

BLUE MOUNTAINS PERMACULTURE NETWORK

bmpermac@telpacific.com.au

NEWSLETTER SUMMER 2005

| | |
|--------------------------------------|----|
| What's on? | 2 |
| Experiment in Soils | 3 |
| New Ventures | |
| Duckmaloi | 5 |
| Brynmawr | 7 |
| The Grass Really is Greener | 8 |
| Community Updates | |
| Blackheath Community Garden | 8 |
| Katoomba Community Garden | 9 |
| Winmalee Neighbourhood Centre Garden | 9 |
| Seed Savers Network | 9 |
| Tablelands Organic Food Group | 10 |
| Sustainable work and housing | 10 |
| Hawkesbury Earthcare Centre | 11 |
| Report of Seed Savers Conference | 12 |
| My home waterhole | 13 |
| Report of Permaculture Course 2004 | 14 |
| Pest Report | |
| Pest control in India | 15 |
| Brynmawr Heritage Seedlings | 16 |
| Feedback | 17 |
| Websites | 17 |
| Odds and sods | 17 |

Hello

Welcome to the summer newsletter. The year has started extremely well, firstly because I have some (at least 3) lyre birds regularly visiting the bush on the edge of my garden. I discovered them when I realised that the range of bird calls was not about 12 new species but 2 lyre birds with their tails on full display scratching around near my pond.

Secondly I have people offering to write for the newsletter, thank you and this means we have some new contributors, as well as our regular contributors.

Chris Garvey, a soil scientist, has written a most interesting and informative article on observing our soil.

Then we have three articles describing new ventures, Sue and Megan and David and Suzanne Alder just west of the mountains and Richard and Alix who have skipped the country.

What do you think of some of us opening our properties advertising the virtues of Permaculture? (See Feedback p 17)

This is a longer newsletter than previously thanks to our contributors, if it is too long let me know.

Pat
BMPN

WHAT'S ON?

- 1st Saturday of month
3rd Friday of month
Katoomba Community Garden 10 00- 2.00
9.00 - 2.00
Contact Derek Pracy 0405 249528
- Saturday 5 February
1st Saturday of every month
Hawkesbury Earthcare Centre: Open Days
Cnr Campus Dr & Science Rd
University of Western Sydney
Hawkesbury Campus
Richmond NSW 2753
PO Box 15, Richmond, 2753
www.earthcare.org.au
- Friday 11 February
Tablelands Organic Food Group meeting at 1.30.
Contact David & Suzanne Alder 02 6359 3175
email bslr@bigpond.com
- Saturday 12 February
Open Garden at Blackheath Community Garden from 9.00 to 1.00
Info. Suzanne 4787 5229 or Matt 0425 253396
- Saturday 12, 19 & 26 February
"Rendering for Strawbale Construction", strawbale building workshop at Permaculture Display Garden, Blaxland Rd., Ryde. Cost \$485 (inc.GST) TAFE certificate issued on completion. Information Ryde College of TAFE 944 86301 or Penny on 9888 2575
Yesterday-Today-Tomorrow, Strawbale Construction
www.strawbale.com.au
- Sunday 13 February
Gathering Winmalee Neighbourhood Garden from 4.00 - 6.00
Scarecrow making
Contact Mark Lutherborrow 0418 694969 or 4754 1055
- Sunday 27 February
4th Sunday of month
Farmers Market Hartley 10.am
- Saturday 19 March
Festival of Herbs Wentworth Falls School of Arts 10.am
- Friday, April 8, 2005
Public Lecture and launch of APC8 at Australian Catholic University in central Melbourne David Holmgren on "Global Energy Peak: Threat or Opportunity?"
- April 10 - 15
APC8 - Permaculture Convergence in Melbourne 2005.
Further information: www.permaculturemelbourne.org.au

June 20 - 26

Earth Festival A week to celebrate together; the Earth and the human solidarity between the nations

Contact Paul on 4787 5850 or earthfestival@geeni.net

EXPERIMENTS IN SOILS

by Chris Garvey

There is a great store of experiences in everyday tasks that one performs. Living on the land I learnt a few things that I would like to share with you. Working as scientist whose research examines the influence of organic matter on soils and natural waters I offer some microscopic observations which allow this knowledge to become more general. My research is on the microscopic origin of the observable macroscopic effects of organic matter on natural systems.

What is organic matter? The definition of organic matter to the soil scientist differs slightly from its usual meaning. In a usual gardening context organic matter is anything that was once living which is placed on the soil.

