

# Permaculture Cairns October Newsletter

EMPOWERING COMMUNITIES WITH SUSTAINABLE SOLUTIONS



**Care for the Earth, Care for people, Share the excess**

Permaculture Cairns Incorporated

Web Site: [www.permaculturecairns.org.au](http://www.permaculturecairns.org.au)

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## October Meeting & Information Exchange Night

**Tuesday 20th at 6pm for a 6.30pm start**

Meeting Venue: ARC Disability Centre – 92 Little Street Manunda

Members please bring a plate of finger food to share and a friend or two!

Financial Members are free, Non Members \$5 Why not join up only \$10 for singles and \$15 for a household until January 1<sup>st</sup> 2016

### AGENDA

Welcome to new members and visitors

Upcoming workshops and event for this month and beyond

Permaculture Principle Number 10, a practical explanation.

Guest Speaker: Neil Robson from “Coco Lavish” After selling Neil's Organics 18 month ago and having a break from business which included a sailing trip to the Solomon (where the people's lives are dependent on coconut for survival) it was time to start something new. Sasi who had work at Neil's Organics for 10 years, was very keen to be part of this new adventure.

So now there's a new cafe on the block, it's called Coco Lavish and it's the creation of Neil and his business partner Sasi. Coco Lavish is based on the amazing quality of the coconut and all the different ways it can be eaten and all the products that are made from it.

The team at Coco Lavish now includes Kylie, Kanan and Clare. You will find Coco Lavish in Shields Street just around the corner of Grafton and Shields Streets. They are also on Facebook.

A Movie that Matter next

Then a survey to determine workshop and event preferences for 2016

Followed by a few brief talks on some of the following topics, Books, Plants, Tools, Tips, Weeds, Pests, Recipes or Gardening Tips of the month.

About 8.15 we break for a cuppa and nibbles and a chance to network with likeminded people.

Check out the books in our Members Library – We are finished and on the way home by 9.00pm **or so**.

Last month we were fortunate to have two Guest Speakers, Doctor Todd Lizon who talked about Stress Management and a way to measure it - The Speed Trap – If you can't measure it you can't improve it.

Doctor Todd can be contacted at [www.stressaway.com.au](http://www.stressaway.com.au)

Jason Webber, our second guest speaker, gave us lots of information about the people friendly and environmentally friendly and safe Eucalyptus oil cleaning products. Jason can be contacted at

[jayweb58@yahoo.com](mailto:jayweb58@yahoo.com).

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## **Permaculture Principle No. 10**

### **Use and value diversity**

**“Don't put all your eggs in one basket”**

Diversity reduces vulnerability to a variety of threats and takes advantage of the unique nature of the environment in which it resides.

The remarkable adaptation of the spinebill and hummingbird to hover and sip nectar from long, narrow flowers with their spine-like beak symbolises the specialisation of form and function in nature. The proverb “don't put all your eggs in one basket” reminds us that diversity offers insurance against the variations of our environment.

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## **Permaculture Cairns Annual General Meeting and Social Event**

**will be held on Tuesday night 15<sup>th</sup> December 2015**

We are planning to combine the meeting and a social event on the same day, at a venue to be announced later. So let us know if you would like to attend.

We would love you to become involved in Permaculture events and workshops. Being involved is a great way to meet people if you are new to the area, or have time to give to a noteworthy cause.

And it is fun.

There will be a notice in the November issue of the newsletter including nomination forms and proxy forms for those who cannot attend the meeting in December.

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## Plant Of The Month – Pigeon Pea – *Cajanus cajan*



### **The Plant:**

Pigeon Pea is a fast growing, perennial woody, leguminous shrub which will last a number of years in well-drained soil in the tropics. It will grow up to 4 metres high and has yellow and red and sometimes apricot coloured pea shaped flowers. The bees and honey eaters love it.

This plant grows easily in the tropics withstanding heavy rainfall and high temperatures. It can also be drought tolerant and will grow in soil with low fertility. It will not survive in frost areas. It is not fussy about soil or pH. Some cultivars will adapt to saline water. Nutrition wise the seeds contain 25% protein and the leaves contain 5 times more Vitamin A and C than green peas.

### **Uses:**

The seeds, can be eaten fresh or as split dried peas. The young shoots and soft leaves may be eaten, but need cooking first. Leaves and seeds are suitable for feeding to cattle, pigs and poultry. In India the dried peas are used to make Toor dal. Before cooking, it is best to soak the dried peas for an hour.

This plant makes great mulch, and can be cut back a number of times during the growing season. When no longer needed - simply cut off at ground level and it will not reshoot. The roots will break down and feed the microbes in the soil.

It can be grown as a green manure crop and dug into the soil when flowering to get best benefit.

It makes great green manure for incorporating into the compost heap. Some studies have shown that a combination of composted Pigeon Pea and Crotalaria leaves added to tropical soils will stop the Bacterial Wilt in Tomatoes, Capsicum and Egg Plant which is caused by the bacteria *Ralstonia* in tropical soils.

I will be adding pigeon pea and crotalaria to my next compost heap, and this compost will be used in my veggie garden soils.

Use it to provide shade and shelter for softer plants by planting in rows with the tender plants in between. It will add nitrogen to the soil and the roots will help stabilise loose soils. I have noticed the small birds like the trees.

### **Propagation:**

PP grow easily from seed, either direct seeded or placed in small pots for planting out later.

It is best to soak them over night in tap water before seeding.

Each year towards the end of the year when the temperatures start to rise I take a hand-full of seeds and broadcast them over the veggie growing area and wait for them to come up. I remove the ones I don't need and leave the ones in strategic spots to provide shade during the hot weather.

## **Garden snippets:**

Vanilla orchid pollination – Another way to pollinate your Vanilla plants. Hang a fly trap near your Vanilla orchids and the flies will do the pollinating for you. The fly trap is one of those awful smelly traps that has a powder dissolved in water. Apparently the flies will crawl over anything near the trap and in the process pollinate the flowers.

Mango farmers are collecting road kill and hanging it in their mango trees to attract flies – which will crawl over the trees and flowers and do the pollinating for them. I heard this on the Radio ABC Garden Show.

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## **PERMACULTURE CAIRNS FARM TOUR**



### **RAVENSHOE BIODYNAMIC MIXED FARM**

**Sunday 15<sup>th</sup> November 2015 - Approx times: 8am to 5.00pm**

**Venue: Lisa Price & Simon Harden's Farm, Tully Falls Road, Ravenshoe.**

**Program on the day - visit the Poultry and Pigs, Lisa's Biodynamic Seedlings and there will be planting out of the family home garden. And for the children harvesting of potatoes and carrots.**

**Please register your interest in participating in this tour by emailing  
[info@permaculturecairns.org.au](mailto:info@permaculturecairns.org.au)**

**We need to know numbers before we decide to car pool or hire a bus, so let us know ASAP.**

**There is no fee for the farm visit but there will be a fee to cover transport costs.**

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### **OTHER LOCAL WORKSHOPS AND EVENTS**

#### **Bungalow Community Garden General Meeting**

Date: Sunday 11 October 2015

Time: 10.00am

Venue: The Bungalow Gardens on Spence St

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#### **Kanjini Co-op – Hearts and Mind Meeting**

Sunday 25<sup>th</sup> October 2015

Check out all the info on their web site at [www.kanjini.org](http://www.kanjini.org) or email: [info@kanjini.org](mailto:info@kanjini.org)

## Cairns Seed Savers

Cairns Seed Savers is an informal group of individuals with a passion for saving seeds and growing fruit, vegetable and other useful plants that have been passed down through generations and are adapted to our local conditions.

WHEN: Sunday 15th November 2015

WHERE: Jo's place, 39A Clifton Rd, Clifton Beach

PHONE: Jo 40553053

WHAT TO BRING:

- Organically grown, non-hybrid seeds if you have any spare
- A plate of food to share for lunch • Your own chair, plate and cutlery
- Your spare seedlings, cuttings, plants and produce for the Share Table

AGENDA:

10 – 11AM Meet'n'greet, general housekeeping, seed sorting and access to Seed Bank

11 – 12 Talk by Michael Alba on "What to grow in the wet season"

12 – 12:30 Enjoy a shared lunch

12:30 – 1PM "Show and tell" of any of your great ideas/inventions

Tour of Jo's very productive garden

Everyone Welcome - See you there!

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## L.E.T.S. October Calendar

TABLELAND LETS - Relocalising all of Far North Queensland  
LETS is a Community Trading System which uses "Bartles" for trading.

Sorry I don't have this info right now but you can get it from the web site.

What to bring to Trade Events where not specified above: food & drinks for yourself or to share, or money and/or Bartles at some venues, friends, Trading Record Sheet and pen, any goods you wish to trade, table/rug to display them upon is often useful, your own chair at some venues, promotional material of any services you are offering if applicable, \$20 to join LETS if you are not yet a member.

[tablelandlets@gmail.com](mailto:tablelandlets@gmail.com) - 4096 6972 - [www.tablelandlets.org](http://www.tablelandlets.org) - [www.communityexchange.net.au](http://www.communityexchange.net.au)

From CAFNEC





## **Environment FNQ Roundtable - 21 November 2015**

**Save the date!**

Cairns and Far North Environment Centre is again hosting the FNQ environment groups' Roundtable, where conservation and sustainability groups meet, discuss the primary issues facing the conservation movement in our region and form and strengthen our networks.

This year the event has a new name, *Environment FNQ*, and a new addition: a preceding day of capacity-building training workshops.

