

Wood you believe it?

Some hardworking Earth Carers have just completed a chopping board, a wooden spoon or other special project with the grand master of wood-working Greg Miller.

Workshops were held with Greg in July with sessions on a Thursday and Friday evening and daytime sessions on Saturday and Sunday. The event was jointly arranged for Earth Carers from the MRC, WMRC and EMRC regions.

Bods were seen beavering away on fence posts, former church pews, old floor boards and general verge throw outs to produce amazing and beautiful pieces.

We learnt to appreciate how the growing conditions change the wood properties, the history of the wood in production, how to appreciate quality tools and how hard it is to carve a smooth spoon.

For those who have not been on a session of working with 'Greg and wood' we would encourage you to have a go next time round. You will never put a piece of timber on the verge again!!



Earth Carers master the art of recycling wood into a wooden spoon



Earth Carers and their hand-made recycled wood products

LOOK OUT FOR FURTHER EARTH CARERS WORKSHOPS IN THE FUTURE.

Volume 6
September 2010

Welcome to the spring edition of our Earth Carers newsletter.

Since our last edition we've welcomed another 54 Earth Carer volunteers to our group.

If you have any suggestions for future editions, contact Peg Davies (contact details below).

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Garden Week Thank You

With Earth Carers from WMRC and EMRC we put on a display at the Town of Cambridge tent at Garden Week during April. We had worm farms, compost demos, doggy poo worm farms and more. Earth Carers fielded in depth questions and queries about waste of all sorts from all areas.

The venue at Perry Lakes is great and it is always warming to offer a service for no cost in a sometimes very commercial event.

A BIG thank you to all of you who were involved.

Reduce
Reuse
Recycle



Make waste work

For further information please contact
Peg Davies on 0422 941 492
Email: pdavies@mrc.wa.gov.au

Ideas for a Healthier Planet



David & Karen are Earth Carers who like nothing better than finding new uses for unwanted items.

Like most of you, we're trying to minimise our impact on the world around us. We try to create as little waste as possible and to re-use what other people may consider waste but we see as useful. Here are a few of the things we do:

- Make a list of what you want to eat for the week coming, note the ingredients for the recipes and only buy those items you need. It saves on waste food.
- Keep your veggie peelings in a container in the fridge and, when you have a few, boil them in a little salted water and then drain to make your own veggie stock.
- Invest in a bread machine to avoid all those bread bags and bulk buy the flour etc ... an added bonus is that the bread tastes SO much better.
- Take old clothes and items to an op shop. You may not want them but someone else may love them. Buy your clothes from op or retro shops, there's some real bargains to be had.
- Make full use of your computer by storing all your photos from your digital camera. It saves the paper to print them out and the albums or boxes needed to store them in. You can still organise the photos into albums and view them as a photo show when you fancy a browse.
- Download your music onto your computer. No CDs or packaging but the artist still gets paid.
- Borrow books from the local library instead of buying them. You can get hold of most books from the library and it saves having shelves full of once read books.
- Carry a spare bag with you when you go shopping (not just for food) and use the line "It's okay, I have a bag".

- Save the plastic bags you get when you buy your fruit and veggies, tuck them inside your shopping bag for next time and use them again and again.
- Save things like wrapping paper, ribbons, string and cut pieces from old birthday or Christmas cards to re-use to wrap presents and make new gift tags or cards. Or use old paint to cover sheets of used newspaper, maybe even add your own designs, and use to wrap pressies.
- Save items that you like and make them into pressies. Paint a picture, make a bookmark ... be inspired and make your gift personal.
- Check out local bulk refuse chuck-outs for useful items. David made a pergola from wood found at bulk refuse and his uncle built most of his shed from other people's waste.



