WA gardeners slapped with outrageous seed quarantine fee, winter gardening jobs, PW welcomes a new Co-convenor...

PermacultureWest eNews
Permaculture Association of Western Australia

Winter 2013

Rain! Finally. Just in time for Spring...

In winter, there's no other place in Perth I'd rather be than in the Hills. I've always been a summer kinda girl but I'm so enjoying the freezing mornings, dripping bush and mist-shrouded valley coupled with the warmth of our toasty pot belly stove. For the first time ever, I'm a bit disappointed to see the first signs of Spring budding on the trees and the rosemary a-buzzing with flowers and bees. Not yet!

But with Spring barely a month away heralding the beginning of the gardening year, many gardeners will be starting to think about what seeds they're going to order and plant, which brings us to the topic du jour. The big news that hit WA gardeners in late June was the outrageous WA quarantine charge on all seed orders from over east that came into effect on 1 July. Keep reading for full coverage of that developing story.

May I just acknowledge PermacultureWest Co-Convenor Charles Otway, among many others (Sparkles, Peter McMullen, Trevor Cochrane, etc), who has been incredibly active on the seed fee issue and has done a marvellous job in keeping PermacultureWest members up to date through Facebook, the PW website and emails to members. We are lucky to have such a dedicated individual at the helm of this purely volunteer-driven organisation.

Enjoy!

Jo, eNews Editor

Our new Co-convenor, Peter McMullen

I'd like to introduce myself as PemacultureWest's Co-convenor, my first year in the position.

I researched Permaculture around five years ago after hearing more about Peak Oil. My wife Katrina and I started to attend both the local Lockridge Permaculture and Environment House workshops. Together with buying and reading many great books (starting with the Bill Mollison set) and merging them with my local mentors and online research, our journey was well underway. In no time I knew that Permaculture was just what the planet needed.

Katrina and I sold our house and moved to Helena Valley where we bought a more suitable block and started putting permaculture principles into action. We joined the local groups of the area and have started transforming our block and house into a sustainable asset and education tool.

I love the technical side of permaculture and am often found researching instead of spading. Luckily for me, Katrina is the opposite.

The following are some of the additions and modifications we've added to our block: rain water collection, solar water heating, wicking beds, front and rear garden beds, fruiting trees, a worm farm fridge, chooks, summer house shading (grape vines) and soon to be installed bat boxes to offer homes to local displaced micro bats that can each eat up to 1,000 mozzies / moths / caterpillars a night.

I love the people, ideology and strongly believe the future will be far better when permaculture and the importance of local groups and small businesses are re-appreciated by all.

I have never found a better bunch of 100% caring individuals. My hat is raised to you all and I personally thank you all for your very positive actions.

Cheers,

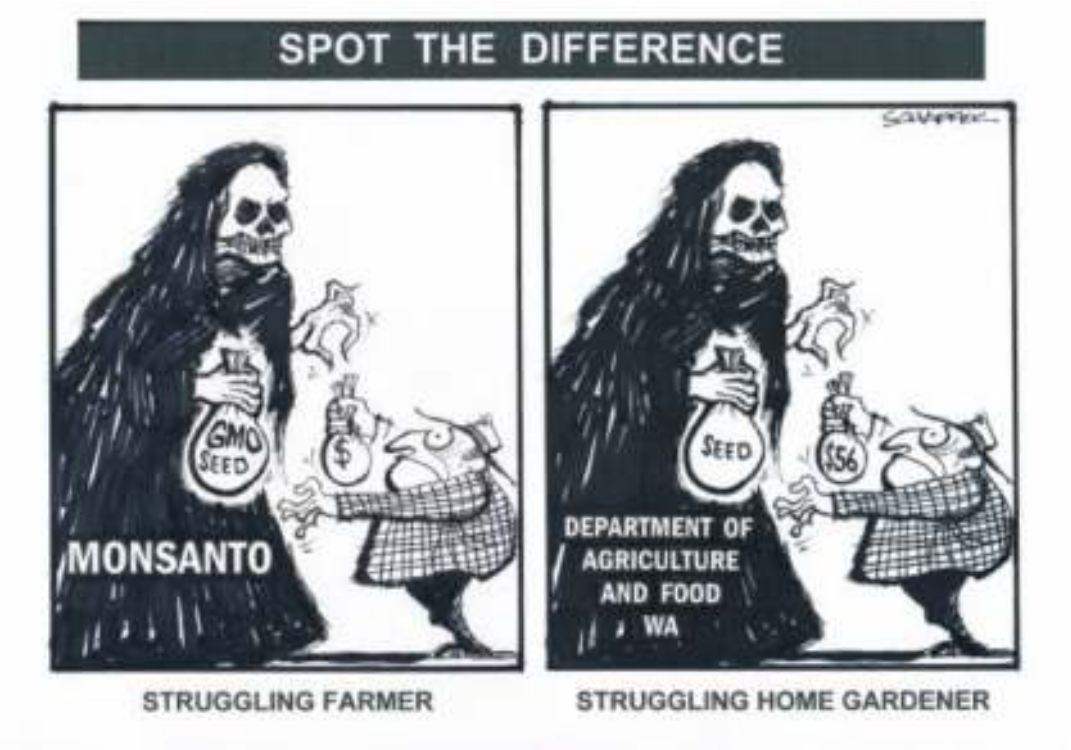
Peter McMullen

Co-convenor
PermacultureWest

More seedy decisions on managing WA's bio-security

By Charles Otway

PermacultureWest has been in the media a lot recently trying to lobby to have the seed importation fees for private seed buyers dropped, and importantly, to warn people of the huge fees they will get in the mail out of the blue. While it does not look like the fees will be dropped, WA Quarantine management has been scrambling to create an approved seed supplier list, notify people and enter arrangements that instead put limited cost on suppliers by forcing them to ship to WA in bulk.



Thanks to the great work by Peter McMullen, Brooke Murphy, Trevor Cochrane and the exposure firstly by the ABC and then the other radio and TV channels. It has been a learning exercise on just how much power the PermacultureWest community has if we combine efforts around important issues. Thanks everyone for your support on this one.

The good thing to come out of this sad day for food diversity and security in WA was the realisation by many of us that WA needs to take charge of its own seed supplies and saving. Hundreds of you have joined the Facebook Seed Savers group, started networking and sharing, and emailed in support.