**Friday 20 November - Creative Social Change capacity building workshops**  
**Saturday 21 November - Environment FNQ Roundtable (invitation only)**

**Where:** Edge Hill State School Environmental Interpretive Centre, 254 Pease St Edge Hill (entry via Russell Street)

### ***Environment FNQ's Objectives:***

- **To identify, discuss and coordinate action on regional environment priorities.** Formal and informal discussions identifying regional environmental priorities, emerging threats, and current activities/gaps, for actioning via lobbying, projects or other work.
- **Sharing our resources.** Hosting informative sessions presented by guests from the environment sector, or others we can learn from. A focus on sharing approaches to environmental protection that are working well (or mistakes to learn from), to help us all in our work.
- **Networking.** A social event to be included.
- **Capacity building.** We are organising a preceding day of targeted sessions (Friday 20 Nov), to be hosted by the Knitting Nannas. These workshops aim to up-skill people in the environment sector, to be able to do our work better and find creative ways to bring about real change. Topics to be included:
  - Use of social media and film-making
  - New forms of community organising
  - Advocacy techniques
  - Advocacy and the law

**Please let us know who the delegate from your organisation will be by [contacting us](#) as soon as possible.**

**We're calling for speakers** – please [contact CAFNEC](#) if your organisation would like to nominate to give a short 10 minute talk on a particular topic at *Environment FNQ* Roundtable.

**We're calling for event hosting partners** – if your organisation would like to be a host partner, assisting with sponsorship and/or in-kind contribution in exchange for promotion and other benefits, [let us know](#).

This email has been sent to past delegates of the FNQ Roundtables. If you have suggestions of others who could be invited, please [contact us](#).

**For more information or to discuss the event, please contact:** Nina Bailey,

Community Engagement Officer, CAFNEC (Tues & Wed) 07 4032 1746 / [community@caf nec.org.au](mailto:community@caf nec.org.au) or Josh Coates, Director, CAFNEC 07 4032 1586 / [director@caf nec.org.au](mailto:director@caf nec.org.au).

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## **News Snippets from our overnment**

### **Call for submissions on a GM corn line**

Date: 25/09/2015

**Food Standards Australia New Zealand (FSANZ) today called for submissions on a corn line that is genetically modified to be tolerant to certain herbicides.**

**FSANZ Chief Executive Officer Steve McCutcheon said the corn had been modified to be tolerant to the herbicides glyphosate and glufosinate ammonium.**

**"FSANZ conducted a thorough safety assessment on the application, which included comparing the GM corn with a non-GM corn from a molecular, toxicological and nutritional point of view," Mr McCutcheon said.**

**"The aim of the assessment is to find out if there are any differences between the GM food and its conventional counterpart. No public health or safety issues were identified and the corn was found to be as safe as its conventional counterpart."**

**Submissions are invited from government agencies, public health professionals, industry and the community.**

**All FSANZ decisions on standards are notified to [ministers responsible for food regulation](#). The ministers can decide to adopt, amend, or reject standards or they can ask for a review.**

**The closing date for submissions is 6 November 2015.**

**More information**

**[Application A1112 - Food derived from Herbicide-tolerant Corn Line MZHG0JG](#)**

**[Information about how to make a submission](#)**

**Media contact: 0401 714 265 (Australia) or +61 401 714 265 (from New Zealand)**

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### **MORE NEWS**

### **\$350m to kick start new large-scale solar projects**

*A joint statement from the CEFC and ARENA*

At least four, and as many as 10, new large-scale solar farms will be built across Australia with the help of \$350 million in new funding initiatives announced today by the Australian Renewable Energy Agency (ARENA) and the Clean Energy Finance Corporation (CEFC).

ARENA today marked the start of its large-scale solar competitive round, a \$100 million programme that is seeking bids from major solar PV project proponents for grants of up to \$30 million. Projects must have a minimum generation capacity of 5 MW (AC).

The CEFC has announced a complementary \$250 million large-scale solar financing programme, which will support projects with loan requirements of \$15 million or more, targeted at unlocking additional private sector investment in the large-scale solar sector.

The new CEFC financing initiative will provide successful ARENA grant recipients with the opportunity to secure long-term debt finance to support their projects.

The ARENA funding round aims to support the development of a further 200 MW of additional large-scale solar capacity in Australia. Currently around 211 MW in solar capacity is being created at AGL's twin solar farms in Broken Hill and Nyngan and at the Moree Solar Farm. Smaller farms in Royalla (ACT) and Greenough River (WA) together have 30 MW of capacity.

ARENA anticipates the competitive funding round will lead to between four and 10 projects being funded.

ARENA CEO Ivor Frischknecht said the competitive ARENA funding round aimed to support a spread of projects, with the central aim of bringing down the cost of large-scale solar developments in Australia and achieving cost parity between large-scale solar and wind energy by 2020.

"Australia has huge natural advantages in this area: more sun than almost anywhere else and a solar R&D sector that is the envy of the world," Mr Frischknecht said.

"The funding round is about unlocking that capability to deploy large-scale solar farms across the nation. This will drive further innovation in the sector and create efficiencies in Australia's solar PV supply chains."

CEFC CEO Oliver Yates said the CEFC and ARENA finance would be transformative for the deployment of large-scale solar in Australia. "While the costs of large-scale solar PV are decreasing, this financing boost will help Australian projects move down the cost curve, in line with international trends," Mr Yates said.

"When fully deployed, the CEFC finance will be the single largest debt financing commitment to the Australian large-scale solar sector. The CEFC's provision of fixed-rate longer-dated senior debt finance is designed to directly support the network of financiers, project suppliers and developers in the delivery of additional large-scale solar in Australia."

ARENA and the CEFC have supported a number of large-scale solar PV projects, which are either already generating power, or for which first-generation is imminent.

AGL's project at Broken Hill and Nyngan (supported by ARENA) is already grid-connected at Nyngan and generating electricity. When fully operational it will have a 155 MW capacity. The 56 MW Moree Solar farm (supported by both the CEFC and ARENA) is expected to come on line early next year.

Together the two projects created 550 direct construction jobs, will have 2.2 million panels and power 65,000 homes when fully operational.

Construction is also underway on Australia's largest solar and battery storage project to date, at the Sandfire Resources DeGrussa copper mine in Western Australia. It is also supported by both the CEFC and ARENA.

"By working closely with ARENA, and investing alongside private sector co-investors to bridge the financing gap for projects that make commercial sense, we're seeking to build Australia's expertise in solar and bring down development costs," Mr Yates said.



"Projects seeking funding from ARENA and debt finance from the CEFC will benefit from our organisations working together during each stage of the application process, to minimise transaction and due diligence time and costs," Mr Frischknecht said.

Applications for funding for large-scale solar projects from ARENA and finance from the CEFC open this month. For more details go to [www.arena.gov.au/large-scale-solar-pv](http://www.arena.gov.au/large-scale-solar-pv) and [www.cleanenergyfinancecorp.com.au](http://www.cleanenergyfinancecorp.com.au).

#### **About ARENA**

ARENA was established by the Australian Government to make renewable energy technologies more affordable and increase the amount of renewable energy used in Australia. ARENA invests in renewable energy projects, supports research and development activities, boosts job creation and industry development, and increases knowledge about renewable energy. ARENA is currently supporting more than 200 projects and is actively seeking new projects to support

## **NEWS & INFORMATION FROM HOME AND AROUND THE WORLD**

### **Permaculture Courses to be held at Rockhampton University**

9<sup>th</sup> October 2015

#### **It's the end of the world as we know it but we feel fine! (thanks to permaculture)**

**Interviews: Prof Drew Dawson 0438 329 766 or [drew.dawson@cqu.edu.au](mailto:drew.dawson@cqu.edu.au)**

We should not feel powerless in the face of climate change and resource depletion. We still have a great chance to heal people and planet ... and a key healing balm will be permaculture.

Dr Keri Chiveralls, CQUniversity Australia's Permaculture Design Program Coordinator, says that in the wake of the launch of the United Nations' Sustainable Development Goals and in the lead-up to the UN Conference of the Parties (COP) climate talks in Paris in December, many people may be wondering what role they can play in the global challenges that lie ahead.

"In order to meet the Sustainable Development Goals, we need to look beyond conventional approaches to 'sustainability' and redesign organisational and value systems to create integrative and regenerative systems that enable us to thrive in the face of these challenges. We all have a role to play in this process.

"We are already starting to see this happen in a variety of ways. The decentralisation of power via increased use of solar and wind technology and the re-localisation of food production/consumption through home, school and community gardens and farmers markets are all good examples of this trend.

"Communities at the local and regional level are experimenting with new forms of organisation and governance through initiatives like the Transition movement. Companies are developing and delivering services and products based on personalised local supply chains rather than anonymous global ones," Dr Chiveralls says.

She says that understanding, adapting to and mastering these changes will be one of the great challenges facing us over the next 50 years.

Learning to live well, while caring for people and planet and ensuring a fair distribution of resources, is the central tenet of the emerging discipline of permaculture. Originally developed by Bill Mollison and David Holmgren in

Tasmania in the 1970s, permaculture is an integrated design system that teaches people a systems-based approach to understanding and practicing regenerative and sustainable living skills.

Dr Chiveralls says learning how to adapt and thrive in this changing environment will be an increasingly important quality for the next generation.

**To help embed these skills in the next generation of professionals, CQUniversity has announced a new post-graduate program in Permaculture Design.**

**One of the first fully-accredited courses of this kind in the world, the Graduate Certificate in Permaculture Design will be offered in 2016 with further plans for a Graduate Diploma and Masters in Permaculture for 2017. Details: [k.chiveralls@cqu.edu.au](mailto:k.chiveralls@cqu.edu.au) or [www.cqu.edu.au/permaculture](http://www.cqu.edu.au/permaculture) .**

Dr Keri Chiveralls and her colleague Lucy Legan will coordinate input from key permaculture designers and academics, including permaculture co-originator David Holmgren, to deliver the innovative program.

