and their whole system begins to cave in. Soil is exactly the same. Composting is a bio-chemical process that is in fact a form of digestion.

Benefits of Compost/No-dig gardens?

- They create soil carbon.
- The soil becomes more productive. The conversion of animal manures & vegetable matter into humus adds nutrients & retains moisture in the system. (These are waterstingy gardens).
- Humus helps bind the soil together & build crumb structure.
- The humus pH level tends to support microorganisms.
- The plants are provided with an increased ability to withstand pests & to resist negative fungal attacks.

Soil Biology!!

Abundant soil biology, with a multitude of micro-organisms like bacteria, fungi, protozoa & beneficial nematodes, is *vital* for growing healthy plants that are also resistant to pests & pathogens.

Large populations of soil organisms + a complex diversity of soil organisms drive soil functions. This will benefit:

- soil structure,
- soil fertility,
- soil moisture, &
- promote disease suppression

Planting

It is best to use seedlings that you have grown from seed, or purchased (rather than planting seeds).

Create a hole, throw in a little dirt & pack in the plant as you would if you were potting it. Between growing seasons, simply add more compost, manure & straw.

And now to look at Hugelkultur & Agroforestry...

To quote from an article in "Permaculture" (a UK magazine) on the many benefits of Hugelkultur (17.10.2013) https://www.permaculture.co.uk/articles/many-benefits-hugelkultur

"Hugelkultur are no-dig raised beds with a difference. They hold moisture, build fertility, maximise surface volume and are great spaces for growing fruit, vegetables and herbs. "Hugelkultur, pronounced Hoo-gul-culture, means hill culture or hill mound."

"Instead of putting branches, leaves and grass clippings in bags by the curbside for the bin men... build a hugel bed. Simply mound logs, branches, leaves, grass clippings, straw, cardboard, petroleum-free newspaper, manure, compost or whatever other biomass you have available, top with soil and plant your veggies."

Video links

- https://richsoil.com/hugelkultur/ Rich Soil
- https://www.youtube.com/watch?
 v=302gCQU7Cac Self-Sufficient Me

Article links

- https://richsoil.com/hugelkultur/
- https://permaculturenews.org/2010/08/03/ the-art-and-science-of-making-a-hugelkulturbed-transforming-woody-debris-into-agarden-resource/ – Permaculture Research Institute
- https://permaculturenews.org/2012/01/04/ hugelkultur-composting-whole-trees-withease/ – Permaculture Research Institute
- https://permaculturenews.org/2012/08/22/adventures-in-hugelkultur-in-australia/

 Permaculture Research Institute

Growing flowers – Learning from Kerry Lason By Diane Kelly

Continuing through my list of Cub members to chat to about their areas of expertise -Maria re running a gardening club: lan about bees: Bill about vegetables - which instead turned out to be a wonderful introduction to the Eco Village's plant nursery - I've now come to "Growing Flowers", and the person I thought to talk to about this is Kerry Lason. Kerry's love for flowers first came to my notice back in 2016. I had heard that she had gone on a tour of the United Kingdom and one of the highlights of that trip was a visit to the Royal Chelsea Flower Show. I suggest you go to the GCCC website and have a look at the July 2016 newsletter - you can have a read about Kerry's trip and see some of her photos. On the way to the UK, Kerry went to the "Gardens by the Bay" in Singapore, and she writes about the orchid gardens there. So these were good clues – Kerry loves her flowers!

My original request to Kerry for the interview was that she choose her four favourite plants and provide some guidelines for us as to how to grow them. But when I arrived at her home, I could see her dilemma – she has a very diversified garden! Kerry lives in a quiet street in Labrador, and her block backs on to the reserves along Biggera Creek, and all the sporting fields there. This makes it a perfect location for Kerry, as walking (with her dog Harry or her grandchildren) is one of her other hobbies

Kerry lives in a duplex whose front gives no hint of what is behind the home – although I knew I had come to the right place when I saw sweet peas, succulents, herbs – and the "Butterflies Welcome" sign. The duplex has a standard living area, but extending out from that is a wonderful sun-room – along the back fence to the left is a low maintenance, low-sun garden that has orchids and other grasses, and to the right the view opens up to Kerry's surprisingly large backyard.

Let's move from left to right. Tucked around behind the sunroom is a shade-cloth area filled with orchids. In flower at the moment are the Dancing Princess orchids, but there are about another 50 orchids growing there. This area gets the morning sun. Next to the shade-cloth area are Kerry's two aerobins – these are compost bins with an internal system that keep the material aerated. Next to them is a wicking bed that contains a lemon tree, a lemonade tree and a grapefruit tree currently bearing the largest fruit I've ever seen!