For the scientist soil organic matter is the homogenous material made largely of carbon, hydrogen and oxygen, somewhere between the organism which formed the material and the final product, carbon dioxide. It is not a nutrient in itself but has important effects on the physical properties of the soil and also on the way the soil stores nutrients

The natural process by which organic matter is turned from something identifiable, something heterogeneous, to something relatively uniform or homogenous is not unlike burning but takes place ever so slowly (over a periods up to many thousands of years) and we call it decay. Finally all the carbon in the organic matter is turned into carbon dioxide¹. Instead of flames the main agents of transformation are the micro-organisms and fungi within the soil but the final result is the same there is carbon dioxide and free nutrients (ash). The ash contains mainly minerals which are a very important source of nutrients in the soil. It is obvious that as the process of decay occurs that these will be released slowly, and because this process relies on organisms, the conditions in the soil must suit the organisms. These micro-organisms may incorporate nutrients into their bodies and when they die they also become decaying organic matter. If a plant takes up these nutrients, and is eaten, and well you know the rest.....

This inter-connection between the various elements of a living environment or an ecology is not always recognised in traditional agricultural systems which more usually identify simple inputs and outputs. The agricultural system called Biodynamics inspired largely by the writings of Rudolf Steiner, though couched in not quite scientific terminology, represents an important recognition of value of an ecological approach to agricultural systems and an important step in intellectual

¹ As well as being an important issue in the degradation of Australian soils by conventional agricultural methods CO₂ released from degradation of soil organic matter has formed an important contribution to the rise of Greenhouse gases.

foundations of Permaculture. However this knowledge was being gained at a more fundamental level since humankind started to rise above subsistence. I am sure you all have your own experiences.

Growing up on a farm in western NSW I was the child responsible for the family garden. While I didn't realise it at the time, the demands of other farm chores, school and the constraints of growing in a hot and dry climate led me to approach this problem with skills that would later stand me in good stead for my eventual chosen career as a scientist. In much the same way as the permaculturist learns to gently adapt to their living space, the family vegetable garden became a place to experiment and produce adequate vegetables with the resources available.

Over a period of 10 years or so I learned that incorporation of organic matter into soil could make my plants much healthier and give much better yields. The soil took a much more heterogeneous appearance and rather than a uniform red clay, one could clearly see various cracks, holes and pores through which water, insects and roots could easily travel. Placing organic matter on top of the soil could protect plants sensitive to the extreme heat of this environment and reduce the time I spent watering, and indeed the amount of precious water that was used. Another simple but important observation was that this improved soil was in a position of equilibrium, the organic matter on top of the soil would disappear depending on the weather conditions and if nutrients were applied. The same was true of the improved growing conditions in the soil if the land was vigorously cropped, eventually it would return to the conditions of poor moisture infiltration and drainage, and one would have to apply much more fertiliser to have healthy happy plants.

It was interesting to contrast this with my experiments in hydroponics where one applies all the nutrients to plant growing in an inert medium such as vermiculite. If I forgot to tend it carefully it had a tendency to die and the plants seem very sensitive to diseases. Hydroponics seemed like a lot of work and was not so forgiving of mistakes. Systems less artificial seemed much more robust and resistant to large changes.

This organic matter seemed to have magical properties! But its magical properties seemed quite different in different parts of Australia.

The first anecdote took place on a red clay soil which was much degraded by the ravages of time (and man's agriculture). I tried the same approach on a sandy loam soil near Faulconbridge. This soil had the problem of not retaining water so well. I started to add organic matter to the soil. In addition to the differing soil type I did not have the large amount of manure that I had in the country. I found that the effect on the soil was quite different. Although numerous wide pores formed the soil would not wet very well so we had to use a lot more water to saturate the soil. Interestingly this problem was solved to certain degree by using the old dishwashing water which seemed to help the soil wet and stay wetter.

Organic material has many almost magical effects on the observable, or macroscopic, properties of the soils, including:

- improving the way which soil retains water but also the drainage and infiltration of water during heavy rain periods,
- decreasing the amount of fertilisers (natural or artificial),
- protecting roots from the extremes (heat and cold) of the climate.

By identifying these simple desirable qualities one can start to experiment, and study the effects of modifying your various management practices on the health of your living environment, your own personal habitat!

Without worrying too much about the philosophy of Permaculture it is a practical solution to the problem of living in our modern society. Not only does the ecological approach to living afford us a green and pleasant environment which incidentally gives us food but it provides a connection to the rhythms of the natural world. In this way the lifestyle affords both spiritual and physical sustenance.