A feature of the Graduate Certificate is a 'residential' to be held at one of the permaculture teaching sites, which currently include The Food Forest in Australia, Kul Kul Farm at The Green School in Bali and Ecocentro IPEC in Brazil. Further negotiation will include other exciting permaculture centres across the globe.

"The course will draw multiple disciplines together to support integrative research and create regenerative and sustainable designs and solutions, as well as enabling graduates from any discipline to learn how to apply permaculture ethics and practices in their professions and in their broader way of life," says Dr Chiveralls.

"The program also aims to support students in establishing their own start-up projects or social enterprises as well as exploring opportunities to apply permaculture at home and abroad."

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## **PROBLEMS GROWING FOOD IN ASIA**

### **AND OPPORTUNITIES FOR AUSTRALIAN ORGANIC GROWERS**

**From the Chair of the Organic Federation of Australia**

11<sup>th</sup> October 2015

Currently in Cambodia on an Organic Rice Project, I can give our members assurance that clean, nutrient rich certified organic food has an enormous future. With a population of 4.3 billion in a world population of 7.3 billion, Asia is stretched beyond its ecological limit, in fact it is collapsing. Soil carbon levels and structure have collapsed across most agricultural soils. Rice and other crops are now under extreme pressure due to the increasing incidence of extremes in weather. Rivers are being dammed and water quality due to excessive nitrogen fertilisers is effecting the survival of low cost, high protein freshwater fish everywhere. Pollution is endemic making Asia a disaster in the making.

With Australia able to export and feed 60 million people, our opportunity to supply the top 1.3% of this market with certified organic food has never been better. Due to the increasing pollution in their soils, water and air, Asia is currently incapable of producing enough certified organic food to meet its growing middle class. This is Australia's opportunity of a century and why the OFA wants to build successful organic businesses here in Australia

The OFA has also lobbied the Federal Government to reverse its decision on 417 Visa's. Young backpackers can no longer WWOOF on organic farms and get time credits towards an application for a second year visa. The OFA's position on this is that this decision will destroy small startup organic farms. We have proposed to the Federal Government that organic farms that turn over less than \$40,000 per year, with a maximum of 3 WWOOFers at any given time should be excluded from this policy change.

Enjoy our newsletter, it is full of great success stories. We thank our business members for their long standing support and look forward to meeting you all at our Bio30 business meeting scheduled for October 29. At this meeting we will be going over our business projects for 2015/16. Business members will be notified shortly. If you aren't a business member and would like to be part of this great event, upgrade your membership this week.

*Yours in organics,  
Adam Willson*

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From the Nutri-Tech Solutions newsletter by CEO Graeme Sait

## Defying Father Time – Five Life-Extending Strategies

09 October 2015

The following suggestions are not restricted to those of us seeking a longer life – they are, in fact, relevant to quality of life for all. Health, or a lack of it, effectively impacts everyone who breathes. The healthy habits I will describe in this article can increase longevity, but they are also major factors in the wellbeing equation for all of us.

### HGH – Understanding the Health Hormone

The level of Human Growth Hormone (HGH) in our blood generally declines as we age. It was thought that production of this wonderful life-enhancer faltered with advancing years, but that is not the case. In most of us, the pituitary gland is jam-packed with this hormone, but over time we have lost the capacity to release the payload.

What is Human Growth Hormone and why is it so important? **Dr Daniel Rudman** was one of the first researchers to publish his HGH studies. He injected the hormone into a bunch of aged volunteers and chronicled their remarkable turnaround. One of the primary markers of advancing age is a worsening ratio between muscle and fat. Dr Rudman reported a reversal of this phenomenon to the point that the subjects returned to ratios relevant to 10 – 15 years earlier. There was a marked increase in zest for life and libido and energy levels were positively impacted. The injections (if they were legal in this country) cost about \$US1000 per month and, if you could afford it, this could be worth considering for a virtual elixir of youth. However, there is a cheaper, more effective alternative.

There are a number of proven strategies that can sponsor release of HGH from your pituitary. In fact, one of these is so effective that it has become difficult to distinguish between those who inject vs those who stimulate release from their own storehouse. First, it might be worth looking at the symptoms of HGH decline because they are not pretty and there will be many readers over 50 who are silently suffering, perhaps unnecessarily.

### The Symptoms of HGH Decline

As our blood levels of HGH drop, males and females experience symptoms often associated with menopause or andropause. These include the following:

1. Weight gain, particularly to the abdominal region  
A decline in muscle integrity (with serious implications for heart health)  
Neurological symptoms, such as anxiety and depression  
Reduced lean body mass and muscle strength

Reduced sex drive and energy  
Poor memory and concentration  
Increased LDL cholesterol

Does this package sound familiar to any of you out there?

### The Five Secrets of HGH Release

**1) Calorie restriction** – research has repeatedly demonstrated impressive longevity increases linked to keeping our daily calorie intake down to 2000 calories a day. This does not mean starving, but it does require you to cut the cakes, desserts, soft drinks and deep fried food.

**2) Resistance exercise** – this practice is not about building biceps, but rather it involves exercises with light weights or anything that creates resistance against your muscles. Studies involving five sessions of resistance exercise for forty minutes a day have demonstrated increases in HGH release of up to 400%.

**3) Glutamate** is the body's most abundant amino acid, but it is also called a "conditional" amino. This means that it is not produced in certain circumstances. Unfortunately, it is **stress** that impacts glutamate and the vast majority of us live lives tempered by anxiety we would rather not feel. Two grams of glutamate powder (1/2 a teaspoon), twice a day, has been shown to increase HGH release by as much as **460%**.

**4) Maintaining the balance between testosterone and estrogen** – testosterone declines from 25 years of age onwards, often relating to a lack of zinc and omega-3 fatty acids. Meanwhile, estrogen comes in from everywhere. Confinement animals are still pumped with estrogen to fast-track weight gains. Many of the farm chemicals are estrogen mimics. Phthalates, which are constantly released from our plastic environment, serve as pseudo estrogens. Finally, most water sources feature some degree of pollution from the birth control pill. If we can improve the ratio between these two hormones by boosting testosterone and reducing estrogen inputs, we will sponsor release of HGH.

**5) Peak 8 training** – this particular regime was discovered by sports scientists working with Olympic sprinters. For decades we have believed that aerobic activity exercises the heart muscle, but we only got it half right. We now know that there are three types of muscle tissue that comprise our heart muscle. Slow twitch muscle fibre comprises slightly less than half of our heart and this is the tissue worked aerobically. However, fast twitch and super-fast twitch fibre, comprising over half of the heart muscle, are only worked with **anaerobic** exercise. This involves repeated short bursts of energy followed by short recovery periods.

### Peak 8 Life Extension

Most reasonably fit people can embark on this practice – here's how you do it. It involves just 3 twenty-minute sessions per week (one hour) and it is actually counterproductive to exceed this limit. **Peak 8** can be practiced on a track, a treadmill, an exercise bike or out in the paddock (as long as there are no rabbit holes).

Walk (or pedal) at a medium pace for two minutes before embarking on the first burst of energy. For thirty seconds, run or pedal as fast as possible. You must be absolutely breathless after thirty seconds and then you have 90 seconds to recover. If you have not got your breath back at the end of 90 seconds, then you should not continue. You are not fit enough and persistence may result in injury or death. This cycle of thirty second bursts followed by 90 second recovery periods is repeated a total of eight times. This segment of the routine involves a total of 16 minutes. At the completion of this exercise you return to the two minutes of medium pace exercise which commenced the routine.

Twenty minutes of this routine, three times a week will flood your body with HGH, which also hunts down fat cells like a heat-seeking missile.

### In Conclusion

**Peak 8 training** is one of the most productive tools to increase longevity and quality of life, and it takes just 60 minutes per week. Even the most time-starved among us must surely recognise that this is a highly productive investment. Just do the sums. One hour per week is around two days per year, for a total repayment of up to 5000 days (15 years) life extension. What are you waiting for? Get your running shoes on now!

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## **More than one-third of cancers can be avoided if Australians modify their lifestyle**

October 7, 2015 6.28am AEDT

Moderate intakes of red meat and alcohol can prevent a cancer diagnosis. from shutterstock.com

Nearly 40,000 cancers diagnosed in Australia can be prevented if people avoid known risk factors for the disease, according to research published today.

In 2010, 116,850 Australians were diagnosed with invasive cancer. The new study identifies 13 areas where people can alter their lifestyle to prevent a third of these.

Led by clinicians at the QIMR Berghofer Medical Research Institute, researchers applied international measurements to calculate Australian data.

Published today in the Australian and New Zealand Journal of Public Health, the study showed smoking, ultraviolet radiation, body weight, diet, and alcohol, contributed to 90% of all preventable cancers.

Modifiable risks accounting for the remaining 10% of cancers were:

- Red and processed meat
- Inadequate fibre intake
- Inadequate intake of vegetables
- Inadequate intake of fruit
- Inadequate physical activity
- Infections such as hepatitis B and C, human papilloma virus, Helicobacter pylori bacterium, HIV and Epstein-Barr Virus.
- Hormone replacement therapy (HRT)
- Oral contraceptives
- Inadequate breast feeding.

Director of the Sansom Institute for Health Research, Ian Olver, said the often convoluted reports about causes of cancer distracted people.

“People think, ‘oh everything causes cancer, I don’t need to be worried about it’. But this study actually refocuses it on the things that can prevent about a third of them - and it’s simple lifestyle changes,” he said.