The shade-cloth area with the Dancing Princess in bloom



The Aerobins and the citrus in the wicking garden

Then we moved through Kerry's backyard, and it was just full of life. There are more citrus – a Washington orange; a navelina (a good juicing orange); a mandarin; a red orange and a red grapefruit (Kerry likes to add these as a bit of colour to the marmalade she makes). There are herbs and spices growing – rosemary, ginger, coriander (which Kerry loves, and is self-seeded), oregano, parsley (for smoothies) and tarragon.

And there are flowers and shrubs – traditional violets, magnolias, salvias, daisies, euphorbia, pig face, hydrangeas, grevilleas, banksia, lilly pilly, wattle, pansies and hibiscus. But what about the things that are unique about Kerry's garden?

Firstly, Kerry has been able to successfully



Colour and variety – Kerry's courtyard corner!

grow plants that she brought up from mid and northern coast NSW to Labrador. As we walked through the garden, Kerry mentioned "Oh, I brought that up with me from Maitland", or "That came up from Coffs Harbour from my mum's garden". Kerry's mother had the traditional "green thumb", and she grew stone fruit and citrus trees that produced abundantly on their sheep farm out from Scone, NSW. When Kerry's mother moved to Coffs Harbour she continued to garden – Kerry was inspired by her beautiful roses, camellias and citrus trees

Secondly, I think Kerry has created microenvironments. As you look out from her sunroom, there is a display of all sorts of flowers and shrubs - the pentis, yellow cosmos, salvias and all the variety of flowers you see in a Gold Coast garden. But there are also milkweed plants grown to attract Monarch butterflies (Kerry's favourites). Between November last year and January 2019, over 70 butterflies were hatched out – and Kerry's greatest joy was sharing these moments with her fiveyear old grandson. There is a salvia for the bees and in the "native corner" there are native orchids (which have a lovely purple flower); a "gold fish" which has a striking yellow and orange flower; grevilleas; and Kerry has thrown out a "cottage garden mix", which has produced Queen Anne's lace, cosmos and other homely plants to keep the bees happy. Thirdly, Kerry is a teacher at the local State School. So she is teaching the students about composting – she has a bench-top composter that she will be taking along to start off the new term and collecting any scraps from the kiddies lunches. These will go into one of her four compost bins, or her worm farm. Kerry says she wouldn't be with-

out a worm farm - and hers is an obviously

active one. The current model has a soft material covering over the feeding tray – otherwise Kerry would put a good thickness of wet newspapers on top to keep the farm insulated and damp. One thing Kerry has always done in her classrooms is to bring in pot-plants – for example, she will take in pots of orchids when they are flowering. A good way to introduce poten-



All gardeners need a sense of humour!

tial gardeners to the wonders of nature! So what about my original question – what are Kerry's four favourite plants, and how does she grow them?

The first answer is simple:

- Roses (Kerry has a Mr Lincoln, a Peace, a Violena, and a Best Friends (the proceeds from the sales of which go to the RSCPA. And she envied my Princess de Monaco that I have just planted.)
- Orchids as I mentioned, there are about fifty of them in the shade house!
- Begonias
- Petunias

And how does she grow them? It seems like the whole of Kerry's garden is treated in much the same way. The initial garden was built up with various soil types, including some of David Freeman's volcanic soil. More recently, Kerry has applied a layer of Red Soil Organics mulch. But other than that, she applies the compost from her bins and the worm castings and liquid from the worm farms. along with applications of "Rooster Booster. She also makes up a mixture of fertiliser, potash and magnesium. And that seems to make the whole thing work.

Kerry's regret is that she doesn't get to spend enough time in her garden. But I think it is doing just fine. Her garden is interesting; she composts all she can; she grows things successfully that have memories attached; and she uses the produce to enjoy and share with others.

Isn't that what gardening is all about?

From Bokashi to BIOL By Jorge Cantellano

From Bokashi to BIOL

The composting journey in which EdibleScapes has embarked, is seen along the coast in fertiliser. We haven't yet chosen a particular method of fertilizing, but have experimented with a wide range of liquid fertilizers. We enter first into the realm of bokashi fermentation, which is a Japanese term for slow fermentation in steam. The Bokashi method has been appropriated and modified to suit a range of agricultural conditions around the world by organic farmers. The urban bokashi makes use of a solid and liquid EM (effective microorganism) activator, which is a solid anaerobic microorganism activated in water. raw milk and molasses.

liquid EM (effective microorganism) activator which is a solid anaerobic microorganism activated in water, raw milk and molasses. The urban bokashi separates and harvests the liquid which is leached out, allowing the solids to ferment with low humidity. EdibleScapes has begun adopting this system. EdibleScapes Solid Bokashi Mix:

- 1 part of wood mulch fungii inoculated microorganism
- 2 parts of bamboo-stands-soil bacteria inoculated microorganisms
- 2 parts of sifted compost
- 2 parts of coffee grounds
- 1 Portion of Mountain Microorganisms (solid cultivated microorganisms) to 10 parts of the above mix
- 1 Portion of activated liquid MM to moisturise the above mix



EdibleScapes Solid Bokashi
EdibleScapes are adapting bio-digester technology to produce anaerobic fermented Bokashi, fermenting fruit and veggie scraps on a community composting scale.