Natural systems have the features of remaining robust, and are resistant to change. Manmade systems strive to achieve a constant state struggling against the ebb and flow of the seasons. While this is to a certain degree inevitable, since there is an optimal comfortable environment for humans to exist in, this struggle comes at a cost to the resources of the natural environment. Permaculture seeks to modify the natural environment in a way which allows a connection to the modern environment avoiding the practice of soil mining. You buy vegetables from somewhere else; this takes those nutrients from where the vegetables were grown. You put your waste in the garbage to be put in a big hole and the rest goes down the toilet.

The scientific method, at least to the experimental physicist/gardener, represents the ability to apply special observations, to make generalisations, and on the face of it would seem an ideal tool for helping families or some other social unit to adapt its lifestyle to the environment. While there are many good books on the subject it is impossible to encompass all the different types of environment which are found in a formulaic fashion. The philosophy of my research is in the formulation of general principles which may allow us to better sustain and even enjoy the resources that we have. So the next time you go out into your garden think perhaps of scientific methodology, start with a hypothesis, and test it. Also remember that part of the scientific tradition is the free exchange and debating of ideas. Talk to your neighbours!

New Ventures

Duckmaloi

by Megan Walker and Sue George

Two years ago this January, we became proud owners of a 'blank canvas'-around 8 hectares of ex-cattle grazing country in the small hamlet of Duckmaloi, the Katoomba side of Oberon-not too far from our respective workplaces at Lithgow and Blackheath. Our continually evolving (and occasionally wildly optimistic) plans have at times included growing saffron, oaks and truffles (!!), raising rare chooks, growing hazelnuts /chestnuts / berries, beekeeping, growing trees as 'stock'

(as suggested by a neighbour), building a tyre-wall for the gardens to create microclimate, etc, etc, etc and indeed some of these ideas are still on the 'possible list' or have been partly realised. This article will describe some of the things we have done over the last 2 years in particular in relation to permaculture ideas.

Rainfall in Duckmaloi is around half that of the upper mountains and so it has been trial and error in terms of plantings. We are actually trying to design around water availability- a spring-fed dam (possibly with a seasonal flow) which has been invaluable for establishing initial plantings. There are areas of natural catchment where we can collect water and plan a series of dams later down the track. Deciding on a waste water system has occupied us for many months- our garden design and house site depends largely on this. The aerated waste water treatment we have chosen will take grey and black water from the shed (temporary accommodation) and eventually from the house (in 2 or 3 years) and treat it using an aerobic 'ecosystem' of various invertebrates and microorganisms in a tank, to secondary treatment level. This treated water will then be pumped in sub-surface irrigation lines to where we want it- orchard and /or vegetated dispersal area. One issue may be looking at phosphorous levels in this water as it may be unsuitable for natives and in addition the treated water will not be suitable for veggies.

Initially, vegetation included a few mature *Eucalyptus stellulata* (Black Sally) and an expanse of wind-swept pasture grasses, cat's ears and sheep sorrel growing on fairly good loamy soil. The first plantings were of around 200 Eucalypt tube stock (snow gums, shining gums and white sally) on 2 of our boundaries- done at the height of summer in a period of extreme drought in the region- they have survived climate and marauding stock and we have around a 75% survival rate. We got to know our neighbours well over that first summer of watering and were touched when one delivered a portable water tank complete with hose to make our lives easier.

A local nurseryman, Sam Keen, has been the source of most of our tubestock for our boundaries and windbreaks- all grown from seed he sources locally. Lately we have been raising our own here in Katoomba and have varied success- probably because the conditions are so different here. Planting a series of wind breaks was a priority as the site is quite open and wind chill is a real factor in winter in the area. Our first wind break was planted in our first Easter- according to our tree man every 1 metre of plant height gives 25 metres of horizontal wind protection. Five long rip lines were made following the contour lines along the back of our building envelope where wind whips across from the west and a mixture of natives planted. These being:

E. stellulata, *E. rubida* (candlebark), *E. pauciflora* (snow gums), *E. nitens* (shining gum), *E. viminalis* (White Sally), *E. dalrympiana*, *Acacia provissima*, *A. boormanii* and *Bursaria* sp. Most trees are 1-1.5 metres high now and we have extended the wind break with more Eucalyptus sp, Hakea sp and Acacia sp.

In the lee of the windbreak we have begun a small, fenced orchard with old apples, quinces, raspberries, pears and peaches. This is a work in progress and will be extended as the wind break grows. A chook yard will be built onto the orchard and free ranging chooks will benefit the trees. We tried a winter manure crop (wooly vetch, buckwheat, fenugreek and oats) with

bacterial inoculation and a slashing/mulching regime and the soil in the orchard has definitely improved.