It might look like nothing is happening currently but we are busy networking and drumming up support so that Seed Savers WA becomes a long term WA-wide seed saving and swapping group.

We already have many local growing groups and permaculture groups seed saving, so the aim is to link us all up and help set up many more local gardening, food production groups that are motivated and connected via the Seed Savers WA group. The seeds that have been planted by your support are being nurtured and propagated by Freo Permies who are working on a website / database to allow some kind of management of seed varieties, expiry dates, seed guardians etc. Also Sparkles is approaching LotteryWest for grants and support / endorsement from TV and publicly prominent people (like Josh Byrne) to raise the mainstream profile and effectiveness of a seed saving group.

Our loose plan is to set up Seed Savers WA under PermacultureWest's solid and respected not-for-profit banner to ease grant requesting etc. When the seed saver group has enough momentum, it would become its own independent entity that can more easily be seen as representing everyone in WA, rather than just for permies.

The latest update from Trevor Cochrane (our public ally in the fees fight) is that while the petition alerted pollies to the issue, because it was in an online format it will unfortunately not be tabled in Parliament. His advice is to keep the pressure on by writing letters to local ministers and the Minster for Agriculture and keep the issue in their minds and letterboxes. While he is still keen to champion the fight, sadly the petition numbers were low, which does not provide much of a mandate/platform from which to lobby. What it illustrates to me is the huge need to educate the public as to why veggie seed availability and seed saving is so important to food production and food security in WA.

We are very isolated and have unique climates and conditions. We need to localise and develop locally resilient food plant varieties and build on the great work of locally organic food growers and groups like Yilgarn Seeds.

Rest assured, we are still planning skill sharing workshops, formation of groups and meetings for the seed saving group. Keep networking and chatting to us and we will update you with the latest news soon.

Cheers,

Charles Otway

SEED SAVING

Beginners start saving, Savers start swapping

Swap or buy open pollinated seeds and start to grow your own seedlings. This is a little harder than buying seedlings but the resulting plants and food will be better, and you can save the seeds for next time. A cheap plastic greenhouse propagator can be bought at any garden store to make starting seedlings easy.

While it seems like the easy and cheap option seed packets in hardware stores and garden centres all come from the UK. They are not organic, local or even Australian suited plants, as they have adapted to northern hemisphere climates and are increasingly hybrid types. Don't buy them.

Open Pollinated – are seeds you can save and, if not cross-pollinated, will produce the same plant again. (Non-Hybrid and Non-GMO)

Heritage / Heirloom – are open pollinated seeds, saved for generations by someone like you to produce a specific taste / look / growth, specifically for the home garden.

Hybrid Seeds – are from forced cross-pollinated plants. Seeds saved from these hybrid plants will not grow the same. These plants and seeds are designed for factory farms where everything must look the same, mature at the same time and be tough for transportation. This often makes them crap to eat and does not suit backyard food growing. Don't buy them.

Seed saving is rewarding in so many ways.
It's very easy, saves money and gives you a food insurance policy (we have insurance for everything else so why not food?) Even a little seed saving is an empowering and powerful thing to do. Trade your excess with others and double your varieties.

What you basically do is avoid eating all the plant / fruit, wait for it to mature, pick them, separate seeds from pulp or shell, make sure they're really dry, and then you store them.

It's as simple as that. But … getting good seeds involves knowing the usual life cycle of a plant and whether a seed will stay 'true' (be the same as the plant from which it was produced).

Plant Types and Specifics

Plants are annual, biennial or perennial.

Annual plants (such as lettuce and tomatoes) flower and mature seed in the same year.

Biennial plants (such as carrots and beets) are normally harvested as food in their first summer or autumn but do not flower or produce seed until the next year. Most biennials become tall and bushy when going to seed, taking up more space than they did the previous year.

Perennials live and bear seed year after year.

Plants are also classified as either self-pollinated or cross-pollinated although sometimes they can be both.

Self-pollinated plants: Pollen is not transferred from one flower to another, either on the same plant or between plants. The process occurs within each flower. The flowers have both male and female plant parts and pollination occurs successfully within the single bloom. The seeds of these plants almost always retain the quality of the parent seed or stay "true." Because they rarely cross with another variety of the same species, isolating them is unnecessary unless you want absolute purity in a strain.

Cross-pollinated plants: The pollen from one flower fertilizes another flower, either on the same or another plant. Either wind or insects carry the pollen. It is important to know other varieties of the same species with which a plant has the potential to exchange pollen. For example, if your cabbage and your broccoli flower at the same time, the seed produced will be a mix of both of them. Allowing only one variety of each potentially cross-pollinating vegetable to flower out eliminates the need to separate plants from each other. As well, barriers can be erected or planted, plantings can be staggered or crops can be covered with garden fabric.

Start with easy seed saving: Self-pollinating annuals

These include lettuces, beans, grains, tomatoes and peppers. It is easy to save a diversity of them and they are very significant crops to save.

Lettuce

A single lettuce can produce hundreds of small yellow flowers atop its stalk. The flowers become bunches of feathery little seed sites, each flower creating eight to fifteen seeds. The seeds are a miniature version of dandelion seeds, having a tiny parachute perfect for riding the breezes. They are little wedges about an eighth of an inch long and are either white or dark, depending on variety.

Someone wanting to have enough seed for the coming year could simply pluck two or three fuzzy seed heads to easily get a couple of dozen seeds. The seed can be rubbed between the fingers to release the fluff. Most of the fluff can be easily blown away if you're careful not to blow too hard. Sifting it through an appropriate screen can also clean the seed. For the amateur seed saver, it is not crucial for the seeds to be totally clean, just totally dry. Lettuce seeds keep a high viability for at least four years.

Tomatoes

Tomatoes are the most popular food to grow so it's probably appropriate that saving their seeds involves a special little project. The accepted tomato seed saving method involves letting ripe tomatoes ferment for a few days to prevent bacterial and viral diseases from persisting through the seed. (Don't save seed from any tomato that was obviously diseased.) Fermentation also breaks down the gel that covers tomato seed.

Three days later you'll observe a moldy, fermented brew (you're not supposed to let the fermenting process go on much longer.) Pour the clear water and the seeds onto a fine

mesh screen that collects the seeds. The seeds dry remarkably fast. The seeds turn a very light color when dry. They look and feel dry. They too remain viable for four or five years.