Bio-digesting is an old technology used by

farmers in Europe, India and China to ensilage fodder in silos to ferment grass crops to feed to cattle, sheep and other such ruminants (cud-chewing animals). This is the technology that is used for biofuel today.

An adaptation of silo silage is now commonly used by organic farmers in the form of 200L plastic drums of Brazilian 'Super-Magro' liquid fertiliser (BIOL). This method reproduces the cow's stomach fermentation system. Because one of the drawbacks of biol is the use of cow manure in its production, Central American organic farmers are replacing cow manure with fermenting grass in a bokashi-MM reproduction method.

EdibleScapes are experimenting to substitute fermented grass with fermented fruit and veggie scraps to produce BIOL – liquid fertilisers.



EdibleScapes Bokashi Biodigesters, - collect fruit and veggie leachates in separate containers.

The first step after collecting from a Farmers' Market is to separate and crush family groups of veggies and fruits to put in different containers. As these are added, they are compressed down with a thicker top solid bokashi layer to be sure it is completely anaerobic airtight. This will be kept closed for at least 15 days.



Crush family group of veggies



Crush family group of fruits

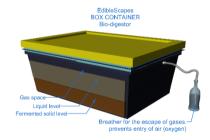


Add a thick layer of bokashi to each box.

At the end of the fermented bokashi cycle, the fruit and veggie scraps are conserved in a nearly recognisable shape. To finish the process, EdibleScapes has two options. The first is to incorporate this fermented bokashi into a mix with compost. The compost heat is reduced by lowering the compost heap height and adding dry bokashi as a brown carbon component. The fermented bokashi in this new mixture. becomes the green nutrient component of the compost bokashi mixture. This compost bokashi mix will allow the fermented fruit and veggies to dissolve into the organic mix without loss of its valuable nutrients. Both the solid fermented bokashi and the liquid fertilizer contain undestroyed all the nutrients of the food: nitrogen, potassium and phosphorous, and all the 16 minor minerals contained in the fruits, veggies and herbs. A second option, preferred by EdibleScapes, is to incorporate both the solid fermented bokashi fruit and veggies and liquid leachate into a BIOL super-magro process in an anaerobic, airtight container for another 30 days to produce liquid fertilisers. Then, BIOL products can be diluted by 2 - 5% in water for foliar spray for crops, fruit trees and plants. The benefit of separating the veggies and fruit scraps into family groups to enter into the fermenting process is that each group of vegetables contain many vitamins and minerals

that are good for human and soil health. Groups such as: cruciferous vegetables, including broccoli, brussels sprouts, cabbages and cauliflower; leafy green plants, including lettuce, silverbeet, spinach, bok choy and kale; Root/tubular/bulb-vegetables, including potato, sweet potato, carrots, beetroot, onions, cassava and others; fruit plants, including tomato, zucchini, squash, avocado, capsicum, eggplant, cucumber, pumpkin, green peas and green beans; tropical fruits, such as banana, paw paw, mangoes, melons; citrus fruits, such as oranges, mandarins, lemons: stone fruits and berries, such as apples, pears, peaches, nectarines, plums, strawberries, kiwifruit, and passionfruit.

The benefit of having each veggie and fruit group in separate BIOL super-magro processes is that each group has characteristic mineral concentrations which can be enriched further by adding magnesium, manganese, zinc, boron, calcium, silicate for a tropical mix group or phosphorus, potassium, borax, magnesium, calcium and silicate for a crop strengthening mixture and so on.



Insert the end of the hose pipe in the plastic bottle containing water - it acts as a breather for the escape of gases produced inside the container and also prevents the entry of air (oxygen). Gases produced inside the container will escape through the hose pipe, forming gas bubbles in the plastic bottle containing the water.

EdibleScapes will be making available to the Gold Coast Organic Growers' community, liquid fertilisers and a bokashi system appropriate for the home. These products will be the core trading for the social enterprise of fundraising, both for the benefit of the Edible Landscapes Gardens and to improve the community composting system.

How Does Your Garden Grow? With Bev Geraghty

By Leah Johnston

Bev Geraghty is living what most gardeners would call "the dream" on her elevated acreage in the beautiful Currumbin Valley.

Since moving there four years ago Bev and her hubby Laurence have been transforming an existing shed into a beautiful home for themselves with amazing views across the Gold Coast.

It was moving to this property that piqued Bev's interest in gardening on the Gold Coast and saw her join GCOG.

Bev had moved to Sydney from New Zealand before coming to the Gold Coast. Gardening in New Zealand was relatively easy because she understood the climate, but when she moved to Australia in 1998 she found gardening "hostile" and avoided it like the plague.