Risk factors considered for the report had to meet three conditions: be classified by the World Health Organization or the World Cancer Research Fund as a cause of at least one cancer type; be modifiable; and there had to be reliable data on numbers of Australians exposed to the particular risk.

Associate Professor in Nutrition at Deakin University, Tim Crowe, said while the research was significant in its credibility, there was no magic formula it exposed to avoiding cancer.

“It’s about eating plenty of plant-based foods and fibre, being active, not drinking too much and trying to maintain as healthy a body weight as possible,” he said.

“You could apply those recommendations to reducing the risk of diabetes and heart disease. It’s a common theme across many chronic diseases.”

The study suggests nearly 2,000 cancer cases diagnosed in Australia in 2010 were attributable to inadequate intakes of fruit and vegetables.

Low levels of dietary fibre were responsible for at least 1,000 – and possibly up to 2,600 – bowel cancers.

Professor Sanchia Aranda, chief executive officer of Cancer Council Australia, which commissioned the study, said bowel cancer was a major issue in the country.

“We have a particularly low participation in our national bowel screening program in Australia. Our target is 70% of the target population and we’re sitting at about 33% at the moment,” she said.

The report showed red and processed meat were significant risk factors for bowel cancer, accounting for about 17% of all such new diagnoses in 2010.

It states if Australian adults consumed less than 65 grams of red and processed meat per day, around 800 fewer cases of bowel cancer would have been diagnosed in 2010.

Professor Aranda said Australia’s culture of barbecues with a high red meat component contributed to it sharing the highest level of bowel cancer in the world with New Zealand.

She also said there was a worrying rise in rates of liver cancer in Australia.

The study showed the hepatitis virus contributed to around 30% of liver cancer diagnoses. But alcohol and tobacco were responsible for 13% and 21% respectively.

“It’s always been thought the rising rates of liver cancer was largely due to infections.

“But in France, recent reports suggest that about 50% of their liver cancer is due to drinking too much alcohol,” Professor Aranda said.

Hormone replacement therapy (HRT) for menopausal women was found to be both a risk and protective factor, depending on the type of cancer.

The study suggested more than 500 Australian women – and perhaps as many as 675 – developed cancer in 2010 as a consequence of using HRT. But nearly 90 cancers were prevented when women used the therapy.

Professor Olver said the information was complicated and women using HRT who were worried about their cancer risk should consult with their doctor.

Women most at risk of cancer are those using the therapy for longer than five years.

“There are a lot of factors that have to be balanced. If you’re having dreadful symptoms from being post-menopausal, then you need to do something about them because it ruins your quality of life,” Professor Olver said.

“This is something individual patients have got to talk to their doctors about; their individual situations and risk factors and reasons for needing to be on or not be on HRT.”

Overall, the study showed tobacco smoke to be the only risk factor with no safe level of intake, while there was no limit to recommended levels of fruit and vegetable consumption.

“The interesting thing about this is that it’s not saying to cut out anything,” said Tim Crowe.

“It’s really about having more of. plant-based foods, and not going overboard on eating red meat.”

-oOo-

From the Conversation Newsletter



## Winners and losers in the Trans-Pacific trade deal: experts respond

Australia is among 12 nations signing the historic Pacific rim trade and investment pact, the Trans-Pacific Partnership. The agreement, eight years in the making, is one of the largest free-trade agreements in history, encompassing countries that represent 40% of the global economy.

We've asked our experts to explain some of the winners and losers.

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### **The Trans-Pacific Partnership will transform intellectual property**

**Matthew Rimmer, Professor in Intellectual Property and Innovation Law, Queensland University of Technology:**

The agreement will protect legacy copyright industries, famous trademark holders, patent owners, and the holders of trade secrets. We still need to see the final “ugly compromises”. There is a concern that the TPP will be hostile to disruptive technologies and innovation in the digital economy. There are also fears as to the impact of the TPP upon privacy, consumer rights, freedom of speech, local content rules, and network neutrality.

The TPP will have a significant impact upon public health in the Pacific Rim. Pharmaceutical drug companies and biotechnology developers will benefit from stronger patent standards. However, this may adversely impact upon access to affordable medicines. Australia showed backbone in the final negotiations in Atlantic, refusing to fully accede to the US demands in respect of biologics. The safeguards for tobacco control measures in respect of graphic health warnings and plain packaging of tobacco products are limited - rather than comprehensive.

The US Trade Representative engaged in greenwashing in respect of the TPP at the Atlanta talks. The Environment Chapter does little to protect the air, land, water, and biodiversity of the Pacific Rim. The Investment Chapter will enable Big Polluters to challenge government regulations in foreign investment tribunals. At a time when we should be taking decisive action on climate change, the TPP locks in fossil fuel investments. It is notable that the TPP has been lauded by big mining companies.

Given our broken treaty-making process, the Australian Parliamentary debate over the TPP promises to be chaotic. It will be intriguing to see how Australia's new prime minister, Malcolm Turnbull, seeks to persuade the Australian public of the value of the trade deal. Opposition leader, Bill Shorten, will face an important test of his leadership. The Greens' Richard di Natale and independent Senator Nick Xenophon have flagged that they will take a critical approach to the TPP.

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### **TPP remains a threat to global access to medicines**

**Deborah Gleeson, Lecturer in Public Health, La Trobe University:**

Reports suggest that Australia's trade minister, Andrew Robb, has successfully fended off efforts by the United States to use the TPP to extend monopolies on clinical trial data for biologic medicines beyond Australia's current five year period. This represents a victory for Australian patients over the interests of transnational pharmaceutical companies, though the details of the TPP's pharmaceutical provisions are still unknown.

Biologics include many costly new medicines for conditions like cancer and rheumatoid arthritis. US pharmaceutical companies have been lobbying heavily to lengthen monopolies and delay the availability of cheaper follow-on drugs. Accepting longer monopolies would have meant hundreds of thousands in foregone savings to our Pharmaceutical Benefits Scheme each year. Rising costs would have likely been passed on to patients in the form of higher PBS co-payments.

But the outcomes for health and access to medicines in the region will be far worse. Humanitarian organisation Medecins Sans Frontieres has warned repeatedly that the TPP could be disastrous for access to medicines in developing countries such as Vietnam and Peru. In Vietnam for example, the TPP could shrink access to HIV medicines from the current 68% of eligible people to a mere 30%, leaving 45,000 additional people without life-saving treatment. The details of what TPP countries have agreed to remain to be seen, but the global health implications could be disastrous.

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## **The Investor State Dispute Settlement clause will be scrutinised**

**Tomas Fitzgerald, Senior Lecturer, Law, University of Notre Dame Australia:**

For all the rhetoric of the United States' "strategic pivot" to Asia in the 21st century, to date, practically, very little has been achieved. The TPP changes that; it is an historic agreement which represents the US' strategic response to China's growing economic clout. The TPP is, at its heart, an attempt to create a trading bloc of Pacific nations which excludes China, thereby ensuring the US' continued economic importance in the region.

While not as ambitious as, for example, the EU's common market, the TPP will set minimum standards for goods; reduce and eliminate tariffs; set up a common dispute resolution framework for members; and harmonise the rules of regional trade. This lead to greater trade between the TPP nations. Given Australia's economic reliance on exports, this is a positive for us; expect agribusiness - especially rice, sugar and beef - to be big winners. However, trade agreements will always see winners and losers across the economy.

When the text is released, two areas in particular will receive close scrutiny; the Investor State Dispute Settlement (ISDS) clause and the clauses dealing with intellectual property. I have [previously argued](#) that concerns relating to the potential impact of ISDS on sovereignty are unwarranted. Expect the ISDS clause to be substantially identical to the earlier leaked version, which explicitly dealt with many of those objections. It is likely ISDS proceedings will be public, and will explicitly exclude "future profits" from what constitutes expropriation, in all but the most exceptional cases of state misconduct. Similarly, expect the clause to have strong protections to prevent companies suing states for enacting public interest regulation like tobacco plain-packaging laws.

The intellectual property provisions - particularly for patents and "next generation" biotech and pharmaceuticals - do represent a potential risk to Australia. However both trade minister Andrew Robb and the prime minister Malcolm Turnbull have sought to reassure that those provisions will not adversely affect the Pharmaceutical Benefits Scheme.

The TPP highlights Australia's unique position; economically, politically and geographically sandwiched between our largest trading partner, China, and our largest investment partner, the United States. While much is made of Chinese investment in Australia, quantum of that investment is dwarfed by US investment. Australia's current experience of attempting to simultaneously negotiate the TPP and the China Australia Free Trade Agreement foreshadows the balancing act we are likely to face as we move into the "Asian century".

## Ocean predators can help reset our planet's thermostat

September 29<sup>th</sup> 2015

If you knew that there was zero percent chance of being eaten by a shark, would you swim more often? Rhetorical questions aside, the fear of being eaten has a profound influence on other animals too, and on the way they use marine environments.

Turtles, for example, fear being eaten by sharks and this restricts the movement and behaviour of entire populations. But when the fear of being eaten dissipates, we see that turtles eat more, breed more, and go wherever they please.

It might sound like turtle paradise, but in an [article](#) published today in Nature Climate Change we show that loss of ocean predators can have serious, cascading effects on oceanic carbon storage and, by extension, climate change.

### Cascading effects

For a long time we've known that changes to the structure of food webs – particularly due to loss of top predators – can alter ecosystem function. This happens most notably in situations where loss of predators at the top of the food chain releases organisms lower in the food chain from top-down regulatory control. For instance, the loss of a predator may allow numbers of its prey to increase, which may eat more of their prey, and so on. This is known as “[trophic downgrading](#)”.

With the loss of some 90% of the ocean's top predators, trophic downgrading has become all too common. This upsets ecosystems, but in our article we also report its effects on the capacity of the oceans to trap and store carbon.