David made this pergola from wood found at bulk refuse time

Degassing Fridges & Leak Repairs

Before we put our fridges out on the verge (if we cannot get them to Balcatta or Tamala Park) we should de-gas them as the refrigerant can be damaging to the ozone layer if it escapes into the atmosphere. The link below will take you to the closest qualified technician in your area to either repair or de-gas the fridge. The best option after repair, if you need to dispose, is to take it to Tamala Park or Balcatta where it is taken free of charge, degassed and the gas sent for recycling and the fridge is also recycled.

www.lookforhetick.com.au/fridges-and-freezers.php

Food for Thought

The single largest impact Australian households have on water use is through the food we consume. According to CSIRO data:

- Throwing out a kilogram of beef wastes the 50,000 litres of water it took to produce that meat.
- Throwing out one kilogram of white rice wastes 1,550 litres.
- Throwing out one kilogram of potatoes wastes 500 litres of water.

It's certainly food for thought.

Information from Planet Ark Newsletter

Earth Carer Inspirations

Liljana Marsanic is an Earth Carer who as you will see below has a varied involvement in many 'earth friendly' activities. She is particularly interested in teaching and sharing her knowledge and skills and in developing a Living Smart course for the Wanneroo area.

I am basically wanting to create a community and presence in the northern suburbs of Perth where people and households can network, relate and learn. To increase awareness of sustainability issues, create positive behaviour change and support and strengthen community relationships. My mantra in developing this is "Creating healthy homes and communities" . **It starts with self. People are unlikely to make changes at work, in the community, in groups if it is not something we do for ourselves, so it all starts with ourselves** and in the home and then extending our sphere of influence outwards from here. Encouraging and supporting each other in walking the talk, and no matter where we are at, there is always more to learn, or better ways of doing things.

I would love to address this via the following three avenues:

1) **Education** - short talks through libraries, community groups etc - running 8 week community classes. Starting off **facilitating "Living smart" courses, and then eventually I would like to evolve this and concurrently run my own version of sustainable community classes.**

2) **Community** - to create a network of people in the northern suburbs as well as an online community that shares the same vision and interest of living with conscious awareness. I feel it's a basic human need to connect with other people, make new friends, learn and share along the way, and together with a united presence a new paradigm has the chance to thrive and survive more strongly and create an impact than all of us trying to do it by ourselves living in an individualised world. The one thing we all have in common no matter what part of the globe we are on is that we all live on this amazing planet. Let's make use of the connections and learn to re-create community in a way that is meaningful to each of us.



*Liljana Marsanic
Earth Carer*

3) **Social Media** - hosting monthly film nights in the community with the message and then relating to sustainable green living. Perhaps in the future expand this out to other forms of social media.

I have some amazing heartfelt inspirations and ideas that I would love to ground so if there are any people that feel they want to connect and be part of the growing team, **I would love to hear from any volunteers, or interested folk, and together we can help grow the presence and awareness in the northern suburbs.**

So since getting involved with Earth Carers and my work at MRC, I have taken some steps towards this. I held the first movie night as a communal street movie, open to anyone to join. The "Age of Stupid" was screened, its a fabulous movie and I would love to screen it again. Given that its now winter its a bit nippy to hold outdoors so **I am looking for an indoor community space which can be used for further movie screenings.**

I am starting to put together a simple website. I am currently doing some further Living Smart facilitator training and look forward to running this before the end of the year. **I am currently putting together a flyer that I can letter-drop to local residents to offer free home sustainability assessments** but also importantly as a call to action for anyone interested in this field so

that I can develop and create a database of people in the local community. The aim is to use this to inform about future upcoming events and sustainable community news/happenings occurring. **I have started making my own rice milk (I am dairy intolerant) at home** rather than buying the 1L tetrabriks since learning this packaging is not recyclable.

IF YOU'RE INTERESTED IN FINDING OUT MORE OR WOULD LIKE TO GET INVOLVED PLEASE CONTACT LILJANA ON 0412 770280 OR E-MAIL AT liljana_m@hotmail.com

Cooking up a treat — curried chickpeas

Ingredients:

2 large onions (sliced), 2 teaspoons canola oil, 1 teaspoon curry powder (adjust quantity to taste), 420 g can of chickpeas or lentils (drained and rinsed), 2 large tomatoes (diced), 1 green capsicum (diced), 1 cup vegetable stock (made with half a stock cube), and black pepper to taste.