"When I got to Australia I understood nothing and there were so many big bugs. A need to constantly water and low nutrient value in the soil. I just couldn't get my head round it. I lived in Currumbin Waters for seven years and needed to do a bit of landscaping. I really wanted to have chickens because I didn't like the eggs that were available at the shops. Chickens work better with a garden so the garden started then," she shared.

Upon moving to the valley with so much room to grow things she yearned for an orchard and has since planted around 75 fruit trees including mandarins, lemons, cumquats, lime, oranges, sapote, persimmons, custard apples, pecan, macadamia, almonds, pomegranate, blueberries, tamarillos, tropical apples, nectarine, jaboticaba, grumichama, soursop, figs, banana and avocado, paw paw, bay tree, guava and a couple of others. Not all the fruit trees have thrived but with each planting Bev is learning more about her land and what will grow well where.

"Fruiting trees are for me an absolute delight. It's thrilling to pick from your own trees!" Bev told me.

Bev also grows zucchini, aloe, asparagus, sweet potatoes, salad greens, Asian greens, lots of herbs, chop and drop trees, turmeric, ground apples, arrowroot, coffee trees, ginger and lemongrass

"I love to grow lots of herbs and salad greens." the more you pick the more it grows. I make my green salad every day, it's a delight," Bev said.

Bev and Laurence have previously raised their own pigs for pork, ham and bacon, and currently have chickens for eggs and a pet cow named Maisey Graze which was bottleraised from three days old.

Bev's best advice for fellow gardeners is: "ask lots of questions and learn what grows well where you are. And your soil is everything. you can't grow well without caring about your soil. You can make your own good soil quickly by building lots of compost heaps and turning them over every couple of days. The more you make the better at it you get.

"You never know what's gonna be awesome to grow, you just have to try and wait and see," she said.

Bev hosted a permaculture course at her property, run by Terri Brown from Beechmont Community Garden, last year which helped her identify a better site for her gardens than where they had previously been. Now she's built new lasagne style beds with logs from her property and soil she's built up herself. Next she plans to experiment with planting vegetables directly into banana trunks, felled and lain down into the beds.

"The trunks will release a lot of water and nutrients as they decompose, it should work, will get back to you on that," Bev said.

Bev's garden grows with cow poo tea, chicken manure, seaweed and weed tea, and home made compost which has had several handfuls of lime through it.

Bey tries to use materials which are on hand to build and construct things on her property, rather than bringing outside materials in.

"My sister always had land and saw our block and said 'everything you need is already here, use the rocks, use what you have.' Things change and evolve. We've been here over three years now and I'm thinking about flowers. I never thought about that before now. My daughter has a honey hive and the beautiful bees pump out the honey so it would be nice to have more flower variety, to feed the bees, and the added aesthetics they bring. The bees also have access to native rainforest which produces wonderful flavours through the honey, we are blessed indeed," Bev said.

Bev's daughter, son-in-law and three grandchildren have built their own beautiful home on the property so harvests are shared with friends and neighbours.

"I like everything about gardening. I love the creativity of it and the education it gives you. I think it's just so incredibly wonderful to watch everything (almost everything) grow. And I love meeting like-minded people through GCOG," Bev said.

Bev's garden isn't just about edible plants, she's also very fond of her white temple tree, Barringtonia Calyptrata, which is native to far North Queensland and also New Guinea. She's looking forward to it flowering soon, as the flowers grow up, instead of hanging down like a wisteria.

"The battle is taking time to sit, to stop yourself from being busy and going hard all the time, sit and enjoy it. Also another trap is I keep adding more not realising the maintenance of what I have previously created takes its allocation of time," she said.

Thanks for the tour of your wonderful property Bev (and thanks for the bush lemons!) If any GCOG members reading this would be happy for me to write an article on their garden please email or text me on leahbryan9@gmail.com or 0428 028 042.







Bev's new lasagne style garden beds – no wonder the plants are so happy, check out that view!

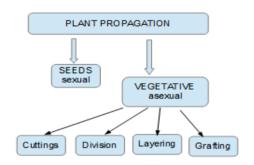


Lots of yummy bush lemons

Plant Propagation

by Terry Lewins, wrote from Exmouth WA

Plant propagation is the process of growing new plants. The various methods of propagating plants are summarised in the diagram below. The most common methods are from seeds and from cuttings. I haven't had much practical experience with propagating plants but last year I put these notes together for a discussion group on the topic.



SEEDS

Growing plants from seed is the most common method of plant propagation. Seeds are placed in containers and when grown to a suitable size are transported to their final position.

Fine seeds have a much better germination rate if grown in controlled conditions. Large seeds (beans, spinach) have the best success rate.

Seeds are collected from mature plants or from various providers. Germination rate decreases over time and it is recommended to store seeds in a cool dry location.