Beans and Peas

These include bush beans, runner beans and canning beans, fresh green snap beans, peas, chickpeas, soybeans and lentils. In the process of dying down, all these legumes lose their leaves until only the pods are left. Most get to the point where the beans rattle in the pods if you shake them. Some beans pods twist open and spurt their seeds on hot days, so it's important to do daily checks when harvest is close. If your thumbnail can't make a dent in the seed, the beans are ready. Opening the pods one by one can be a very exciting as well as mesmerizing activity.

Having your own dry beans on hand means special meals are around the corner. You're unlikely to find beans in a store that have the eating quality of your homegrown ones. As seed, beans will easily stay viable for four or five years but as food, they are best eaten by next year's harvest.

There are three kinds of beans that, because of their more open flowers, can be pollinated by insects as well as by themselves: runner beans, fava beans and lima beans. To maintain purity in these bean families, it is best to grow only one variety of each (which most people would ordinarily do anyway) or to separate them as much as possible. Runner and fava beans appreciate a cooler growing season than regular beans and the seeds ripen unevenly over many weeks.

The above self-pollinating annuals are an excellent place to start seed saving. Lettuces, tomatoes, beans, grains and peppers can be used in lots of meals.

These tables are from the best seed saving book in Australia, "The Seed Savers Handbook" (buy it online I highly recommend it). The following pages provide a summary of information on the rest of the seed species.

For the beginner
• For the gardener with experience
•• For the accomplished seed saver
••• For the expert seed saver

• Amaranth
• Artichoke
• Asparagus
• Basella
Basil
Bean
•• Beetroot
• Bitter Gourd
• Borage
Broad Bean
• Broccoli
••• Brussels Sprouts
•• Cabbage
• Calendula
• Cape Gooseberry
• Capsicum & Chilli
•• Cardoon
• Carrot
•• Cassava
•• Cauliflower
•• Celeriac
• Celery
• Celtuce
• Chervil
• Chicory
Chilacayote
• Chinese Cabbage
• Chives
Choko
•• Collard
Coriander
••• Corn
•• Corn Salad
• Cowpea
•• Cucumber
• Dandelion
Dill
•• Eggplant
•• Endive
Eschallot
Fennel
•• Garland Chrysanthemum
Garlic
Garlic Chives
• Ginger
• Gourd
• Gramma
•• Guada Bean
• Hibiscus Spinach
• Hyacinth Bean
• Jerusalem Artichoke
•• Kale
•• Kohlrabi
• Korila
• Leek
Lemongrass
Lettuce
Lima Bean
• Luffa
Marigold
• Marjoram
• Mint
• Mitsuba
• Mizuna
•• Mustard
•• Mustard Greens
Nasturtium
• New Zealand Spinach
•• Oca
• Okra
•• Onion
•• Orach
• Oriental Cooking Melon
• Pansy & Violet
• Parsley
•• Parsnip
Pea
• Peanut
• Peruvian Parsnip
• Poppy
• Potato
• Pumpkin
• Queensland Arrowroot
•• Radish
• Rhubarb
• Rocket
•• Rockmelon
• Rosella
• Rosemary
• Runner Bean
Sage
Salad Burnet
• Salsify
•• Silver Beet
Snake Bean
• Sorrel
• Soya Bean
•• Spinach
• Spring Onion
• Squash
• Sunflower
Sweet Potato
• Taro
•• Tarragon
• Thyme
Tomato
• Tree Onion
• Tumeric
••• Turnip
•• Water Chestnut
•• Water Spinach
Watercress
• Watermelon
• Wax Gourd
• Winged Bean
Yam
• Yam Bean

APPENDIX A

Pollination and Storage Table

Name of Plant	Annual, Biennial or Perennial	Means of Reproduction – Vegetatively and, if by seeds also, Cross-pollinating and/or Self-pollinating	If Cross-pollinated are they Wind, and/or Insect-pollinated?	How many years the seeds last in good storage conditions	How many seeds to the gram
Amaranth	A	C	W	5	800
Artichoke	A,P	V,C	I	5	30
Asparagus	P	V,C	I	3-5	50
Basella	A,P	V,S		5	50
Basil	A,P	V,C	I	5	600
Bean	A	S		3	5-10
Beetroot	B	C	W&I	5	50
Bitter Gourd	A	C	I	5	12
Borage	A	C	I	5	65
Broad Bean	A	S,C	I	4	1
Broccoli	A,B	C	I	5	300
Brussels Sprouts	B	C	I	4	270
Cabbage	B	C	I	4	250
Calendula	A	C	I	2	100
Cape Gooseberry	A,P	S		5	400
Capsicum & Chilli	A,P	S,C	I	5	150
Cardoon	P	C	I	4	25
Carrot	B	C	I	3	1000
Cassava	P	V			
Cauliflower	B	C	I	4	500
Celeriac	B	C	I	5	2000
Celery	B	C	I	5	2000
Celtuce	A	S		5	1000
Chervil	A	C	I	1	450
Chicory	B	C	I	8	600
Chilacayote	P	C	I	5	5-8
Chinese Cabbage	A	C	I	5	350
Chives	P	V,C	I	1	600
Choko	A,P	C	I		
Collard	B	C	I	4	200
Coriander	A	C	I	3	90
Corn	A	C	W&I	2-10	3-8
Corn Salad	A	C	I	4	700
Cowpea	A	S		5	50
Cucumber	A	C	I	4-10	40
Dandelion	P	S		2	1000
Dill	A	C	I	3	900

KEY:

A–Annual
B–Biennial
P–Perennial
C–Cross-pollinated
S–Self-pollinated
W–Wind-pollinated
I–Insect-pollinated
V–Vegetatively reproduced

APPENDIX A cont'd.