This can occur in multiple ecosystems, with the most striking examples in the coastal zone. This is where the majority of the ocean's carbon is stored, within seagrass, saltmarsh and mangrove ecosystems – commonly known as “blue carbon” ecosystems.

Blue carbon ecosystems capture and store carbon [40 times faster](#) than tropical rainforests (such as the Amazon) and can store the carbon for thousands of years. This makes them one of the most effective carbon sinks on the planet. Despite occupying less than 1% of the sea floor, it is estimated that coastal blue carbon ecosystems sequester [more than half](#) the ocean's carbon.

The carbon that blue carbon ecosystems store is bound within the bodies of plants and within the ground. When predators such as sharks and other large fish are removed from blue carbon ecosystems, resulting increases in plant-eating organisms can destroy the capacity of blue carbon habitats to sequester carbon.

For example, in seagrass meadows of Bermuda and Indonesia, less predation on herbivores has resulted in spectacular losses of vegetation, with removal of [90–100%](#) of the above-ground vegetation.

### Stop killing predators

Such losses of vegetation can also destabilise carbon that has been buried and accumulated over millions of years. For example, a 1.5-square-kilometre die-off of saltmarsh in Cape Cod, Massachusetts, caused by recreational overharvesting of predatory fish and crabs, freed around [248,000 tonnes of below-ground carbon](#).

If only 1% of the global area of blue carbon ecosystems were affected by trophic cascades as in the latter example, this could result in around 460 million tonnes of CO<sub>2</sub> being released annually, which is equivalent

to the annual CO<sub>2</sub> emissions of around 97 million cars, or just a bit less than Australia's [current annual greenhouse gas emissions](#).

So what can be done? Stronger conservation efforts and modification of fishing regulations can help restore marine predator populations, and thereby help maintain the important indirect role that predators play in climate change mitigation.

It's about restoring balance so that we have, for example, healthy and natural numbers of both sea turtles and sharks. Policy and management need to reflect this important realisation as a matter of urgency.

More than 100 million sharks may be killed in fisheries each year, but if we can grant these predators great protection they may just help to save us in return.

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From The Conversation Newsletter

## Many fear the worst for humanity, so how do we avoid surrendering to an apocalyptic fate?

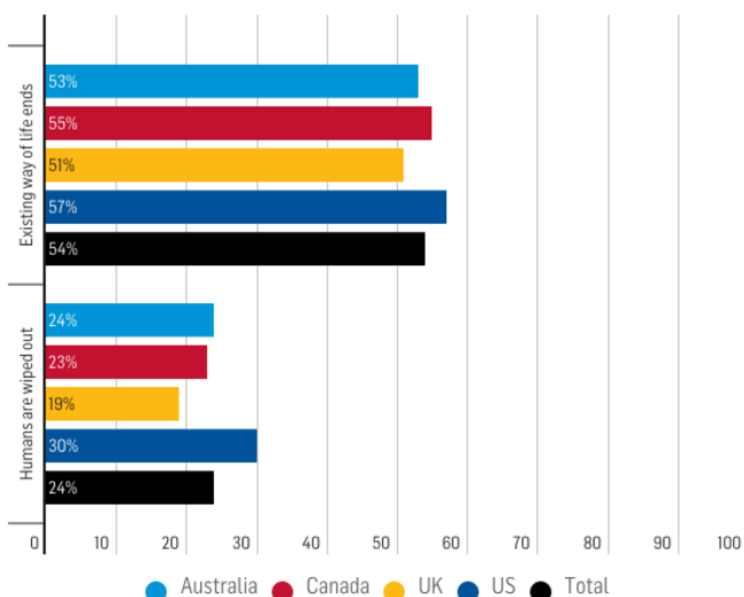
October 12, 2015 6.27am AEDT

A new, four-nation study has found people rate the risks of global threats to humanity surprisingly high. These perceptions are likely to be important, socially and politically, in shaping how humanity responds to the threats.

The [study](#), of more than 2000 people in the US, UK, Canada and Australia, found:

- 54% of people surveyed rated the risk of our way of life ending within the next 100 years at 50% or greater;
- almost one in four (24%) rated the risk of humans being wiped out within a century at 50% or greater;
- almost three in four (73%) believe there is a 30% or greater risk of our way of life ending (30% said that the risk is 70% or more); and
- almost four in ten (39%) believe there is a 30% or greater danger of humanity being wiped out (10% said the risk is 70% or more).

### Perceptions of risks to way of life and humanity by country



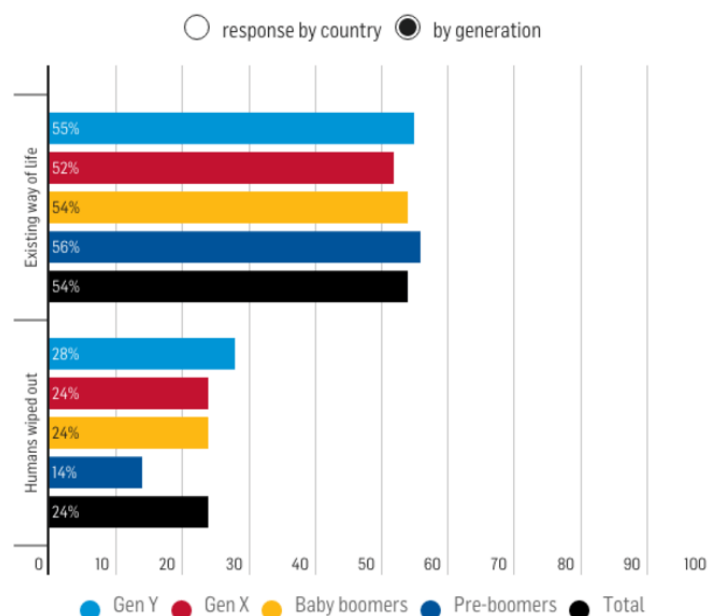
Percentage support for propositions that existing way of life and humanity have a 50% or more chance of ending in a century. [University of Wollongong](#), Author provided

The study also asked people about different responses to the threats. These responses were categorised as nihilism (the loss of belief in a social or moral order; decadence rules), fundamentalism (the retreat to certain belief; dogma rules), or activism (the transformation of belief; hope rules). It found:

- a large majority (78%) agreed “we need to transform our worldview and way of life if we are to create a better future for the world” (activism);
- about one in two (48%) agreed that “the world’s future looks grim so we have to focus on looking after ourselves and those we love” (nihilism); and
- more than one in three (36%) said “we are facing a final conflict between good and evil in the world” (fundamentalism).

Findings were similar across countries, age, sex and other demographic groups, although some interesting differences emerged. For example, more Americans (30%) believed the risk of humans being wiped out was high and that humanity faces a final conflict between good and evil (47%). This presumably reflects the strength in the US of Christian fundamentalism and its belief in the “end time”, a coming Apocalypse.

### Perceptions of risk to way of life and humanity by generation



Percentage support for propositions that existing way of life and humanity have a 50% or more chance of ending in a century. [University of Wollongong](#), Author provided

### A world of threats coming to a head

There is mounting scientific evidence and concern that humanity faces a defining moment in history – a time when it must address growing adversities or suffer grave consequences. Reputable journals are canvassing the possibilities; the new study will be published in a special issue of Futures on [“Confronting catastrophic threats to humanity”](#).

Most focus today is on climate change and its many, potentially catastrophic, impacts. Other threats include depletion and degradation of natural resources and ecosystems; continuing world population growth; disease pandemics; global economic collapse; nuclear and biological war and terrorism; and runaway technological change.

Many of these threats are not new. Scientists and other experts have warned of the dangers for decades. Nevertheless, the evidence is growing stronger, especially about climate change, and never before have actual events, including natural disasters and calamities, and their sustained and graphic media coverage so powerfully reinforced the possible impacts.

Not surprisingly, then, surveys reveal widespread public pessimism about the future of the world, at least in Western countries. This includes a common perception of declining quality of life, or that future generations will be worse off.

However, there appears to have been little research into people's perceptions of how dire humanity's predicament is, including the risk of collapse of civilisation or human extinction. These perceptions have a significant bearing on how societies, and humanity as a whole, deal with potentially catastrophic futures.

### **How does loss of faith in the future affect us?**

People's responses in our study do not necessarily represent considered assessments of the specific risks. Rather, they are likely to be an expression of a more general uncertainty and fear, a loss of faith in a future constructed around notions of material progress, economic growth and scientific and technological fixes to the challenges we face.

This loss of faith is important, yet hardly registers in current debate and discussion. We have yet to understand its full implications.

At best, the high perception of risk and the strong endorsement of an activist response could drive a much greater effort to confront global threats. At worst, with a loss of hope, fear of a catastrophic future erodes people's faith in society, affecting their roles and responsibilities, and their relationship to social institutions, especially government.

It can deny us a social ideal to believe in – something to convince us to subordinate our own individual interests to a higher social purpose.

There is a deeply mythic dimension to this situation. Humans have always been susceptible to apocalyptic visions, especially in times of rapid change; we need utopian ideals to inspire us.

Our visions of the future are woven into the stories we create to make sense and meaning of our lives, to link us to a broader social or collective narrative. Historians and futurists have emphasised the importance of confidence and optimism to the health of civilisations and, conversely, the dangers of cynicism and disillusion.

Despite increasing political action on specific issues like climate change, globally the scale of our response falls far short of matching the magnitude of the threats. Closing this gap requires a deeper understanding of how people perceive the risks and how they might respond.