Hybrid plants are produced by crossing parent plants with desirable traits. F1 hybrids are the first generation of a hybrid cross. Seeds of F1 hybrids are often inferior to the parent plant and do not grow true to type.

Most seeds prefer a fine grained growing medium that provides aeration and consistent moisture. Different recipes are included in the table below. It is important to pay attention to temperature and moisture.

It is very important that medium does not dry out. When placed in a container the seeds can be covered with a thin layer of growing medium. Some seed trays are covered with a transparent lid that keep in moisture and maintains a high humidity to encourage growth of seedlings.

Initially, containers can be watered using the bog method, where containers are placed in a tray with water. Containers can be kept moist (not wet) manually with hand atomisers. Young seedlings can be sprayed with nutrient mixes such as Seasol.

CUTTINGS

Cuttings can be taken from the root, stem or leaves. The preferred part of the plant used depends the type of plant - whether the plant is soft, semi-hard or hardwood. Best results are achieved if cuttings are taken when

| Recipes for Seed Raising Mix | | | | | | |
|------------------------------|--------------------------------|-------------|----------------------------|--------------------------------|--|--|
| Ratio | Organic Garden- er Magazine | Phil Dudman | Milkwood Per- maculture | Millie's Mix (Gardening Oz) | | |
| Compost (sieved) | 2 | 2 | 2 | 2 | | |
| Vermiculite | 1 | | | | | |
| Coir | 1 | 1 | 2 | 2 | | |
| Blood & bone | * | | | | | |
| Dolomite | | | | * | | |
| Worm castings | | * | | 1 | | |
| Manure (aged) | | | * | | | |
| Sand (fine) | | | * | 1 | | |

Small amount

plants are dormant - autumn /winter.

Growing media for cuttings is different to the growing media for seedlings. It is usually a sterile mix that retains moisture and aeration such as a 1:1 mix of coir/perlite or vermiculite/perlite or coir/washed river sand.

The cuttings can be encouraged to form roots using rooting hormone. Different strengths are applied - less for soft plants. Honey can also used to encourage root growth. Heat pads are sometimes used to encourage plant to growth.

Soft herbaceous plants

- Stem cuttings usually contain four nodes (where leaves join stem).
- Soft cuttings form roots more easily (few weeks)
- Geraniums, impatiens, daisies

Hardwood Cuttings

- Stem cuttings taken from top 10 cm and 2/3 of bottom leaves are removed.
- Take more time to form roots (few months/ years)
- Semi-hard; Rosemary, lavender, camellias, gardenias
- Hard; grapes, bougainvillea, frangipani



Propagating by stem cuttings, Source: Stewart 2012

Root Cuttings

- Remove no more than 1/3 from parent plant
- Cut horizontal at upper end and angled cut at lower end
- Place in growing medium with horizontal cut at top and just above the surface
- Plants that usually produce shoots from their roots – mint, raspberry, hops.

Leaf cuttings

- Growing medium must be sterile, aerated and well drained (perlite /coco-peat)
- Benefit from bottom heating but high humidity can cause fungal rot.
- Mainly soft wooded plants; mother-in-law tongue, begonia, many succulent species.
- Roots grow from petiole (leaf stalk) of some plants (African violet)



Propagating by leaf cuttings (African violet) Source: Stewart 2012

DIVISION

Propagating plants by division is the easiest method of increasing the number of plants of a given species. Division is most suited to plants that form clumps. The best time to divide plants is during Autumn before Spring flowering. Samples are placed into a potting mix enriched with compost. Trim off about one third of foliage to reduce water stress. Suitable species include; Agapanthas, Kangaroo paw, mondo grass

LAYERING

Plants suitable for cuttings are suited to this method. Part of the plant stays attached to the mother plant and encouraged to grow a separate root system. Simple layering is when a stem is bent and held in contact with a growing medium in a garden bed or a pot. Aerial layering is when a stem, not in contact with soil, is encouraged to grow roots. This is achieved by removing the bark of a young stem and applying rooting hormone. Moist coco-peat is then used to cover the cut area. The coco-peat is held in place by aluminium foil and or plastic. When roots appear through the wrapping the stem is removed from the mother plant and potted on. (See full version on digital version)

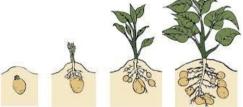
Potatoes – Let's Celebrate Them! by Diane Kelly

As the 19th of August is National Potato Day, and as a number of us have just ordered some organic seed potatoes to plant out, I thought a timely article for this month's newsletter would be one about growing potatoes.

But first some trivia

- The world's largest potato weighed in at 18 pounds, 4 ounces. This gigantic potato was reportedly found in England in 1795 enough for more than 70 portions of medium fries at McDonalds!
- The potato is considered as the fourth most important crop worldwide behind corn, wheat and rice.
- Potatoes produce more food per unit of water than any other major crop and are up to seven times more efficient in using water than cereals.