Finally to our 'livestock', we have 4 double hives of bees- numbering around 80,000(!)- and on our first attempt at robbing extracted around 40 kilograms of light, sweet honey which we sold in a flash. The beekeeping course at TOCAL in the Hunter was really helpful. The bees forage nectar and pollen from acacias, white clover and Patterson's Curse here at the moment, but as time moves on we are planting more bee fodder (especially *Bursaria* sp) and we expect they will be busy pollinating our orchard trees also. The bees have survived drought, our bumbling attempts at robbing, snow and fierce winds and seem to be happy making honey (how do you tell if a bee is truly happy?).



There have been many successes and many failures but lots of learning along the way. Right now we are busy with fitting out the shed to move in, slashing (the tractor is working overtime), electricity and plumbing stuff. The list seems endless but most of the time we are doing ok

BRYNMAWR

by David and Suzanne Alder

We bought our property, Brynmawr (Celtic for big hill), several years ago with the idea to set ourselves up in a sustainable lifestyle. Our plan was and still is to produce as much of our own food as possible and to build a house that is also self sufficient with no outside services other than the phone. We initially planned a mud brick house until a friend introduced us to building with car tyres. We are building in two stages; the first stage is a small cottage to learn how to build since none of us has done it before, then the second stage will be the main house. At this time the cottage is almost complete and the main house has now been started.

The rammed earth tyre construction (earthship) provides very thick walls (700mm) which provides very good insulation. Already with no internal heating installed there is a remarkable temperature difference inside the cottage. We are relying on tank water and currently have 100,000 litres capacity on site. We have yet to fill this because our current catchment is only 70 sq m but once the house is completed this will increase to 340 sq m. We have 20 X 80 watt solar panels with a 1600 amp hour battery system and a small diesel generator as a back up. We have been living on the site in a steel shed for twelve months and are still learning to live within our limits.

Our hope for the future is to have both the houses and the our garden available for inspection on a number of set open days during the year when the public can come and see what can be achieved realistically in alternative sustainable living. We also hope to offer workshops in alternative

building and sustainable living. Finally we are hoping our garden will produce sufficient that we will be able to sell our excess at local markets and sell seedlings grown from plants and seed collected from our own garden. We own 120 acres of sub alpine forest and own aim is to show we can live in this environment without significantly affecting the surround flora and fauna.

THE GRASS REALLY IS GREENER

by **Alix & Richard Lee**

We moved into our new house in New Zealand on the 13 October and our furniture arrived three weeks later. Our house garden is fairly embryonic but we started eating from it a month after we arrived.

Richard has been working hard clearing gorse from the paddocks and finding fences under kikuyu in the other 45 acres of the property. We are planting out our yard surrounding the house with all the edible species we can get our hands on. Richard has started our fruit and nut food forest amongst the gorse down the hill from the house.

Richard had a day of planning, engineering and endurance with the final installation of our wind generator. (The dot in the sky is Richard up the tower)



We have just finished constructing our "Linda Woodrow Chook Dome" and have stocked it with 5 girls and a rooster.

This could turn into a diatribe of why any self respecting Permy should move over here to the land of milk and honey, not to mention soil, rainfall, subtropical climate, no fruit fly, stunning coastline etc.

[At least NZ has kikuyu Editor]

COMMUNITY UPDATES

BLACKHEATH COMMUNITY GARDEN

by **Suzanne Reaney**

You are all invited to "Open Garden" at our community garden, Cnr Great Western Hwy & Prince George St Blackheath, on Saturday February 12 from 9am to 1pm to share gardening tips, summer harvest, preserving tips, weeding, planting winter veggies and delicious light refreshments.

We'll also be assigning any unused plots and planning group visits to other community gardens.

Events calendar for 2005 will also be available

New members welcome contact Suzanne 4787 5229 or Blackheath Neighbourhood Centre 4787 7770.

KATOOMBA COMMUNITY GARDEN

by Derek Pracy

During the last year the following has taken place:-

- Renewed and re-organised hot house and started propagating
- Weed management - clearing privet and broom
- Trees -minor and structural pruning, training and tip pruning
- Pest management
- Started developing a herb layer
- Developed new garden beds.

New members most welcome.

| | | |
|------------|---------------------------------------|-----------|
| Activities | 1 st Saturday of the month | 10 - 2.00 |
| | 3 rd Friday of month | 9 - 2.00 |

Contact Derek Pracy -0405 249528

WINMALEE NEIGHBOURHOOD CENTRE GARDEN GROUP

by Mark Lutherborrow

The Winmalee Neighbourhood Garden is "bloomin' marvelous!!"

grapes on the vine

cucumbers by the dozen

potatoes already harvested

a watermelon in the herb garden

tomatoes at the top of their stakes

hazelnuts in full leaf

fig tree coming out of dormancy

corn bursting out of the soil

citrus trees blooming madly

herbs flowering profusely

the garden is going gangbusters!!