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## **WHAT IS HAPPENING AROUND THE WORLD IN PERMACULTURE**

Article from the Resilience Newsletter

The following is part of an article written about resilience in Cyprus . A story of self-help and of how a community is coming together to create hope by u

sing Permaculture Principles and Practices - Carol.



## Resilience and Collapse: Notes from Cyprus

by [Lakis Polycarpou](#), originally published by [City of the Future](#) | OCT 5, 2015

In early 2014, I interviewed my cousin, Sofia Matsi, a newly minted permaculture designer and sustainability/resilience activist who lives on the Mediterranean island of Cyprus. Last year, Sofia related her experience of the all-but-complete collapse of the Cyprus economy in 2013 and her attempts, with others, to spark a movement for resilience and local self-reliance.

In this follow-up interview a year and a half later, Sofia describes how the explosion of interest and activity in permaculture, natural building, sustainability, resilience and relocalization in Cyprus is giving her renewed hope for the island's future.

Cyprus is a tiny nation, but when its banking system collapsed from overexposure to Greek debt, it sent a chill through the world economy: for the first time in living memory, a percentage of bank deposits were confiscated as part an agreement with EU leaders to bail out the country. This precedent threw into question not only the viability of the Euro currency and the European Union itself, but of the security of bank savings for ordinary people across the world.

Cyprus is comprised of an 80 percent Greek, 18 percent Turkish population; it has been *de facto* partitioned since the Turkish army invaded in 1974, taking over the northern 40 percent of the country. In 2004, Cyprus became part of the European Union.

Over the past 40 years, the intractability of “The Cyprus Problem” has puzzled and confounded generations of peacemakers and diplomats, as recurring talks between representatives of the two sides collapsed, again and again.

Recent developments, though, have raised the hopes of many residents on the island; new negotiations between Cyprus president Nicos Anastasiades and Turkish Cypriot leader, Mustafa Akinci, have been described by some observers as the most hopeful since the invasion. Others, however, are wary of what kind of deal might reached, especially since a major incentive for settlement is the recent discovery of large offshore gas deposits that could either revive the nation's economy or subsume it to the interests of international oil and gas companies.

In this light, Sofia's belief that—as with sustainability—political problems are best addressed at the common level, person-to-person, has particular resonance.

In the midst of her local activism and community building, Sofia has been busy developing a permaculture design for her family land in Cyprus that she calls “Petrera”. This year, she and a team of students and volunteers finished building “the first 21st Century Sandbag Earth-Dome in Cyprus,” on the property under the guidance of [Iliona Khalili](#), a global leader in natural building who specializes in superadobe structures.



Sofia believes that the interest in and need for permaculture and ecological design in Cyprus has exploded to the point where it's time for the movement to start cultivating its own core of teachers. To that end, she and her fellow permaculture designer Gabriel Pandelis **are conducting an Indiegogo campaign** to raise funds to travel and become certified permaculture teachers.

The idea, she says, is to simultaneously build a solid basis and local knowledge for ecological design in Cyprus and to create another node for regenerative education that can spread regionally and beyond.

“Whatever we do in Cyprus doesn't really stay in Cyprus,” she says, “It's like the effect gets multiplied and spread, from here to the nearby regions, and from there on.”



It seems like there's a gap, people don't really remember how our grandparents farmed, so I was having a hard time finding the more experienced people, and then an even harder time finding people my age to communicate with on these terms to whom I could say, you know, “let's not go for coffee or a taverna, let's meet up at the *xorafí* and collect seeds!” It was a big challenge. But now, about two years later, it's great. It's an amazing transformation of Cyprus.

In that time, the first PDC [permaculture design certification course] came to life in Cyprus—it took place a year ago, October of 2014. I got the opportunity to assist, to be an assistant permaculture teacher, which was exciting. I connected with all sorts of interesting people in Cyprus—people who were a lot more

experienced than I was—who wanted to get their PDC education; people who are experienced herbalists in Cyprus and who just wanted a holistic design for their projects, for their gardens—it was amazing. That course collected an awesome bunch of people, all sorts of people. And through that course I got connected with Gabriel, who I'm doing the [Indiegogo] campaign with.

It was a one-month long course. Peter Cow was the teacher, he came from the UK to do it. The people I met and connected with through that PDC—it's priceless. Before that of course, we were making other connections, but I believe the permaculture course gave me a push. Through the Foundation work—I was collaborating with [The Movement of Life](#)—I brought in permaculture knowledge, and then I started putting subjects on our menu that a lot of people were interested in.



We were being asked to talk about composting, vermicomposting, compost tea, the problems of genetically modified food—all of these interesting topics. We didn't really have all the answers, but with permaculture I learned how to start researching and figure out where the local resources were. That's how we got many movements started, including the seed movement, which got a lot of attention.

There was a seed movement in Cyprus before, a seed-saving group called [Kyprian Sporoi](#) who were doing work. But after our event—which we did in collaboration with the group [Peliti](#) from Greece—interest exploded. So we've continued working on that subject. We gather people to do a collective seed saving ... so that's a big part of the movement.

Profit needs to exist; we need to be sustainable, we need to be resilient, and people need to live, and live decent lives. So there needs to be an earning, and we need to honor the services that we're being offered. But it doesn't have to suffocate people with loans and stuff for people to have a house!

There's these people I connected with through the seed events that have a big interest in seeds, and they are helping set up the network of heirloom seed in Cyprus a little bit better. So all sorts of specialists are coming closer, coming together and we collaborate on different projects. That's what I love, two years later. I love the people. I love the collaborations that we've started in all sorts of subjects. It's not only Sofia, or Gabriel, or individuals separated, trying to do something. It's a platform, it's all these Facebook groups, and Dropbox common folders that people are sharing and updating, and events, event gatherings that we have ... these are the important things that are happening now, big shifts.

**LP: It sounds like the movement has grown tremendously.**

**SM:** That's what I feel. From people who want to get more information, to get more specialized to people who don't really have any knowledge, but have a real interest. Now that we're doing more events, these people—they are everyday people who might have a small interest, but they're not really ready to do a big life transformation yet—but they have events to attend. And that's what I like. They can attend a gardening project on a Saturday, or they can attend a talk on seeds, or a movie projection on genetically modified food.

So we have the collaborations, and many many ideas—endless ideas!—to keep on going with some events. Similar ideas to what I read in *Transition Towns*, the book that we talked about—similar community events that the author was proposing, to get your communities engaged. Get simple spaces, don't rent, don't pay big money, just get some spaces and get together and watch movies, and have a feast—which makes it fun.

**LP: Who are the people who are involved? Is it mostly young people? Is it all generations?**

SM: The positive thing is that I'm meeting a lot of young people through this, people who are starting their lives now, they want to build their houses ... so last year, the project we did with Iliona Khalili—now we have one more tool, we have one more way to build houses. People who want to design houses more ecologically, they have a how-to.

And it attracted professionals too—architects and civil engineers and others. We are getting a lot out of that, because it means we're not on our own. We want to rebel against the system, as you know. But we also want to make it resilient. So if we are going to make a difference, we must start by getting this knowledge out there, by convincing people that this is a very legitimate way to build your house.

Not everyone has the physical power to build a structure like this. So we had an idea: what if we had a more specialized group in Cyprus that has the skills, has the knowledge, has a civil engineer, an electrical engineer? And then they know the natural building method we want to apply in our houses?

**LP: This is interesting—there is the question of how do you engage the broader community. You've got to engage the professionals, the architects and engineers, people who are connected to the established systems in some way.**

SM: That's a difference that I see. Before, probably there were initiatives that were happening, like seed saving groups, but there was resistance on their part to collaborate with the system in any way. Which didn't really help get it out there. And that's what I love in the groups I collaborate with. We know where we stand, we know that we reject certain structures that are not working, but we're not pushing that in a way that would block knowledge from getting out there. We're using the resources we have access to, like television shows, radio shows, the papers, we're using all of these fun resources to connect with people. And it's working. People have the interest, they just need to see you doing it so they can start trusting.

**LP: It's great because you have some demonstration projects that are actually working now. Can you tell me about the Earth Dome building?**

SM: It's a superadobe sandbag technique that we used with Iliona—it's still not finished yet, we still have work, the fun work, the plastering and the waterproofing to do.





The technique [superadobe] actually makes a lot of sense for Cyprus. Cyprus traditionally had cob [*plithari* in Greek], but in terms of earthquakes—Cyprus is in an earthquake zone—superadobe is a very safe technique, and it's a very fast technique as well.

I was hesitant at the beginning to be honest, but after we built it, I sensed how safe that structure was, just because of the geometry. It's a circle, and then a dome—it's pure math, pure physics that it works out. And then you can just play with materials, use the earth that you have locally.

We wanted to make the building a seed bank, so we decided that it needed to go somewhere cool. We chose not to put in a lot of windows and light. All the props that we used while building were used to make shelving, to make it easy for us to build an entire library of seeds. That was it. And that just made complete sense.

The design needed careful choices. It needed also some decisions. We ended up using some cement. When we conducted a soil test, we found that the soil here is almost pure sand—like zero clay. So that is not as safe a structure. So do I want that? Do I want to create something that's going to collapse very soon under the rain? Or do I want to build something that would be safe also for me to be inside? So it's the balancing of things. Another option of course would have been to bring clay in. Which I didn't have the time to search for. So, you go with cement. Anyway it was 7–8 percent cement that we used for stability.

So all the decision-making—you observe what will work, what won't work. When Thomaso came—one of the architects who was co-teaching the course—we ended up making huge changes, because we encountered problems that we never could have anticipated, and we had to deal with them. So it was a great experience to work on that.