A potato is described as "a tuber that forms on a slender rhizome (which is a subterranean plant stem). The eye of a potato are buds, some of which develop into stems after planting, while others form the roots. The skin and flesh colour of potatoes varies considerably, and may include white, cream, yellow, pink or purple". There are more than 4,000 varieties of native potatoes, as well as over 180 wild potato species – so plenty of shapes and sizes!



The life of a potato plant

True seeds don't get saved from potatoes, as they are planted from "seed potatoes" or tubers (these are clones of the parent plant). Certified seed potatoes should be used, as these have been tested and deemed to be free of virus diseases and other pests. Small whole seed potatoes are best for planting, as they produce well-

spaced stems and fewer sprouts. You can use large tubers by cutting them into sections, provided each piece has several well-formed eyes and the cut surfaces are dried for a day or two before planting.

One of the main considerations for growing potatoes is they need an open position in full sun, as otherwise the "haulm" (or green top) will become lank and spindly as it reaches up towards the light. Potatoes also like good drainage, adequate nutrition and regular watering. In preparation for planting, fork the soil deeply and incorporate plenty of organic matter - but not fresh manure, as it will burn the young plants. A slightly acidic soil is suitable. And remember not to grow potatoes in beds that have grown tomatoes, capsicums, chillies or eggplants in the previous season – otherwise nematodes can be a problem. To obtain a longer growing season and to produce a heavier crop, it is beneficial to "chit" the seed potatoes - chitting is a method of pre-sprouting. Place the potatoes on a trav (egg cartons work well) in a light and cool place and wait until the eves grow to about 2.5 cm – this will take several weeks. Remove all but four or five of the eyes (leaving the strongest ones) and then plant the seed potatoes in the ground.



Chitted seed potatoes – off to a good start!

As the potato plants emerge from the soil and grow taller, hill up the soil around each plant to prevent the developing tubers being ruined by exposure to light (this will make them go green and poisonous). Continue hilling the plants each week or two until the foliage meets between the rows. A rough guide is that new potatoes should be harvestable after about 12-14 weeks – remove some to enjoy, and leave the rest for another month or so. Bandicoot down to get the potatoes as using a garden fork may impale them. After about

20 weeks the skin of the mature potatoes should be set, and the potatoes are able to be stored. Potatoes can be harvested earlier, but will need to be eaten immediately – to test the skins to see if they are mature, just rub the skin with your thumb. If the skin doesn't come off, the crop is ready!

So how else can potatoes be grown – especially if you don't have lots of spare garden area? There are plenty of no-dig, or small space, options:

- Potato grow bags: There are plenty of these available – they are made from soft material and can be easily moved around, just keep filling as the potatoes grow. Very economical on space.
- An old burlap or hessian bag can be used to create your own grow bag instead of paying for one.
- Grow your potatoes in a cardboard box tall removalist boxes should work well.
- 4. Make your own potato bag from weedbarrier cloth – staple the pieces together and plant out your seed potatoes
- 5. Potato towers: If you have three or four star pickets or tomato stakes, use them to support a chicken wire tower. Plant your potatoes in the bottom, and keep adding material as they grow.



A potato tower - cheap, easy and effective

growing plants in hay bales is a fascinating one. Soak a bale of hay in water; drench with a liquid seaweed product; scoop a hole in the top of the bale and add the seed potatoes. Cover the potatoes with compost or sawdust; keep hilling them up – and watch them grow!

And if you do have a bit more space in your backyard – and it doesn't need to be in garden soil (this can even be done on concrete!) try Peter Cundall's "Potatoes Under Straw" method:

Select a site that receives full sun. If it is a

- lawn area, don't worry about removing any of the grass just mow anything that is a bit long.
- Place the seed potatoes in rows on the ground – 30 cm apart with 60 cm between rows.
- Cover the tubers with a thick layer (at least 50 cm) of straw, ensuring a good overlap at the edges. Any sort of strawy material can be used – even spoilt hay. Give the bed a good watering to settle the straw.
- Sprinkle blood and bone with 10% added potash over the straw at the rate of a good handful per square metre. Then add some animal manure – a good shovel or two for each square metre will do the trick. Water again.
- Add some sawdust or fine wood shavings if you have them – this helps exclude light from the tubers, as well as adding important trace elements.
- Tidy the bed up; top with any excess straw or manure – and then water it all again to help the fertilizers soak in.
- After three weeks, the first growing tips should emerge from the mulch that will have now settled into a warm and nutritious pad.
- As soon as the top growth comes into flower, the new tubers will swell rapidly. With only an occasional watering and no other work, after about two to three months the first harvesting can be made.

*This is a summary of Peter's guidelines – if you would like the full article from the "Gardening Australia Book", please let me know and I will email it to you.

As Peter says "You will taste potatoes the like of which you have never experienced. They will be clean (because there is no soil involved), tender and so full of flavour, they will bring back memories of the way potatoes used to taste." That's his bloomin' promise!