Our next meeting will be on Sunday Feb 13th from 4 pm to 6pm we are planning a big day and all are welcome to participate in Scarecrow making, no dig garden bed construction, planting, weeding, harvesting, watering etc etc. Should be fun. Call Mark Lutherborrow 0418694969 or 47541055 for more info.

MID MOUNTAINS SEED SAVERS - 2783

Our intention is to move the meetings to the Mid-Mountains Community Centre Lawson once a season/quarter. Unfortunately we can't give you the exact dates until the bookings are finalised. Please contact Loret or John on 4759 2118 or email mcrun@hermes.net.au

TABLELANDS ORGANIC FOOD GROUP

Tablelands Organic Food Group has about 15 members ranging from Bilpin and Hazelbrook to Oberon and Capertee. Our aims have previously been stated by both Richard Griffith and Brian Coates in previous newsletters. We are looking for food producers, sellers as we are struggling to justify a market. Currently those producing are trading between each other and selling to a local IGA store.

Meetings are organised to suit those attending. Some consideration has been given to setting up an internet bulletin board but some of our most active members are not on the internet. We are certainly looking for more members and particularly people interested in participating in the market. We held our first market at Hartley on Sunday 30 January. While we only had 5 sellers we were kept busy most of the day. Our next market is 27 February at 10 am.

The next meeting is Friday February 11 at 1.30pm.
Contact David Alder 02 6359 3175 email bslr@bigpond.com

SUSTAINABLE WORK AND HOUSING

Want Work and Housing in a Community Garden?

The 'Work for Housing' group first met in 2001. Affordable and secure rental housing, meaningful work, bringing back a sense of community and making a better future are the values behind this group.

For Tony, a Penrith local, this is the sort of opportunity he has been looking out for. "I'll get healthy outdoor work in a community garden co-op, fresh food and the chance to earn an income". "Secure low cost rental housing is part of the deal too!" "With the rents these days and the sort of work on offer, I never thought I'd find such an exciting future".

With things looking good for a Western Sydney Area project in the not too distant future, you are now invited to apply for membership.

So, if you are interested in voluntary co-op work with returns like:

- * secure low cost rental housing
- * co-op benefits - eg. fresh food, low cost car use etc
- * the chance to earn a small income

... apply for the upcoming Western Sydney Area Project by calling: (02) 4758 8646

Whatever your age, income or skill level, whether an individual or a family, you could find a secure future in this work for housing co-op.

CHEC - Work for Housing co-op

(02) 4758 8646

chec@iprimus.com.au

(no www) home.iprimus.com.au/chec

HAWKESBURY EARTHCARE CENTRE

by Tom Mellor

The Hawkesbury Earthcare Centre is an environmental educational centre situated in the grounds of the University of Western Sydney, Hawkesbury Campus.

The Centre houses four groups: Henry Doubleday Research Association (HDRA), Dwelling Place, The Sydney Branch of The Alternative Technology Association (ATA) and Seasons Organic Food Coop.

The centre has a passive solar designed building that uses a combination of environmental building techniques, such as, mud brick, rammed earth, compressed block and timber frame on a concrete slab for thermal mass. It was the first community building in NSW to receive the Government rebate for a solar electricity power system; this was launched by the then NSW Minister for Western Sydney and Energy, The Hon. Kim Yeadon, in 2001.

There is also an extensive permaculture and organic gardens maintained by HDRA. We are currently developing a 'native section' on the site, which will also have native fish, bees and other fauna.

The centre has its open day of the first Saturday of the month and every one is invited to come along, to see the centre, talk to people, get their hands dirty in the gardens, help out with our projects and events also to get lots of great ideas about sustainability! We also have a gardening group every Tuesday at the centre.

Special events planed for the year so far are:

Saturday 2nd April - Sydney ATA Water Seminar - www.ata.org.au

Sunday 11th September - Solar House Day - www.solarhouseday.com

Saturday 24th September - Hawkesbury Earthcare Centre Sustainability Fair

For more information about the centre, any of the groups or our events contact:

Eric Brocken: ph 4567 8424 - mob 0438 731 712 - email eric@earthcare.org.au
Tom Mellor: ph 9332 4215 - mob 0419 416 551 - email info@earthcare.org.au

Also visit our web site: www.earthcare.org.au

SEEDSAVERS NATIONAL CONFERENCE

Bowral Steiner School

October 2004

Report by John McNaul

What a great feeling it was to be amongst so many enthusiastic and like minded people! Two days of intensive workshops and discussions. Information overload! As old questions get answered, many new ones emerge to take their place.