We attracted so many people who were enthusiastic about natural building—unemployed people, students, recent graduates from architectural schools—we had a lot of specialists, which was so exciting! It was people-people, everyday people, who want to build their houses, but also specialists who studied

architecture, civil engineers, electricians, you know, people who could do this professionally and could help us in the future.

Profit needs to exist; we need to be sustainable, we need to be resilient, and people need to live, and live decent lives. So there needs to be an earning, and we need honor the services that we're being offered. But it doesn't have to suffocate people with loans and stuff for people to have a house!

So, there's options—do-it-yourself completely, collaborate with others, do it more “professionally”—I believe it's good to always have options. And to not just say there's only way you can do permaculture. You can do it in different ways.

SM: There is an organization in Cyprus that I connected with after we did Iliona's course called *Geodomo*. And it is focused on natural building. And they're doing an excellent job reviving traditional Cypriot techniques with local materials, cob. Maria Kosti is doing her PhD in collaboration with the University of Cyprus on cob. So there's great people coming out with these solutions, and I'm positive that the traditions in Cyprus are not being lost.

**L: Tell me about your Indiegogo campaign.**

SM: Well I've been involved in organizing seminars for the past year. The first course I organized up on the land was an introduction to permaculture. And we attracted about 15–18 people—there was good interest. That's when I understood that people are ready for this. People want to know more about permaculture. That was actually a testing course to see if we were going to organize a PDC.

Then PDC itself came up with a different group of people! Which again confirmed that people were ready for that. Then it was Iliona's course, last summer. Through all these courses that I've been facilitating and organizing, I've realized that we have a need. We want to keep these courses happening. But we also want to keep them affordable for people to take, because the people who need them more are the ones who, most of the time, cannot afford it.

And we also had the thought that apart from organizing some seminars on our own, it would be a great idea if we were certified teachers, then we could start pushing this knowledge through schools, through the education system.

I've already been invited in multiple schools, high schools, sometimes elementary schools, to do either a practical workshop—seed-saving and gardening, that stuff—or a lecture on permaculture. And people get excited with it. I see the potential. And if I am certified as a teacher, I can officially push things. I can say I'm certified, let me teach an afternoon course in the yearly teachings that you do—like my dad did his gardening training for a couple of years. Why not have permaculture be like that? And you can't really bring a teacher from Spain to do that throughout the year. It needs to be someone who lives in Cyprus.

So these are all these exciting solutions I see, both in Cyprus and in Greece! In spite of the image that is thrown out there. Yes, Athens as a big city—it's tough to transform Athens. And because of the lack of willingness of people to collaborate or change things. But visiting Greece, in other areas, or a little bit outside Athens, I see a completely different image from what is shown on the news, or what people tend to emphasize.



This summer, I visited good friends that live in communities or are developing projects in different parts of Greece. So I passed through **Re-green**, where I did my PDC... two years later there's a huge transformation of the land, and I can see how they make their lives, how they make a living through organizing and educating people.

Then I went a bit further and I saw how another friend is able to make his living with a more natural lifestyle, by producing food. And I went to other friends I saw how they save a lot of money by building their own structures. So they put the labor in, they get the knowledge, and they apply it, and they have a shelter, which is important!

And then I have another friend up in Komotini, who is a guru of seeds, and I see how simple things are, and how simple things can be. And that you could be more or less self-sustained in food, using a small plot of land, just by saving your own seeds, year by year. You make them stronger, you make them more resilient in those climatic conditions, you learn more what works in your land, you just make it happen. And then throughout the summer you have tomatoes, peppers, cucumbers, melons, watermelons, and you can feed your family out of your garden.

And it's not only people who have nothing else to do—these are people with jobs, a teacher and a nurse. And at the same time, they run this project at their house, in a very simple way. It's inspiring to see all sorts of solutions that people find. There's not just one way to respond to this crisis. People have found many interesting ways.

I have a friend who is a psychologist, and he currently lives in Kyrenia [in the Turkish-controlled part of Cyprus]. And he had this great idea of getting a plot of land, and getting actions happening there to engage the local community, which is very underprivileged in that area. And he has this great idea of giving them simple tools, gardening tools, knowledge of growing some basic things, and at the same time offering community counseling services to help support those families who are dealing with very serious problems.

More projects like this, I believe would make a difference, and build those bridges between the two communities. This is what we need.

From my perspective, that is how I see things moving along. Bringing the knowledge more to the people, and empowering them that way, in both communities.

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## A Story of people making a stand in Italy

From the Resilience newsletter

### The Miracle of Mals

by **Ute Scheub**, originally published by Future Perfect | TODAY



Photo (CC BY-NC-SA): Ägidius Wellenzohn

By banning pesticides in a referendum, the community of Mals in Southern Tyrol is set to garner worldwide attention. That does not mean that the conflict is settled.

The winds of change are blowing through Mals. In September 2014, this South Tyrolean community in the Upper Venosta Valley dared rise in a democratic rebellion, holding what must be the world's first referendum against pesticides and triggering a torrent of threats, lawsuits, acclaim, and awards. Journalists from around the world descended upon the rebel village on the green banks of the Adige River to cover the "Miracle of Mals" and its unruly, freethinking residents.

### **Gusts of pesticides**

The wind is also the beginning of the story. On about 300 days per year, the strong katabatic "Oberwind" from snow-covered 3,000-meter peaks gusts over the Mals heathland, blowing off the pesticides that are sprayed in the region's intensive fruit farming. For some time, farmers along the Adige have been banking on Golden Delicious apples and other quite bland-tasting money-makers.

A veritable monoculture-army of apple and cherry trees stands in rank and file along the Venosta Valley. This type of land-grabbing on the hills around Mals hardly leaves any room for organic farmers and nonconformists. One organic farmer was even fined because the wind left residues of toxins on his herbs. In 2011, German toxicologist Irene Witte analysed hay samples from the region and came to the conclusion that their pesticide levels were so elevated that they ought to be disposed of as toxic waste.

### **A gale of outrage, a mighty storm**

In the wake of these horror stories, a gale of outrage roared through the 5,000-strong community. Among those who especially fanned the anger were the *Umweltschutzgruppe*, an environmental protection group that was working on reviving the Venosta Valley Railway; the dairy farmers who worried that contaminated hay would result in contaminated cheese; and the *Bund Alternativer Anbauer* (Association of Alternative Farmers), who feared for their organic harvests. Also involved were the citizens' initiative *Adam & Epfl* (Adam & Evple), who opposed the yoke of monoculture; supporters of Mayor Ulrich Veith, who changed the community statutes in 2012 to allow referenda; as well as the promoters' committee, with its speaker—pharmacist Johannes Fragner-Unterpertinger. The pharmacist published a "Manifesto for Health Protection" that was signed by more than 50 physicians, vets, dentists, and biologists. Since 2013, he has made multiple attempts to hold a referendum.

Following this, the brave pharmacist—a man with a handshake that could make stones crumble, who spends his nights writing novels and poems—had to contend with a good deal of direct headwind. He received

threats and insults, his yard and the family tomb were vandalized, at times he even required police protection. His opponents remained anonymous, yet he knew where this mighty storm was coming from: The powerful agricultural lobby has much to lose if the example of Mals gains national and international traction.



Photo (CC BY-NC-SA): Ägidius Wellenzohn. [Further images at original.](#)

### **Tailwind**

But there was also some tailwind from the community, especially in the form of “Hollawint.” In 2013, identical warning letters to the editor began to pop up in the local newspaper, a *Hollawint* website dedicated to the topic of pesticides went online, and all the villages in the valley were suddenly plastered with banners advocating a toxin-free homeland. Some of the banners were ripped off or lit on fire, only to be replaced by “travelling banners” that seemed to wander from house to house of their own accord.

“Who are the mysterious people behind this?” the residents of Mals wondered. It’s an all-female action group consisting of architect Martina Hellrigl, organic hair stylist Beatrice Raas, educator Margit Gasser, and beekeeper Pia Oswald. They are mothers who are concerned about their children’s health, but they also had a lot of fun with their collective operations. Their events brought together the various rather male-dominated opposing groups. At one point, they presented a huge “shopping list” with foods that used to be grown in the Venosta Valley and have since fallen victim to the apple wasteland and the pesticide-ridden winds.

What motivates them? “Our swallows and larks are gone—they can’t find insects anymore,” mourns the architect about the loss of biodiversity. “This is about quality of life: a landscape where we can recharge without having to travel elsewhere,” the beekeeper explains. People from the Upper Venosta Valley “are a little different,” the educator smirks. “Fun-loving,” the hair stylist adds. “This border region between countries and cultures has always been restless, always been vulnerable to conflict,” says Thea Steiner, owner of the Panorama organic hotel. “Survival, solidarity, innovation” has thus become the motto of many Venosta Valley inhabitants.

### **Turning winds**

In September 2014, fully 75 per cent of voters had expressed their support for a pesticide-free community. Yet proponents of pesticides found new ways to turn the wind in their favour. When the mayor wanted to anchor the people’s will in the community statutes in January 2015, many community councillors failed to show up at the session, blocking the required majority vote. Threats and lawsuits also flooded the mayor’s and the pharmacist’s mailboxes. They were accused of “fraud,” wasting funds, and holding an unauthorized referendum. One gruelling, expensive lawsuit is still under way in faraway Bolzano.

But since May 10, 2015, the winds of local change have turned in favour of the environmentalists once again. Mayor Veith's grassroots anti-pesticide approach was confirmed in local elections with an unexpectedly strong result of 72 per cent. Now he hopes for a two-thirds majority in the community council when the pesticide ban in Mals is finally up for a permanent vote.