Let's celebrate potatoes!

Hints for "All Things Gardening" by Diane Kelly

Hints about "All Things Gardening": We have a variety of hints this month, ranging from the flavoursome bay leaf through to "chokes for chooks"

1. Grown naturally or pruned into topiary, bay trees can be both decorative and useful. The secret to establishing a bay tree in your garden is to ensure that it is protected from harsh winds and cold when young. Once established, they are generally resistant to all weathers. As long as there is adequate drainage, your bay tree will do well in most soils. If you are growing your bay tree in a pot, add some gravel in the base to ensure the tree roots are kept dry. Keep your tree pruned regularly – this isn't really a chore, as bays are slow-growing plants.

As bay leaves tend to curl when drying, it's a good idea to place them under something heavy and between a couple of sheets of paper towel to get them to dry flat. Then just store them in an airtight container.



Versatile and aromatic bay leaves

2. When green is not good! If potatoes are green, either cut out all of the greened area, or discard the potato. The green part contains a naturally produced but harmful toxin called "solanine". To avoid triggering solanine in potatoes, store them in a dark area. If they must be stored in a lighted place, put them in a brown paper bag and close it loosely to allow for air circulation.

3. **Sweet, sweet potatoes:** Sweet potatoes can be used as a groundcover to improve poor soil. Planting them provides a protective cover to the soil; helps retain soil moisture; and builds up levels of organic matter by creating its own mulch. The harvest from crops grown in this manner is less than those grown in good soil, but as this is not the prime purpose of the planting, any harvest obtained is considered a bonus.



Sweet potatoes – a variety of colours and flavours!

4. **Protect your cauliflowers:** To protect the cauliflowers you are growing this winter from ear-wigs, make a little trap. Earwigs will hide in the curd of the plant, damaging the tiny buds. So make a trap by placing a twist of moist cardboard or paper into a jar or container – and each morning, check the trap for the intruders!

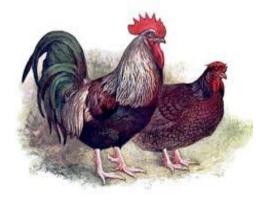
5.Chop and drop!



Comfrey – good for the soil, and attractive to bees!

Plants such as comfrey and a variety of legumes can be cut and placed around fruiting trees or in garden beds to act more like a slow-nutrient-release mulch than a weed-suppressing one. Materials such as card-board and paper can also be used effectively under other mulching material, but they really need to be torn into smaller strips to allow water to penetrate the soil. Wet down before using.

6. Chokos for chooks! You may have heard the saying "Only plant zucchinis if you have lots of friends" Well, a variation is: If you have chooks, then you can plant chokos! If you have a bumper harvest of chokos, don't waste them. If they can't be given away, then boil them up as food for chooks. Boiled until soft, they make a welcome warm mash for backyard poultry in autumn and early winter.



Feed your feathered friends some soft, warm chokos.

Thank you to those leaving their name with their Supper Table offering so we can ask you for the ingredients/recipe!

Please email your yummy recipes to Jill jillbarber611@gmail.com

Recipes

Keto Coconut Custard Lemon Pie Dr David Jockers



Prep 8 mins Cook 25 mins Total 33 mins Author chene Sonnekus Yield 12 slices pie Ingredients:

2 large organic eggs

1 cup full fat canned coconut milk 3/4 cup Swerve sweeter, Monk Fruit sweetener OR 10 dropper fulls of liquid lemon stevia

1/4 cup coconut flour

2 tbsp unsalted grass fed butter

1 tsp vanilla extract

1/2 tsp lemon extract

1 tsp lemon zest

3/4 tsp aluminum free baking powder

4 ounces unsweetened shredded coconut **Instructions**:

Step 1: Gather all ingredients. Pre-heat oven on 350F. Prepare pie dish by spraying with coconut oil and set aside.

Step 2: In a medium bowl, mix together all ingredients, except the shredded coconut, until well combined and has a custard like texture.

Step 3: Fold the shredded coconut into the custard mixture. Pour mixture into prepared pie pan and bake in the oven for 20-25 mins or until golden brown.

Step 4: Remove from oven and let it cool down. Serve

Step 5: Enjoy!

FRUIT TREES

JULY

Custard apple: Harvest every 3 or 4 days as fruit matures. Don't let trees dry out. Apply garden lime to soil – 20 grams per sq m to drip line – for example, a mature tree, 1kg.

Figs: Keep well mulched.

Lychee: Do not let trees dry out. Minimal watering is needed. Check emerging flowers for flower caterpillars. If more than ½ are infested, spray with pyrethrum or garlic spray.

Low chill stone fruit: Peak water needs. Water trees 2 weeks before flowering and 3 weeks later. In late July start blossom thinning. Winter prune late varieties. 50g of organic fertilizer with sulphate of potash added per sq m to drip line of trees. Mature trees – 1 kg.