Lingering memories include the wonderful photo presentations by Michel Fanton; images of markets from around the world - centres of culture and agriculture for 10,000 years. It gave me the idea of printing a recipe on every packet of seeds that our local seed group sells, just to reinforce that seeds are not just about gardening (as if that wasn't enough), but about food, community, culture and one of the basic aspects of being human. Michel also had some great photos of 'Slow Food' restaurants in Japan. Nice to know that the slow food issue links us here in the mountains with other communities around the world.

Another memory is of the great contributions of biologist David Murray to several of the presentations. It is commonly held that 19th century chemist Justus Von Leibig performed the first chemical analysis of plants and came up with the theory that their main mineral constituents (other than carbon, hydrogen and oxygen) are Nitrogen, Phosphorus and Potassium (or N, P, K). This has led to Leibig being called 'the father of chemical agriculture' - a dubious title, depending on where you stand on environmental issues. According to David, not only is this not true, but that Leibig actually published papers on the importance of humus to plant nutrition. David also provided some expert and disquieting information on the status of genetically modified seed in agriculture - this was a theme that pervaded the whole conference. I can also recommend David's new book on growing peas and beans in Australia.

Another pervading theme was that of health and diet, particularly relating to children and the alarming rates of diabetes and obesity. Some good news though regarded community gardens with a groundbreaking (excuse the pun) project at Collingwood College in Victoria (see <http://www.collingwood.vic.edu.au/kitgarfront.htm> or browse through the many results of searching for "collingwood college garden", or go to <http://www.stephaniealexander.com.au/garden.htm>). Someone suggested that every school should have a kitchen garden, a gardener and a chef! Eat your heart out Maccas!!

There were too many workshops to possibly attend, and I have difficulty remembering what they all were now. Apples, potatoes, chinampas, native seeds, companion planting, food campaigns, soil and many other subjects were discussed in detail. Our mid-mountains seed group hosted a

workshop on record keeping for saved seeds. Our treasured take-aways included some pepino seedlings and numerous packets of wonderful seeds, also the warm memories of action in progress, new friends and networks and hope that the actions of a few people might be able to make a difference.

The next Seedsavers conference will be held back in Byron Bay later this year. I can highly recommend anyone to attend as the lift I experienced was tremendous - information, energy, networking, inspiration.

Many thanks to the Southern Highlands permaculture group for organising the event, and to Jude and Michel for their unswerving dedication on behalf of all of us.

John McNaull

THE CONTINUING SPELLBINDING STORY OF MY HOME WATERHOLE

by Rowe Morrow

The story so far.....

After much cogitation and comparison of costs I decided to store water in a hole in the ground. This involved a big machine, deaf driver and me finishing a report after a sleepless night agonising about whether I was doing the right thing putting in surface water, not a water tank. After existing some time as The Black Lagoon, full of bentonite and lime which sank to the bottom and because the sides were so steep they just washed off in a shower, I investigated plastics....yes, terrifying isn't it? Well it was called Damduff and was guaranteed to last 25 years. Like a lady wrestler in mud I got deep into the 2.0 metre hole and sloshed mud on the walls in one of those breaks the gods give you when the mud was wet enough to both slosh and stick on the walls. I enlisted a nephew to help who decided finally that I should be committed as insane.

The plastic sheet weighed as much as gold bullion and so I phoned the neighbours and we stretched the huge plastic/rubber sheet over the mudlined hole also lined with old carpet. It took us most of the morning and at the end we were exhausted.

And then it rained.....glorious rain and the pond/lake/waterhole filled up to about 35,000 lovely litres. It was clear and gorgeous. I looked at it with happiness in my heart.

And then, and then.....

The ducks came, wood ducks and black ducks and snakes. The domestic ducks who couldn't even see it, looked longingly in that direction and finally escaped to swim in triumph. For a short time until I herded them and scolded them back to their place. Then it was suddenly very dry and everything and everyone was coming here to swim and drink and sh*t. The pond turned green - smooth pure algae. What to do? Well, I did what I do when I don't know what to do. I ignored it. Today I'd throw a closed bag of oats into it.