Name of Plant	Annual, Biennial or Perennial	Manner of Reproduction – Vegetatively and, if by seeds also, Cross-pollinating and/or Self-pollinating	If Cross-pollinated are they Wind, and/or Insect-pollinated?	How many years the seeds last in good storage conditions	How many seeds to the gram
Eggplant	P	S,C	I	5	200
Endive	A	S		5	900
Eschallot	A	V			
Fennel	A	C	I	4	500
Garland Chrysanthemum	A	C	I	3	300
Garlic	A	V			
Garlic Chives	P	V,C	I	1	250
Ginger	P	V			
Gourd	A	C	I	5	30
Gramma	A	C	I	3-8	5
Guada Bean	A	C	I	2	6
Hibiscus Spinach	P	S		3	70
Hyacinth Bean	P	S		4	4
Jerusalem Artichoke	P	V,C	I		
Kale	B	C	I	4	250
Kohlrabi	B	C	I	4	250
Korila	A	C	I	3	30
Leek	B,P	V,C	I	3	400
Lemongrass	P	V			
Lettuce	A	S		5	1000
Lima Bean	P	S		3	1
Luffa	A	C	I	5	20
Marigold	A	C	I	3	300
Marjoram	A,P	V,C	I	5	12 000
Mint	V,C	I	I	1	40 000
Mitsuba	A	C	I	3	500
Mizuna	A	C	I	2	600
Mustard	A	C	I	3-7	600
Mustard Greens	A	C	I	4	600
Nasturtium	A	V,C	I	3	30
New Zealand Spinach	P	V,C	I	6	20
Oca	P	V			
Okra	A	S		5	15
Onion	B	C	I	2	250
Orach	A	C	W	5	250
Oriental Cooking Melon	A	C	I	5	70
Pansy & Violet	A	V,C	I	7 days, 1	1-2000
Parsley	B	C	I	3	200
Parsnip	B	C	I	1	200
Pea	A	S		3	5
Peanut	P	S		1	12

KEY:

A–Annual	S–Self-pollinated
B–Biennial	W–Wind-pollinated
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APPENDIX A cont'd.

Name of Plant	Annual, Biennial or Perennial	Manner of Reproduction – Vegetatively and, if by seeds also, Cross-pollinating and/or Self-pollinating	If Cross-pollinated are they Wind, and/or Insect-pollinated?	How many years the seeds last in good storage conditions	How many seeds to the gram
Peruvian Parsnip	P	V			
Poppy	A	C	I	2	10 000
Potato	P	V			
Pumpkin	A	C	I	5-10	4
Queensland Arrowroot	P	V			
Radish	A,B	C	I	4	100
Rhubarb	P	V,C	I	1	250
Rocket	A	C	I	2	500
Rockmelon	A	C	I	5	30
Rosella	A	S		3	70
Rosemary	P	V,C	I	1	900
Runner Bean	P	S		3	1
Sage	P	V,C	I	3	250
Salad Burnet	P	V,C	I	3	150
Salsify	B	C	I	3-5	100
Silver Beet	B	C	W	10	60-90
Snake Bean	A	S		3-8	5
Sorrel	P	V,C	I	2	1000
Soya Bean	A	S		5	5-10
Spinach	A	C	W	5	70
Spring Onion	A,P	V,C	I	2	250
Squash	A	C	I	5-10	6-8
Sunflower	A	C	I	5	10-20
Sweet Potato	P	V			
Taro	P	V			
Tarragon	P	V			
Thyme	P	V,C	I	5	6000
Tomato	A	S		4	400
Tree Onion	P	V			
Tumeric	P	V			
Turnip	B	C	I	5	300
Water Chestnut	P	V			
Water Spinach	A	V,S		3	150
Watercress	P	V,S		5	4000
Watermelon	A	C	I	5	6
Wax Gourd	A	C	I	3	10
Winged Bean	A,P	S		2	18
Yam	P	V			
Yam Bean	P	V,S		5	5

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An Achievapple Cider Sustainability

By Charles Otway

While we have been trying to reduce our intake of processed foods, my wife and I still like a drink in the evenings after the kids are in bed. We are a Coeliac and gluten-intolerant couple and really don't fancy wine (or its hangover) so we have settled into apple cider, a beverage that ticks more boxes than the rest. We drink Mercury Dry cider. It has the required bite and dryness that I enjoyed in beer before I became intolerant. The apples and brewing are Tasmanian, so as a commercial alcohol goes, I am hoping it's better than many.

We have just completed dry July (crazy I know) and in my extra sober evening hours I pondered how much less crap (sulphite/sugar/alcohol) I must be consuming

and the $180 a month we saved not drinking cider. Clearly I jut need to stop drinking, but that would be no fun, so it's time to research how to make apple cider. More importantly, we have a few large apple trees on the farm growing an excess of apples, which makes it all the more attractive as a cheap source of 'healthy grog' if there is such a thing.

Anyway enough waffle, the press is on order and I will follow up with the results in time. But for the moment I will summarise my research on the basics of cider making and what I intend to try next apple season. I hope it gives you some inspiration to try some DIY beverages yourself. I did a Rhubarb sparkling wine recipe in an earlier e-News if you want to look it up.

While you can buy apple juice, we have excess apples so I will be juicing those. We have a tree in the chook run that has long keeping tart green apples, a red baby crab apple tree (no bigger than golfballs), and red self seeding Jonathon style apple (huge apples with tough skin but great red colour). So I thought I would try blending those to get a flavour and sweetness I like. We have other eating and cooking apples but these seedlings are in excess and should be utilised first.

Storage wise the plan is to clean (remove bird poo or windfall dirt), core, and freeze the apples 'whole'. My reading tells me the seeds can give the brew bitterness that is undesirable. Skin adds to the flavour and contains the natural yeasts so I plan to keep that. Coring but leaving the apple un-cut exposes the least flesh to oxidising (going brown).

Freezing the apples causes the cells of the apple to expand and rupture. The faster you freeze the apples the bigger the ice crystals grow and the more rupturing occurs. In this case that is great as it mushes up the apple and allow the juice (and pectins and tanins and other goodies in the skin) to be released much easier and more thoroughly.

Most apple juice or cider production/discussion involves shredding the apples and then pressing them. A shredder is another piece of kit you need to make or buy and the process is messy. So by freezing the apples and pressing I am also hoping to avoid that.

It seems that it will be worth freezing bags of 5kg at a time of cored apples to allow easy mixing and batch production. Clearly when using this method freezer space is the limiting factor. I have a chest freezer, but if you don't, it might not be viable. I think I have a half full 300L freezer. Both the freezing and the bottling of the apple juice allows you to extend your apples as food and drink when they are not in season, hence we are increasing our yield here in many ways.