Slice the onions and fry in oil with the curry powder. When the mixture starts to smell fragrant, add the remaining ingredients and simmer on a low heat. Allow to simmer for 30 minutes or until mixture thickens.

Serve with steamed rice, chutney and low-fat natural yoghurt.



THE “LIVE” WASTE DISPOSAL

Lyndall is an Earth Carer whose passion for worms surpasses everyone. She encourages others in her street to donate food, check out her worms and assists if anyone wants to try it for themselves. Lyndall has helped us set up worm farms and gardens at schools, given talks to the community and is the resident ‘worm lady’ in her hospital workplace.



HOW TO CREATE A MINI WORM FARM

- 1 x discarded builder’s bucket
- 1 x lid or pot plant saucer*
- 1 x large handful composting worms
- 2 x 2ltr ice cream containers of worm castings for bedding
- Newspaper
- Kitchen scraps. *Feed worms fruit, vegetable scraps, tea bags & grounded coffee - no citrus or onions*

Drill

**Using a pot plant saucer has the added benefit of easy removal and can be filled with water to create a little bath and drinking pool for visiting birds. It can also hold sufficient water to tip into the unit after adding scraps to keep the conditions moist for the worms.*

- Use a 5cm hole bit to drill a network of holes around the bucket, leaving the top 10cm of the bucket undrilled. These holes will allow the worms to come and go from the sub-soil into the “unit”.
- Remove the base of the bucket.
- Dig a hole wide enough and deep enough to bury the “unit”, leaving the handle and the undrilled area exposed.
- Place a layer of wet, shredded newspaper on the bottom.
- Add the bedding and worms.
- Top with an ice cream container of chopped kitchen scraps and light sprinkle of Dolomite.
- Place a layer of straw or wet newspaper on top. Remove and replace this cover each time you add scraps. *Do not overfeed the worms – only feed them when most of the previous scraps have been consumed.*
- Place the bucket lid or, my preference, a suitable sized upturned pot plant saucer over the opening.

You now have a mini worm farm that is buffered from the weather. If the sun is too strong and heats up the unit during the day, the worms will escape into the soil, but they will return as soon as the sun sets. If it is very cold the worms will also escape into the warmer soil and come back up for a feed when the weather warms up a bit. They will then leave and spread their castings throughout the garden bed for you.

The worms will come in and out through the base and holes in the mini worm farm to eat their way up through the food scraps, producing their nutrient-rich castings as they go. All you have to do is keep feeding them the scraps directly into the mini worm farm.

The bucket is removed when worm castings reach full capacity. The top layer, which will contain the worms, is retained and becomes the bedding for the mini worm farm when it is set up and commences working again in another area of the garden. Too easy!

Mini worm farms are suitable for people with a small garden area and/or those who would prefer to “test drive” the joy and wonders of vermiculture before embarking on a larger project.

Depending on the worm numbers this unit has the capacity to consume 2 x 2ltr ice cream containers of chopped kitchen waste per week. Imagine how much kitchen waste you could keep out of landfill if you had two, or even three, mini worm farms set up in your garden area.

** The worm lady gives these mini worm farms the 5 “E” star rating! They have proven to be easy, effective, efficient, enriching and eco-friendly!! They make brilliant sustainable gifts! Worth a try??



FIGHT GLOBAL WARMING
PROMOTE GLOBAL WORMING



Problems of 'biodegradable disposable containers'



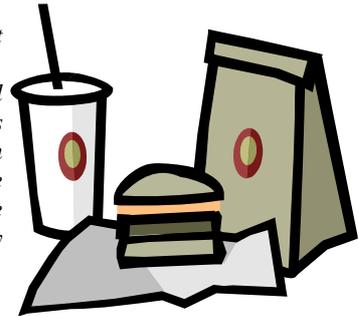
Some of us will be, at some point, organising an event, outing, school fete, or other food consuming activity away from home and be faced with decisions on what sort of containers should be used for food and drinks.