More rain came and with it, I realised the liner had taken up every cranny and stretch joint. So I dug a trench around the whole pond and buried the excess liner in the trench and planted water plants over it and 99% of these died. I don't know why. The bare ground around the lake/pond/waterhole I planted with indigenous grasses and I scattered seed and mulch. (The trench stopped lots of loose dirt migrating into the pond.) Six months later a gorgeous living mulch was established.

And now.....I have learned much and really need to start again. Firstly I am entranced by having my own waterhole. Its magic. Birds fly over, drink from the sides and dip in. Over the last six weeks wood duck parents have safely raised their brood - now teenagers and a bit independent and stropy. The reflections of sun and tonight moonlight is entrancing. I recommend recycling your TV and digging a pond. Sunset is the loveliest and quietest time. It's good for the soul. The pond has given several families security of tenure right through difficult seasons. A family of blue wrens has raised several babies, goannas thrive on the insect life and insects thrive on the plants. All that ecology theory is actually true.

What I've learned.....

- well, that a pond gives squillions more pleasure than any number of water tanks. It is about the same price. It gives life. (Old Vietnamese saying "Water is Life".) It raises the stocking rate on this land with many more species.
- I feel much safer about fires, running out of water, and the garden. But mostly the aesthete in me loves the quiet and life beauty of it - with its many moods.
- If I were to do it again, the waterhole would be much bigger. I wouldn't bury the plastic edges until we'd had really huge rains. I'd have more shelving edges for small birds. I'd have planted edge plants which lapped over the remaining exposed plastic.

I also made small ponds down stream as a plastic sandwich i.e. underfelt - damtuff and more carpet or underfelt. Lots of small ponds are simply like gems. And I would have planted more shrubby things and a couple of small trees much earlier. All the parrots, ducks, snakes love shrubbery and grassy areas. I would have done it five years earlier!

PERMACULTURE DESIGN COURSE - Nov 2004

by Vanessa Steele

Another successful and very productive course was once again coordinated by the bright and cheery Rosemary Morrow, the second for the Mountains in 2004. With some behind-the-scenes assistance from Deb Hurley and Vanessa Steele, the course ran over 3 days over a four week period throughout Oct/Nov.

We began at Rosemary's place with eleven enthusiastic women mostly from the Mountains. In between our hearty and healthy snacks from the garden and delightful selections of homemade condiments and cakes (brought by the group each session), we got stuck into discussions on:

- Ethics and principles of permaculture
- Bioregions regions and local wealth and

- World problems (lots of comments regarding our local and US elections!) plus many more...

Demonstrations of permaculture-in-practice on Rosemary's property helped clarify the concepts and learning experience. Some guest presenters joined the group and presented on water-reuse, permaculture zones, climate, plants and animals.

The group visited the ever inspiring home of Jessica and Greg Yuille and marveled at the 'things' you can grow in cold climate gardens of quite a few homes of past permaculture course participants. An exciting tour was presented by Clearwater Technology at their Megalong St, Katoomba office on their patented greywater system which is currently being trialed locally through some local businesses and households.

The rural design 'experience' was spent at Dargan (40 minutes west of Katoomba), where we enjoyed the hospice of Karen and the magnificent views out to Oberon. The morning was spent investigating and learning about the property after which the group split by 'binary division' to pool their knowledge, skills and experiences for their rural permaculture design project.

A few extra meetings outside the course (and lots of cuppas later), the group's large-scale presentations were held back at Rosemary's place. Some very interesting, practical and inventive ideas were shared amongst the group. We then celebrated the completion of the course in good permaculture spirit with yummy home baked foods, local produces (including drinkable ones!) and laughter.

Since the course 'officially' finished there's been some interesting networking and sharing of skills and knowledge. This month (Jan) we have been informally visiting each other's houses to see what's happening in each of our gardens. A nice way to begin the year I think!

PEST REPORT

PEST CONTROL IN INDIA

by Sue Girard

When my husband Kevin went to India last month to speak at a Pest Management Conference for Asian & Oceania Pacific Islanders I generously offered to go with him and carry his bag. We went to Mumbai (Bombay) and Delhi and briefly visited a couple of their surrounding States.

In Delhi the Airport talks about fog delaying the traffic of planes, but it is actually an inversion layer of smog due to burning of rubbish and fuels, for cars, for cooking and for heating. It apparently hangs over the landscape all year round. In both cities, rubbish dumpsters on street corners, are filled during the day and then set alight at night. The rodents, cockroaches and cows visibly eat from the rubbish in the dumpsters and in the street.

Kevin spoke on training pest control operators in all aspects of Integrated Pest Management including still getting the best results, but reducing the amount of pesticide- thereby reduce the outlay of chemicals, the health risks and the environmental costs. He was well received by the delegates, but what we saw in practice in the several hotels where we stayed, was far from what Kevin had spoken about. We both found this very confronting.