I stumbled across a great blog where a German fellow tried lots of different apple juicing methods. He seemed to agree that freezing apples whole and squeezing the resultant pulp was a great option for flavour and yield. Have a read here (scroll down for English) - http://wijnmaker.blogspot.com.au/2008/09/appeltje-voor-de-dorst-apple-day.html

Depending on the method of pre-processing and pressing, your yield of juice might be 50 - 75% so the pro's and con's and required hardware need to be assessed to best suit your situation.

I have decided to lash out and buy a 10 L Stainless steel fruit press that will hopefully last a lifetime and can be shared around. Just let me justify the $450 please before you ask too many questions :) It can press herbs, honey and fruit and what it is made for olive oil, so should be well used given all of these things need processing and value adding on the farm.

So now we can put the frozen cored apples in the press in a muslin sack and let them drop some liquid and then press out the rest. I am hoping to get 70% yield of juice. The pulp can be composted, fed to rabbits, or anything else you can imagine. The press has a stainless steal splash guard and collector on its base so just catch the juice in a clean sanitised container.

Ensure your pressed juice goes into a sterilised bucket, fermentation container and sterilised bottles, cleanliness here prevents you getting sick or worst ruining your brew. The vessel you are storing or fermenting in should have a sealable lid and an airlock to allow you to exclude air and create a CO2 blanket to stop oxidation. Glass, wood, food grade plastic or stainless steel can be used. Due to the acid in the apples avoid anything that can react (aluminum etc).

At this point you have apple cider, 100% natural, if you filtered it you would then have clear apple juice like you buy in the shop but clearly much better. We don't spray our trees at all and if you have had anything to do with commercial apple growing and the amount of chemicals that go on to make a perfect apple that the shops insist on stocking, it would make your hair stand on end. I digress. I want to make mildly alcoholic cider, so there needs to be some brewing done.

There are two methods: 'wild' unpasteurized apple cider or pasturised 'controlled' cider.

Wild cider involves putting the apple cider into a container with a vapour lock and letting the wild yeast that occurs naturally in apples ferment the juice / sugar into alcohol. (It takes longer and yields unpredictable results, but it is natural.

Pasteurised 'controlled' apple cider is killed with heat or Campden Tablets and then has brewers or champagne yeast added (often with yeast nutrient). Conversely this takes less time to ferment and will yield a more stable cider).

I am still not sure if I will let the natural yeasts grow from the apple skins or if I will need to kill those off and use wine yeast. While I would like to avoid too many off brews due to rogue bad yeasts on the skins, I would like to avoid the cost and 'unnatural' aspect of the commercial yeast.

So the common option now is to add sodium metabisulphite (campden) to the juice to kill off wild yeast with the general dose of 1 tablet per gallon. This needs to be left for around 48 hours before adding your beer or champagne yeast into the

juice.

It is good to clarify at this point that campden (sodium metabisulfate) does not actually kill the yeast in the brew rather it stalls it for a while. Apparently it has more effect on wild yeast than commercial yeast so stalling the wild yeast and letting the commercial yeast take hold is the process. To actually stop the wild yeast repopulating if there is sugar left for it to grow from, you must add potassium sorbate and campden.

Depending on temperature and other additions it may take two to three weeks for the yeast to use all the sugar, and stop bubbling, leaving a dry strongly alcoholic (6-10%) brew. As you follow the drop in Specific Gravity S.G. (drop in sugar / rise in alcohol) with time, it will begin to level off at an S.G. of 1.00. At this point (same point the yeast stopped bubbling) you would rack (remove the cider from the yeasty dregs at the bottom) the cider for the first time. Multiple rackings and aging is an option but I won't go into that.

Racking can be done by a slow steady pour to avoid mixing the sediment. An easier method is siphoning the clear cider with a tube.

This will yield you a dry flat cider, because CO2 stops being produced when the yeast stops bubbling. You then decide how you want to drink the cider, dry and flat, dry and re-carbonate, sweetened and carbonate etc. Each has a different technique, which I won't go into here but can be found on the last link.

Having said all that, I will be trying for a quick rough technique first similar to the rhubarb wine and elderflower wine ideas. I don't want the high alcohol that comes with full fermentation anyway. Green Deane for Eat your Weeds website likes this idea also - http://www.eattheweeds.com/how-to-make-hard-cider-2/

I will get the juice into my fermentation vessel (a 20-litre beer brewing plastic vessel), wait until bubbling starts, then ferment for five days and taste. I may wait for seven days if I want it less sweet or less rough.

I also intend to save some of the dregs / yeast and keep a living wild yeast inoculant to add at the start of fermentation for the next brew instead of using a dry brewers yeast sachet each time. It is wise to have two separate bottles of wild yeast culture in case you mess one up via topping up with a dodgy brew before you realise.

I hope this article has appled to your curiosity and you start making your own beverages. There is plenty of more detailed information on the Internet. Try here to start: http://www.cider.org.uk/frameset.htm

Herdsman Community Garden

Would you love to grow your own food and save money?

This is your opportunity to be part of a new community project that promotes safe and healthy food grown organically in your neighbourhood. Discover easy ways to grow food with proven results. This is guaranteed to transform your life. There will be a meeting on **Wednesday, 21 August at 6pm** at the
Wembley Community Centre, 40 Alexander Street.

Contact Behrooz Eslam on 0408 476 919, 40/99 Herdsman Parade Wembley or email: beslam@hotmail.com

COMMUNITY GARDENS WA

Duncraig Community Garden

Heather, Sue and Kath are looking for locals to Duncraig to support an edible garden out the front of the Duncraig Library. This garden, unlike most, will be a small demonstation community garden with a few beds to teach the City of Joondalup the benefits of and support for community gardens in their council.

Tentatively called, Duncraig Edible Garden , it will be a shared garden without individual lots. To help the group get support from the council they need to demonstrate local support and more importantly helpers to allow the garden to be managed.

If you are in that area and can offer so time (helping or learning) or skills (deisgn or maintenance) we would love to hear from you on info@permaculturewest.org.au

Water Installations is now a Biolytix Service Agent

Biolytix New Zealand has endorsed well-known permaculture specialist and owner of

Water Installations, Ross Mars, as a service agent for Biolytix aerated treatment units in WA. Ross is also listed on the Department of Health website.