The best option is obviously to use containers we can wash and reuse again. However if this is not possible through the quantity needed or no facilities for washing, what do we do?

If we use biodegradable disposable containers often made from corn starch, bamboo or potato starch please remember these should NOT go in the regular recycle bin. This is difficult as the general public will think they are doing the right thing by

putting them in the yellow bin. If we have paper cups we can put them in recycling. The other materials will need to go in the general bin and be sent to landfill. Only our domestic bins get sent to the big composting facilities. So perhaps the times of paper cups and plates need to be more highly valued. If the plates and cups are reasonably clean they can go into recycling.

Also beware of items that claim to be 'degradable'. This can mean they will break up into smaller pieces of plastic rather than BIO-degrade where the materials will actually be converted into biologically usable compounds.



Bangladesh jute gets boost from plastic bag backlash

Western consumers who shun environmentally unfriendly plastic bags are helping to revive the traditional jute industry in Bangladesh.

Jute, a vegetable fibre that is spun into coarse threads, was once known as the "golden fibre" of the British Empire when the Indian sub-continent was ruled from London.

The material's long decline was hastened in the 1980s with the advent of synthetic fabrics, but the trend is being reversed due to growing opposition to the litter and pollution caused by plastic bags.

Jute exports from Bangladesh have surged -- up 70 percent year-on-year in 2010 -- with the fibre now the country's second largest export after garments.

"We are exporting millions of jute bags to eco-friendly foreign buyers who want the finest products made of top quality material," Asma Mohabub Moni, a 29-year-old Bangladeshi entrepreneur and jute promoter, told AFP.

Jute cloth, also called hessian in Europe or burlap in North America, is environmentally friendly to produce, bio-degradable, versatile and cheap, making it a popular alternative to plastic bags.

In 2002 Bangladesh became one of the first countries to ban plastic bags, with China following in 2008, and last month California passed a ban covering pharmacies, groceries and convenience stores.

Some cities and states in India have recently tried to follow suit -- with limited success -- and many shops in Europe impose a levy on every plastic bag used.

For Moni and the estimated four million Bangladeshi farmers who cultivate jute, the worldwide change in attitude is good news.

(So good news for those jute bag shoppers)

KAMRUL HASAN KHAN

June 20, 2010 The Age



Snippets

Newspaper recycling for fundraising through Scarborough Lions Club

There is a collection service at the back of the Innaloo theatre complex (Greater Union) off Scarborough Beach Road. They are there on Saturday mornings between 8am and 12pm and there is a cage there too in between times. No shiny paper please, such as advertising leaflets as this doesn't work in the process.

The collected paper is used with fertilizer and grass seed for stabilizing building sites (the green stuff we see).

Here is another web site location to give and get free stuff. Easy to register and navigate.

www.yoink.com

WASTE TYRE RECYCLING



A Queensland inventor's answer to the global problem of waste tyres is a clean industrial process that converts old tyres into valuable commodities that include rubber feedstock, oil, carbon and activated carbon and jet and diesel fuel. Transcript from an ABC Radio interview

Waste tyres are a global problem. In the United States alone, some three billion old tyres litter the landscape and 240 million more are dumped each year. What to do with them? A Queensland inventor, John Dobozy's answer is a clean industrial process that converts old tyres into valuable commodities that include rubber feedstock, oil, carbon and activated carbon and jet and diesel fuel. The process is patented and a pilot plant is operating on Queensland's Gold Coast. John invented the Molecra waste tyre recycling process several years ago. He discovered a way to recover very clean vulcanised crumb rubber from waste tyres and later developed the apparatus to extract oil and carbon from the rubber.

BLANCH: Now since the birth of the automobile tyre, waste tyre recyclers have adopted a 3R methodology, that is Reduce, Reuse and Recycle, but now your Molecra process adds another "R" which is Recover. What makes your recovery different from recycling and reusing?