Mango: Don't let trees dry out. Continue with copper based spray or leaf microbes for anthracnose if visible.

Passion-fruit: Don't let the vines dry out. Keep up the fish emulsion or kelp sprays every month. Small amount of organic fertilizer with sulphate of potash can be applied for vines. Large vines -1 kg; small vines $-\frac{1}{2}$ kg.

Pawpaw: Spray with wettable sulphur if powdery mildew is a problem. Minimal water. Use copper based sprays or leaf microbes if black spot is about. Pick fruit at mature stage with ½ colour to have full flavour.

Persimmon: Minimal water required at this time.

Strawberries: Feed with organic fertilizer with sulphate of potash. Spray fish emulsion and kelp regularly over plants to keep in good health. This will prevent fruit rot. Pick fruit when fully ripe. Keep plants fully watered, but try not to wet the berries. This will also prevent fruit rot. Mulch plants so the berries do not lie on the soil. Pine needles are best for this.

Bananas: Don't let the stools dry out. Keep

fruit covered and cut off bells.

Citrus: Pick mature fruit when fully ripe. Keep up irrigation.

AUGUST

Custard Apple: Leaf loss should occur this month. Low irrigation. Mulch trees. This month is the best time to prune custard apples. 1/3 of old wood needs to be taken off.

Figs: Pruning can be carried out. Be very vigorous. 1/3 can be cut off. Figs are only produced on new wood of the new season's growth. Give trees a good feed of organic fertiliser with sulphate of potash. Mulch well.

Lychee: Increase irrigation. Flowering should start this month. Fertilise trees with an organic fertiliser with potassium sulphate. Give mature trees 1 kg and small trees ½ kg.

Low chill stone fruit: Carry out final thinning. Stone hardening will occur this month. Continue with high irrigation. Prune out water shoots and dense foliage for better sized fruits. Use fruit fly control programs, for example netting or an attractant method.

Mango: Don't let trees dry out. Once flowering occurs spray with copper based spray or leaf microbes for anthracnose, if visible.

Passionfruit: Vines will start to grow this month. Apply a little organic fertiliser with sulphate of potash and mulch vines at least 2 to 3 metres out from the base. 1kg for large vines and ½ kg for smaller vines.

Pawpaw: Spray with wettable sulphur in the evenings for spider mite.

Persimmon: Flowering will start in early varieties. Mulch trees. Low irrigation.

Strawberries: Apply small amount of organic fertilizer with sulphate of potash. Keep up irrigation. Pick fruit when fully ripe.

Bananas: Don't let stools dry out. Keep fruit covered and cut off bells.

Citrus: Flowering will occur this month. Increase irrigation. Fertilise tree with organic fertiliser with sulphate of potash, 1kg for large trees and ½ kg for smaller trees.

VEGETABLES

JULY:

Asian Greens, Asparagus Crowns, Beans (French), Beetroot, Broad Beans, Broccoli, Cabbage, Carrot, Cauliflower, Celeriac, Celery, Endive, Kale, Kohlrabi, Leeks, Lettuce, Mustard Greens, Onion, Peas, Potato, Radish, Shallots, Silverbeet, Snow Peas, Tomatoes.

AUGUST:

Artichoke, Asian greens, Asparagus, Beans, Beetroots, Capsicum, Carrot, Celeriac, Celery, Chilli, Cucumber, Eggplant, Endive, Gourd, Kale, Leeks, Lettuce, Luffa, Marrow, Melons, Mustard Greens, Okra, Peanut, Potato, Pumpkin, Radish, Shallot, Silverbeet, Squash, Sunflower, Sweet Corn, Sweet potato, Tomato, Zucchini.

Queensland Planting Guide - Brisbane Organic Growers

HERBS

JULY

Annual: Borage, Calendula, Chervil, Chamomile, Coriander, Dill, Giant Red Lettuce, Herb Robert, Italian parsley, Misome, Mizuna, Mustard Lettuce, Nasturtium, Rocket.

Perennials & Bi-Annuals: Catnip, Chicory, Chives, Perennial Coriander, Fennel, Hyssop, Lavender, Lemon Balm, Lovage, Marjoram, Mint, Mushroom Plant, Oregano, Parsley, Rosemary, Sage, Salad Burnet, Thyme, Upland Cress, Watercress, Winter Savoury.

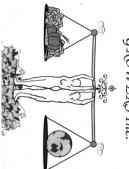
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Queensland Planting Guide - Brisbane Organic Growers

GOLD COAST ORGANIC GROWERS Inc.



NEWSLETTER

Meetings held:
3rd Thursday of the Month

Meeting place:Cnr Guineas Creek Road

& Coolgardie Street Elanora, Gold Coast

Next meeting: Thursday 15th AUGUST 2019