Biolytix NZ is hoping to get the Biolytix system approved once again in WA, and we have been working closely with them to help people in WA by replacing pumps, repairing or modifying irrigation and advising about the state of their system. Now we can undertake a full service and provide a short written report for you and for your local Council.

How to rectify a few issues

There are a few problems with the Biolytix system that can be rectified so that the system can continue to be used.

The first is an installation fault in that the lids are left typically exposed. Having the plastic dome exposed to sunlight causes the top of the tank to heat up, and this, in turn, will kill all the earthworms and some of the micro-organisms that the system depends on to break down the faeces and other solid organic matter. Earthworms prefer cool temperatures lower than 22°C, and it is clear that the Biolytix tank space can reach temperatures twice this in summer. This problem can be solved by simply burying the lid with soil or mulch, thus keeping the lid and tank cool. Of course, buy more manure worms if you can't find any when you open the tank up for inspection. Manure worms can be bought from Kevin at the Worm Shed in Chittering.

You must ensure that this lid is completely covered with soil or mulch (100-150mm) to prevent overheating of tank space (which would kill earthworms).

Secondly, the use of geotextile in a few layers that separate the compartments of the tank is fouling in some systems. When there is little available oxygen (due to the small air volume generated by the air pump) and a large rich, nutrient load, the bacteria that survive in these anaerobic conditions will basically form a sludge layer that prevents water from passing through. It essentially seals the geofabric and the tank space above it floods. So you will find when you remove the lid that the pump chamber doesn't have much water (pump still works) but the top of the tank is full of water.

There are two 'quick-fix' alternatives. Firstly, the cheapest, is to puncture the geotextile and insert a breather tube that extends from the top to the bottom of the tank. This enables air to rise to all three sections of the matrix. Wherever possible we install an additional air hose to the top of the breather to further aerate the matrix. We can install one of these for $298.

What is clear after installing a few of these already is that by punching a hole in the fabric layers, poorly treated effluent is able to by-pass any filtration and flow down into the pump chamber. You can expect very coarse wastewater temporarily being pumped out, but the

hole around the breather tube will eventually seal again.

The second more expensive option is to get the system re-built. This means removing all the bags, getting a waste liquid contractor to pump out all the effluent and then get someone to put in new geotextile and bags. Typical costs are up to $5000. We do not endorse this procedure.

A steel pipe is hammered through the bags and geotextile to the bottom of the tank.

The breather tube is inserted, and then the steel outer casing pipe is carefully removed.

A taper on the steel pipe enables easier cutting action through the geotextile.

Breather tube in position alongside pump chamber.

The breather tube has small holes to let air out.

Servicing the Biolytix requires both technique and equipment as the water quality is determined.

If you wish to get your Biolytix serviced please contact us at the office and we can book a

time most suitable to you. While the requirement is to get an annual service, we believe that it is better to get servicing every six months to better monitor the system and rectify issues as they arise.

Fair Harvest
Introduction to Permaculture course

Get ready for your summer planting season with this 2 day course. Learn about what to plant when in your garden while finding out about the principles of permaculture and how you can apply them to any aspect of your life. This short, interactive, hands on course is a great place to start if you are new to the area or new to the idea of growing your own. It's also a great way to connect with others interested in food and living a more positive and healthy life.

If these dates don't work for you and you want to do this course get a group together (minimum 8 people) and we'll set a date that works for you.

Visit Fair Harvest for more information.

Hills Local Permaculture Group mini-blitz

I thought this email sent by HLPG Coordinator, Kristylee Sharp, from an Internet cafe in Ecuador while on holiday showed true commitment to the cause and was also rather amusing...

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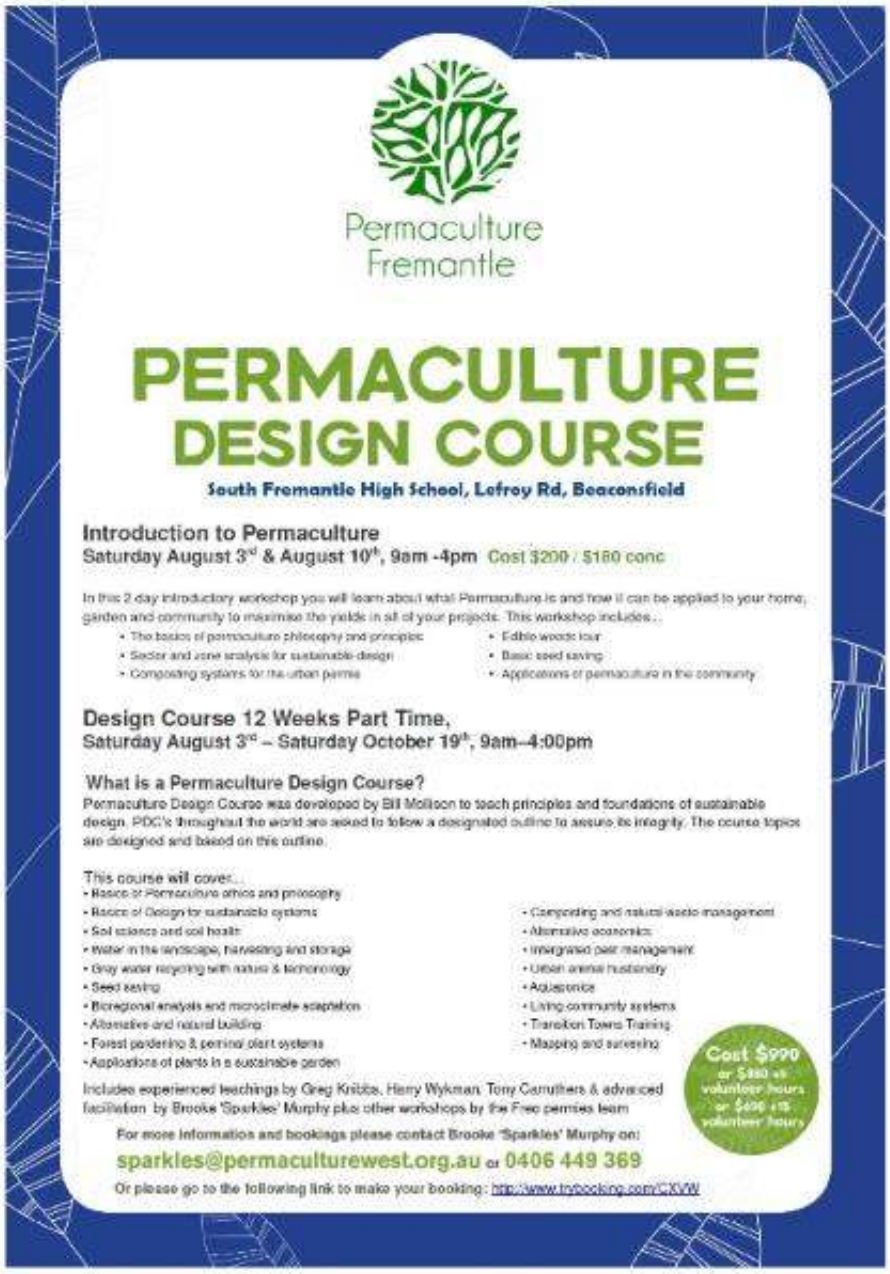
hi everyone