DOBOZY: We had to use twenty-first century biotechnology to use molecular separation in order that you can extract more valuable materials. Rubber is a very pure commodity, carbon and hydrocarbons are better investment returns and that's what we achieved.

We're recovering limonene, jet fuel, diesel, carbon black, activated carbon and we also obviously recover the fibre material which is like a plastic product, they can manufacture plastic materials from it.

BLANCH: What is the process?

DOBOZY: We've developed some mechanical separation of the steel initially and cut the tyres into pieces, then the chopped up rubber of the tyre pieces are soaked in an oil in the hydrocarbon that we extract from the tyres in order to make them more pliable and mechanically easier to separate the three components of the rubber, metal and the fibre. And also subsequently we get a very high quality rubber, very fine rubber powder. Beyond it, what you can't sell as a rubber commodity you put it into microwave and heat it to 1300°C and then you're extracting the various hydrocarbons from the rubber and, the residue that is left over is carbon black and, during the process of discharging from the high temperature microwave, we're cooling it with steam and subsequently you end up with another by-product that is marketable, which is activated carbon and typically could be used for industrial water purification. And water being another of our century's big problem - future shortage of water will hit us all, we have to do something with it, so we are extracting a good product which is quite expensive, activated carbon, to purify water to solve another problem.

BLANCH: It's incredible. The aim of the process was to recover completely all components from waste tyres, so there's absolutely nothing left after what you've just described.

DOBOZY: No. We recycle 100 per cent of it. As I said, at molecular level you can deal with it, you know, to the last molecule.

BLANCH: How have you kept the plant environmentally friendly?

DOBOZY: Well, we utilise our vacuum systems and, under vacuum systems which is safer to operate, you don't have emissions. You try to prevent emission because anything that you would heat up and evaporate, that would be a loss and we have to capture everything that we can extract from tyres and subsequently it's clean, because nothing is lost to the environment.

We're extracting 3.9 litres of hydrocarbon from a typical passenger tyre and one third of that hydrocarbon is used to power the whole plant, so we don't need other energy, we don't have to buy energy from other sources, we create our own energy from within the tyres.

BLANCH: And part of this is the cost factor, because you've designed the technology to specifically lower the cost of processing tyres, so by how much and how much do you save, how have you done that?

DOBOZY: As I mentioned earlier, we soften the tyres in order to separate the components because, generally tyres are indestructible and that's the biggest problem in other mechanical separations, that it takes a lot of energy to separate the components of the rubber, metal and the fibre, but by making it soft we don't need that much energy. We reduce energy by at least two-thirds. That way we don't need to buy energy and we clean the product better and we produce a better quality product.

BLANCH: Another thing that occurs to me is how flexible is the process in its ability to switch between production streams to satisfy market demands?

DOBOZY: That's another development that nobody has tackled so far. Obviously at various parts of the world once we're marketing this technology, requirements will

be different. Some companies might want our rubber products, others oil or carbon, so you always produce from this technology what you can market. Recycling has to pay and if you can produce products from base that are good commodities, that are commercially viable, then everybody will do it.

BLANCH: Well, it's taken several years of extensive research and development and \$AUD2 million to get to this pilot plant stage, when you get your commercial plant up and running, what volume of tyres will you process?

DOBOZY: I hope this commercial plant will use about two or three million tyres annually around the clock.



'In the United States alone, some three billion old tyres litter the landscape and 240 million more are dumped each year'

All About Sprouts — Nature's Superfood with less waste!

THE DIRT

What is Sprouting?

- Sprouting is the process of turning seeds, beans and grains into edible partially grown plants, which are jam packed with living enzymes for easy digestion and vitality
- Sprouting can be done all year round in the comfort of your own home, requiring only 1 minute of watering per day
- No green thumb is required! Soil is often not required either – just a glass jar, some mesh and organic seeds, how simple is that!