While we were captive passengers on the plane, the cabin was sprayed with a pyrethrin based aerosol. If you were chemically sensitive 'tuff luck'- you were advised to breath through a hankie. The hallways of one hotel smelt of chemical residue every time you left the lifts on the various floors, so the chemical was being applied daily not just once off. The chemicals are all oil based with a high solvent base and not the less toxic water based chemicals we have access to in Australia.

One night the whole swimming pool surrounds was 'fogged' with a petrochemical haze for mosquitoes. This was regardless of the fact that Kevin and I were swimming at the time. The pest operator had no protective gear on and when Kevin went and spoke to him, he was apparently less than convinced that the guy knew what he was doing.

From a pest management point of view there are huge problems. Our main hosts in India ran the second biggest Pest Control Company in India. They told us that the average cost of a pest treatment was Rs.100 (\$A3.00), and that the average weekly wage of a worker was Rs. 600 (\$A18.00). A can of Pepsi costs about Rs 7 (<\$ A 0.20) and is cheaper than bottled water, yet the cost of chemicals from the big chemical suppliers is almost as high as in Australia. So the Pest Companies cannot afford the less toxic chemicals, nor can the clients afford to spend more for the services they need.

Brynmawr Heritage Seedlings

David Alder

Brynmawr Heritage Seedlings provide heirloom variety vegetables and herbs in seedling form. Heirloom varieties are more resistant to pests and disease and, therefore, do not require chemical treatments. They also have a richer flavour and stronger perfume than hybrid varieties. They are easy to grow and are perfect as an addition to existing gardens or as a starting point for people who want to produce their own vegetables and herbs. Heirloom variety plants are self-propagating and so create inexpensive, low-maintenance gardens.

Brynmawr Heritage Seedlings aims to reintroduce these highly valuable varieties back into the marketplace. We provide seedlings through market sales and private orders. The seedlings are grown from seeds acquired from our own garden as well as Diggers, Eden, Greenpatch and New Gippsland. Our seedlings are available individually for you to create your own garden combinations. We can also have pre-packaged theme garden collections prepared in packages of 20 or 30 seedlings.

Brynmawr Heritage Seedlings
PO box 40, Lithgow, NSW 2790
6359 3175

bslr@bigpond.com

The seedlings are being propagated by our daughters Jenny and Ceinwen Alder.

FEEDBACK

- **"Permaculture style" Gardens**

We often see open gardens advertised as "permaculture gardens", perhaps we as a group who have completed a Permaculture Design Certificate, could open 3 or 4 of our houses and gardens or gardens in the Blue Mountains later this year.

I know it will be a lot of work so those who have more embryonic designs could help those willing to open their gardens by helping with preparation, crowd control, etc.

I am willing to co-ordinate such a venture.

Comments, volunteers, ideas let me know

Pat

WEBSITES

www.amcs.org.au is the website of the Australian Marine Conservation Society.

It provides a comprehensive guide to choosing sustainable seafood, identifying species that are overfished and providing reasons why consumers should say 'NO'. The guide then list species which are a 'better choice'. The site also provides a pocket (1 page) list of species that are overfished.

I found this a most confronting site as I need to rethink the choice of seafood I buy.

Pat

ODDS & SODS

- **Review of permitted seeds list**

The Australian Government has fast-tracked a review of seeds allowed entry into Australia in its ongoing commitment to stop the spread of new weeds. Australian Conservation Minister Senator Ian Macdonald said 4 000 species, which had been identified as potential weeds in Australian conditions, would be reviewed as a matter of priority. *"The initial focus will be on 4 000 species which the Cooperative Research Centre for Australian Weed Management and the Worldwide Fund for Nature assisted in identifying as potential weeds in Australian conditions,"* Senator Macdonald said.

<http://www.mffc.gov.au/release/2005/05002m.html>

- **Bookings are now being taken for APC8.** April 8-15 2005 in Melbourne. Contact Virginia Solomon, or the apc8 secretariat at apc8@tpg.com.au Brochures, registration forms, flyers and posters available. Any of the above available as pdf downloadables.
Make it a great APC8!
Virginia Solomon
Website: www.apc8.org.au

AUTUMN NEWSLETTER

Contributions for the Autumn Newsletter by Friday 25 March PLEASE.

To **unsubscribe** please reply with subject 'Unsubscribe'.

Disclaimer: The Editor cannot be held accountable for any content but has endeavoured to check all she can.