next hills permaculture session is at Aaron <boultbee and familys house in parkerville. this will be a mini permablitz where we will help him with putting together a wetland and dampland system as well as garden tour. it should be a great experience for all and we hope you can come along.

when - saturday august 17th 10am - 12pm
where - 7b misty rd ´parkerville
bring - gardening gloves and tools, morning tea to share, energy, enthusiasm and fun, or just come and have a chat!

we look forward to seeing you then. apologies for the poor emailing, im currently emailing from an internet cafe in ecuador with a spanish keyboard icannot understand! we{ll catch up on the photos and news from the last few sessions in september
hope that you can make it to parkerville in august as this will be a really good experience

for sharing,
kind regards from the hills group coordinators.



Permie, where are you now?

I recently had a hugely inspiring conversation with an old student from years ago who told me all about how they've now created their very own urban permaculture oasis since training with us. They are now part of an incredible school project and influencing a whole section of the community with their patch... another one of you has just finished working on a project in Ghana doing community development through permaculture....

What I want to know is... what are you up to now? Have you made changes since doing our course? Are you now self-sufficient? Part of a community project? Running a permaculture-inspired business?

I am looking for inspiring testamonials that I can put up onto my new website to let potential permies know about how this course can change their life and inspire whole communities to become part of the transitition to a more sustainable presence on the planet.

I value any feedback you feel compelled to give!

I look forward to hearing some juicy stories. If you would like, I can share them on to the rest of the group for some inspiration also.

Please also, if you are on facebook go to our new page www.facebook.com/seedsaverswa and like our page. This is the new group PermacultureWest is starting to keep our seed feedom alive through community response to the outrageous quarantine levy that has just appeared. We are still fighting to reverse the charges.

Lots and lots and lots of love!

Sparkles

Call for information about Ngulla nursery

My name is Richard and I'm researching an old permaculture project in the suburb of Casurina, some 35 km south of Perth. I'm wondering if anyone knows anything about a nursery called "Ngulla" which in local regional Aboriginal language means "Our Place" or something similar.

About eight or so years ago, a permaculture project was built in the property's backyard. The project is about 10-15m across and about 3-4 m high and the belly of it contains a concrete marron pool, which is about 3 m x 2 m. The walls of this huge structure are made up of car tyres. It's heavily overgrown with grass and is dangerous to walk there as you cannot see where you are putting your feet.

I have been told the project was never really completed, which is self-evident, despite the nursery having a website. There are 8 acres in the backyard and I had hoped to use this area for a community farm, which would provide the vegetables for Meals on Wheels in Perth, who serve 17,800 meals per week.

If anyone know anything more about this site I would be interested to hear from you. Please contact Richard PH James on ourcommunityfarm@gmail.com

Good Bug, Bad Bug

What bugs you in the garden? What can be done to save our precious plants from attack

WITHOUT resorting to harmful chemicals?

Learn about Organic pest control with Bee Winfield from Merri Bee Organic Farm Hear about some bug beating tricks and maybe share a few of your own!

When?
Nannup's Flower and Garden Festival weekend. Saturday August 17th, 11.30 am till 1pm.

Where? Adam Street, Shire office, Shirley Humble Room

Start a Community Food Garden in your Neighbourhood!

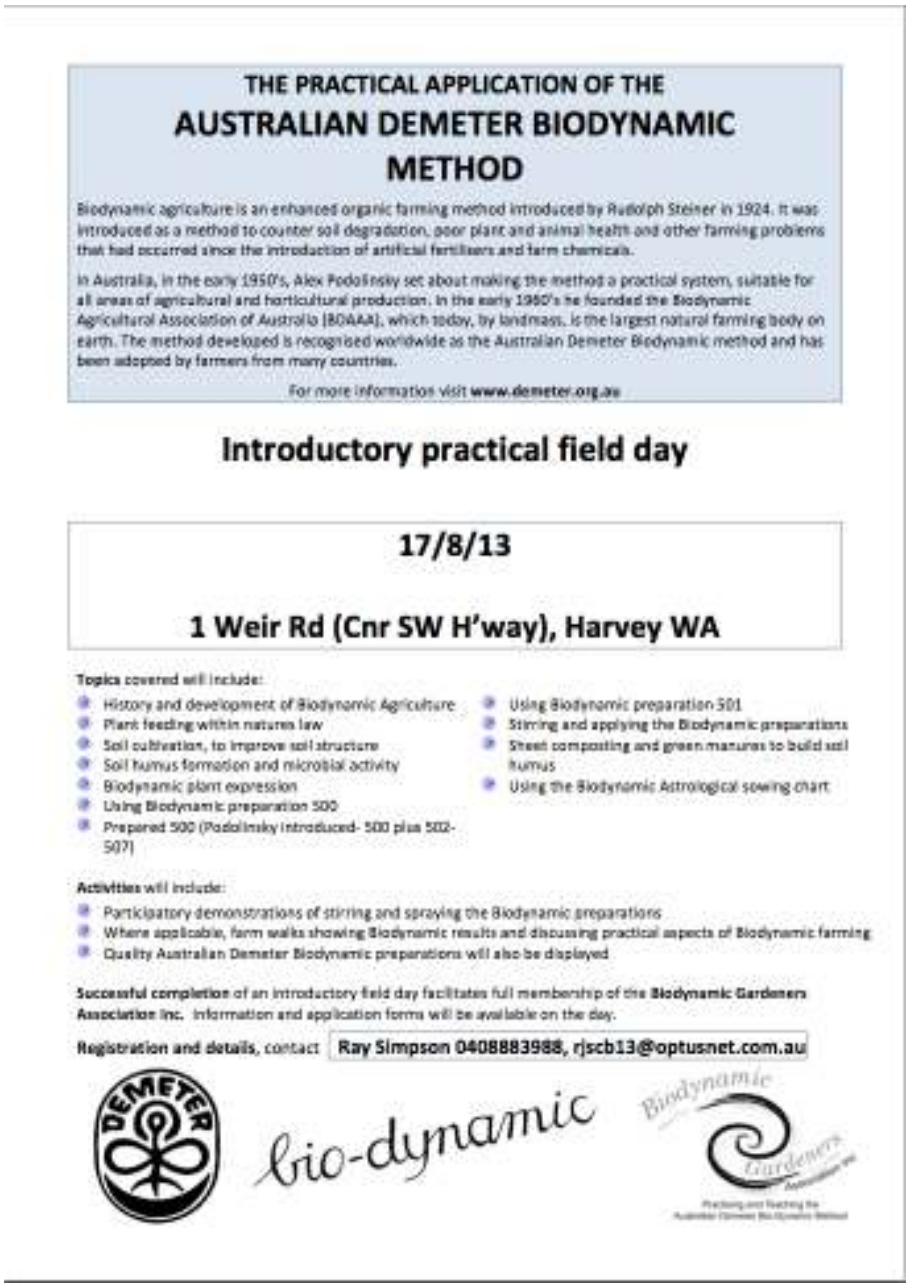
Grant funding is now available to groups of individuals and not-for-profit organisations to establish new community food gardens in the City of Stirling.