Health Benefits

- One of the most enzyme-rich living foods on the planet, very easy to digest
- Considered 'pre-digested' due to the natural breakdown of starch, protein, fats and minerals. Readily absorbed.
- Sprouts are powerful antioxidants, which help protect against free-radical damage
- Alkalise, are low GI and calories, high in fibre and essential fatty acids, rich in oxygen and chlorophyll (essential for blood purification) and high in minerals and vitamins, sometimes with up to 2000% more vitamins than the original seed!
- Easily grown using organic seeds, no need for synthetic fertilizers, pesticides.

Sprout Away!

- Sprouting is very easy and quick, with most seeds or grains only requiring 2-3 days (on average) to grow
- There are a number of methods that can be used, one of which is the jar method (see http://karenknowler.typepad.com/living_in_the_raw/2008/04/sprouting-the-w.html for demo's and more instructions)
- Sprouts are great to add to a variety of salads, stir fry, dips, soups and stews, rice dishes, sushi, baked beans, sandwiches, or just to garnish

Come Clean

Sprouts are one of the most economical foods we can eat, at just a few cents per serve! Here are just a few of the many places you can find organic seeds and sprouting containers...

Alive Organics - Shop 7/515 Walter Rd East, Morley
Supplies: fenugreek seeds, mung beans, chickpeas, linseeds, chia seeds and more

Healthy Valley Organics (wholesale) - 28 Drynan Street, Bayswater
Online or in-store: http://www.healthyvalleyorganics.com.au/seeds___ground_mixes?b=1

Manna Wholefoods – 274 South Tce, South Fremantle
Supplies: linseeds, oats, broccoli seeds, radish seeds, fenugreek seeds, chickpeas and more

Loose Produce – 2 Hobbs Ave, Como
Supplies: soybeans, chickpeas, mung beans, broccoli seeds, sunflower seeds and puy lentils

Sprout Organic – Online store (please note: cannot deliver live seeds to WA due to quarantine laws)
http://www.sprout.net.au/prd_sprouting_supplies.htm

Isabell Shipard has a fantastic book on sprouts called 'How can I grow and use Sprouts as living food' – highly recommended for anyone looking for more guidance on what to sprout and how to sprout it!

Article by Kristen Barker from the Come Clean Newsletter



Recycling at the Sky Show

Although there was a lot of noisy stuff that went up in smoke on Australia Day at the Sky Show, Earth Carers with staff from the City of Perth and MRC managed to rescue an amount of recyclable material at the three recycling stations we had at the Esplanade, Langley Park and South Perth foreshore.

Recycling and general waste bags were distributed in the crowd, with an accompanying questionnaire about rubbish disposal habits, and then filled bags were exchanged for 'prizes' at the recycling stations. The sought after prize was 'the torch', so children were eagerly waiting for patrons to finish with their bottles and cans to count up their recyclable numbers.

Litter was down near the stations and the recycling material uncontaminated because Earth Carers could check the bags. Good efforts and with more recycle stations we should improve next year. People were friendly and enthusiastic to do the right thing.

For a full report on the night go to the MRC web site.



The Sky Show also saw the introduction of Captain Recycle, who was a huge hit with the crowds

FUTURE EVENTS

The latest Earth Carers course has just finished with 25 people completing the course. The graduation evening will be held shortly so please come along and meet our new Earth Carers. The details for the Earth Carers graduation are:

***6pm—8pm on Thursday 23 September
at
Leederville Sporting Club
78 Cambridge Street, West Leederville***

OR

The Perth Royal Show will take place at the Claremont Showgrounds from 25 September to 2 October. The MRC and Earth Carers have a display in the Conservation and Landcare section of the showgrounds. The display will be manned by council members and Earth Carers so come along and see us while you're at the show.

For further information please contact:

***Peg 9306 6303/0422 941492
Karen 9306 6348***

**We're on the Web!
www.mrc.wa.gov.au**

Reduce
Reuse
Recycle



Make waste work

For further information please contact
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