Community Food Gardens are vibrant productive spaces which bring people together to grow food and community spirit, and each year the City of Stirling offers grant funding to support the development of new gardens.

Residents who would like to start a community food garden on a City-owned Reserve in their neighbourhood can apply for up to $20,000, while not for profit organisations who would like to develop a garden on their own land can apply for up to $5000. Existing community food gardens can apply for $500 to improve or add to their existing garden.

The grant round is now open and close at the end of September (up to $5000) or end of October ($20,000).
More information, guidelines and application forms are available from the City's website at www.stirling.wa.gov.au/communityfoodgardens or by calling 9205 8555.


SUSTAINABLE
HOUSE DAY 2013
SHOWCASING SUSTAINABLE HOUSING AND LIVING
SUNDAY, 8TH SEPTEMBER
FROM 10AM TO 4PM FREE ENTRY !
48 JOHNSON PLACE, WATTLE GROVE, PERTH
Supported by PermacultureWest, FOODwatch, SlowFood Perth, Men-of-the-Trees
Worm Farming and Bokashi Composting Workshops
Learn about Bee Keeping, Seed Saving and Solar
Cooking
Sales of Delicious Fair Trade Coffee; Awesome French (Breton) Crêpes; Scrumptious Organic Fruit;
Superb 100% Pure WA Honey
Stock-up on heirloom, open-pollinated and rare varieties of fruit and vegetable seedlings
Music courtesy of Riley Pearce: rileypearce.com.au
TO FIND OUT MORE CONTACT (08) 9359 2582
sustain@iinet.net.au / weatherworks.com.au



THE PRACTICAL APPLICATION OF THE

AUSTRALIAN DEMETER BIODYNAMIC METHOD

Biodynamic agriculture is an enhanced organic farming method introduced by Rudolph Steiner in 1924. It was introduced as a method to counter soil degradation, poor plant and animal health and other farming problems that had occurred since the introduction of artificial fertilisers and farm chemicals.

In Australia, in the early 1950's, Alex Podolinsky set about making the method a practical system, suitable for all areas of agricultural and horticultural production. In the early 1960's he founded the Biodynamic Agricultural Association of Australia (BDAAA), which today, by landmass, is the largest natural farming body on earth. The method developed is recognised worldwide as the Australian Demeter Biodynamic method and has been adopted by farmers from many countries.

For more information visit **www.demeter.org.au**

Introductory practical field day

17/8/13

1 Weir Rd (Cnr SW H'way), Harvey WA

Topics covered will include:

- History and development of Biodynamic Agriculture
- Plant feeding within natures law
- Soil cultivation, to improve soil structure
- Soil humus formation and microbial activity
- Biodynamic plant expression
- Using Biodynamic preparation 500
- Prepared 500 (Podolinsky introduced- 500 plus 502-507)
- Using Biodynamic preparation 501
- Stirring and applying the Biodynamic preparations
- Sheet composting and green manures to build soil humus
- Using the Biodynamic Astrological sowing chart

Activities will include:

- Participatory demonstrations of stirring and spraying the Biodynamic preparations
- Where applicable, farm walks showing Biodynamic results and discussing practical aspects of Biodynamic farming
- Quality Australian Demeter Biodynamic preparations will also be displayed

Successful completion of an introductory field day facilitates full membership of the **Biodynamic Gardeners Association Inc.** Information and application forms will be available on the day.

Registration and details, contact **Ray Simpson 0408883988, rjscb13@optusnet.com.au**

DEMETER bio-dynamic Biodynamic Gardeners

Classifieds

Communications solutions for your business

Finesse COMMUNICATIONS

Finesse Communications can take your business to the next level with holistic marketing and communications advice tailored to your business. Whether you need a professional eye-catching brochure or an integrated marketing and PR strategy - Finesse can help.

Finesse is headed up by Jo Thierfelder, a communications professional with journalism qualifications and 12 years of experience in corporate, professional services and consultancy roles. She has also completed a Permaculture Design Course and a Certificate III Permaculture from Eltham College in Victoria.

"I am inspired to work for organisations with similar ideals and ethics to my own. I have a passion for property, urban design and planning, community engagement, placemaking, sustainability, agricultural urbanism, permaculture and resilience."

Give Jo a call on 0421 589 548 to discuss your business' needs or visit her website for more information about how Finesse can help your business.

Contributions and comments

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