## Look what is happening in the USA – the awful truth about coal mining

From: the Resilience Newsletter

### **The Divestment Movement Has Unexpectedly Exploded into the Trillions of Dollars and Here's Why**

by [Carol Linnitt](#), originally published by [DeSmog Blog](#) | SEP 23, 2015

At this time last year, building on the momentum generated by Climate Week and the New York People's Climate March, divestment advocates made an ambitious announcement: a plan to triple the \$50 billion in assets individuals and organizations had pledged to divest from fossil fuels by the time of the 2015 Paris UN climate negotiations.

That was an ambitious plan. But in the year since, according to [a new report](#) from [Arabella Advisors](#), the divestment movement exploded in scope and scale increasing fifty-fold, bringing the total combined assets of those divesting to an incredible \$2.6 trillion.

It's safe to say that no one, not even the most optimistic divestment dreamers, could have anticipated this outcome. So what's behind the global momentum for divestment?

#### **Climate Change Means Financial Risk**

This exponential growth has, in part, to do with the increasing awareness that climate change means financial insecurity. The risk to investment comes mostly in the form of what are called stranded assets: those fossil fuel reserves that will not be exploited due to efforts to limit climate change.

As Arabella Advisors notes in its new report, concerns about stranded assets and the devaluation of fossil fuels in a carbon constrained world, has been a focus of powerful financial institutions such as Citigroup, HSBC, Mercer, the International Energy Agency, the Bank of England as well as the respected Carbon Tracker Initiative which pioneered analysis on "[unburnable carbon](#)."

[HSBC warned investors](#) the movement of investment dollars to the clean energy sector could mean fossil fuel companies will be worth much less in the future.

It turns out investors are realizing that divestment doesn't mean financial losses. Thanks in part to plummeting global oil prices and the booming clean energy economy, [divested portfolios have been outperforming](#) those with investments in fossil fuels.



Climate change also increases the risk to investments by destabilizing the climate, meaning more extreme weather bringing storms or wildfires that, in turn, flood cities or destroy homes. Many international insurance groups have also warned that **climate change threatens the value we hold in all kinds of assets**.



*A large 'carbon bubble' on Wall Street during the 2014 Flood Wall Street event. Photo: Zack Embree.*

### **Divestment Movement Full of Unusual Suspects**

If you think divestment is for dogged climate activists, think again.

What the explosion of the divestment movement shows is, far from attracting a small group of political lefties, divestment has been taken very seriously by pension funds and private companies.

At this time last year, Arabella notes the divestment movement relied on the support of NGOs, foundations, student-led movements on university campuses, and other “mission-driven organizations” like climate advocacy groups.

Now, amazingly, over 95 per cent of the assets committed to divestment are held by large pension funds and private-sector businesses like insurance companies. But that doesn’t mean those original divestment groups aren’t still growing the movement.

In June 2015 **Pope Francis released his encyclical**, making a strong moral argument for climate action. Faith organizations represent \$24 billion in divestment assets.

Universities are also steadily joining the divestment movement. In the last year university divestments have tripled and major institutions, **like the University of California**, which holds a \$98 billion portfolio, are joining on.

In addition, local governments and public pensions are also building the divestment movement. For example, earlier this month the California General Assembly voted to divest its \$476 billion public employee pension fund from companies generating 50 per cent or more of their revenue from the coal industry.

Finally, major foundations from around the world are also divesting, recognizing redirecting their investments can be used as a powerful tool for achieving their organization’s mission. So far, Arabella reports 116 foundations have pledged to divest a shared \$10 billion in assets.

## Analyzing the Growth of the Movement

FIGURE 1:

AS OF SEPTEMBER 2015, 436 INSTITUTIONS AND 2,040 INDIVIDUALS FROM 43 COUNTRIES REPRESENTING \$2.6 TRILLION IN ASSETS HAVE COMMITTED TO DIVEST FROM FOSSIL FUELS\*



*Global Divestment Movement. Image: Arabelle Advisors.*

### Divestment Has Gone Global

Divestment is no longer a U.S. preoccupation.

In 2014, 78 per cent of divesting institutions were based in the U.S., according to Arabella. Today only 57 per cent of these institutions are based in the U.S. with divestment hot-spots popping up all over the globe. Notably Canada is second after the U.S. as a leader in divestment. Altogether, the estimated 436 groups supporting divestment represents more than 646 million individuals worldwide.

### Clean Energy is All the Rage

Divestment doesn't just mean pulling your investments from fossil fuel holdings — it also means redirecting investment dollars to alternatives like clean energy, green tech and climate solutions. In 2014, investment in clean energy **skyrocketed to \$310 billion** globally. That number is expected to continue growing with an estimated \$785 billion in divested assets being pledged to finding climate solutions.

Bill Gates personally pledged to **invest \$2 billion in renewable technologies**, saying “in addition to mitigating climate change, affordable clean energy will help fight poverty.”

Although companies like the coal monolith **Peabody Energy** argue **fossil fuels are necessary** to bring electricity and opportunity to developing nations, the divestment movement is working to bring clean and renewable energy directly to these places in a move that skips right over highly-polluting energy sources (this is known as **leapfrogging**).

And this makes a lot of sense, given renewable energy is now cost-competitive with fossil fuels and much more popular. Renewable energy is seen as the most effective way to both reduce and alleviate poverty in many countries while simultaneously working to cool the climate.



Arabella concludes that the divestment movement shows political leaders that the world is more ready for meaningful climate action than perhaps previously realized.

In December nations will meet in Paris to sign a global climate agreement. The Arabella report shows that leaders have the political cover needed to take bold steps at this important meeting.

But also, perhaps most significantly, the report shows that despite what the top leaders of the world decide, the momentum of the divestment and climate movement is likely to continue on regardless.

*All photos by Zack Embree.*

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## PERMACULTURE WORLD EVENTS

### South East Asian Bioregional Permaculture Convergence

November 16<sup>th</sup> to 30<sup>th</sup> 2015

Ilagan Capitol, Isabela, Philippines

[http://www.seapc2015.com/program\\_proper.php](http://www.seapc2015.com/program_proper.php)

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## OCTOBER 2016

### The 13<sup>th</sup> Australasian Permaculture Convergence – PERTH W.A

2016 Still in planning but start marking your calendars with the following tentative dates:

**3rd October 2016 - Permaculture public EXPO/Fair**

**3rd October 2016 - Convergence Welcome Dinner**

**4th October 2016 - Part 1 of 2 Day Permaculture Convergence**

**5th October 2016 - Part 2 of 2 Day Permaculture Convergence**

6-7th October 2016 - Concurrent Tours (Tentative: Two day south tour, two day north tour, 1 day Perth Tour, 1 day Hills Tour)

8th October 2016 - Post APC Master Classes (booked by us)

9th October 2016 - Rest Day

10-14th October 2016 - Concurrent Courses - Advanced Teacher training and Dynamic Groups (or similar)

For more information join the Facebook group:

<https://www.facebook.com/groups/1625742390991220/>

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## *THE BENEFITS OF BEING A FINANCIAL MEMBER OF PERMACULTURE CAIRNS*

Eleven Monthly meetings, with information, movies/videos and presentations from informative and interesting guest speakers and members. Plant of the month, Tool of the Month, Tip of the Month, Book of the Month, Cuppa and nibbles and networking time

Discount on most Workshop Fees organised by Permaculture Cairns

Learn more skill by attending Workshops, Permibees, Tours, information nights and events  
 Learn more about Permaculture Practices and Principles by attending Meetings, Workshops, Permibees.  
 Access to tropical vegetable plants and seeds and other resources.  
 Monthly Newsletter with local info on workshops and events and Permaculture news from around the world  
 Networking with people of similar interests from other organisations in the area eg. Seed Saver Groups,  
 Biodynamic Group, Local Exchange Trading System aka LETS, Community Garden Groups, Non-  
 Government Organisations like Terrain and Northern Gulf Resource Management Group.  
 Receive email notices of Events/ Courses by Permaculture Cairns, other relevant businesses/organisations -  
 not all of these notices will be in our newsletters if the news was received after the issue date.  
 Free access to our Library books on a wide range of Permaculture subjects  
 Continue learning about Permaculture through shared knowledge and experience  
 Learn how to live gently on this earth – Care for the Earth, Care for People and Share you excess plants,  
 seeds, knowledge, produce and skills.

**Meet and make new friends.**

**MEMBERSHIP FEES FOR 2015 ARE HALF PRICE TILL THE END OF THIS YEAR.**

You can now make jam without sugar – check out [www.greenlivingaustralia.com.au](http://www.greenlivingaustralia.com.au)  
 for Pomona's Universal Pectin

Please PRINT – SIGN – SCAN and RETURN by email to  
[treasurer@permaculturecairns.org.au](mailto:treasurer@permaculturecairns.org.au).

## Permaculture Cairns

### Membership Form 2015

One year's membership fee - 1 Jan – 31 Dec:

☐ Household membership \$30    ☐ Renewing Member    ☐

☐ Individual membership    \$20    ☐ New Member    ☐

Name(s) of all applicant(s) & DOB if under 18yrs):

.....  
 .....  
 .....

Postal Address: .....

..... Postcode: .....

Phone(s): ..... .

Email: .....

Signature: .....

Payment may be made at Meetings, at Cairns Penny or Online Direct Deposit to Permaculture Cairns A/c



at Cairns Penny in Grafton Street. BSB704-966 A/c No. 100009440 please include your Surname as reference.

If you have a Permaculture Design Certificate could you please complete the following survey.

YOUR NAME:.....

Who was the Course Presenter:.....

When did you do the Course:.....

Where did you do the Course:.....

Permaculture Cairns Public Meetings - All Welcome Third Tuesday of month Feb to Nov (Second Tuesday Dec). Doors open 6pm, meeting starts at 6.30pm at: ARC Disability Centre, 92 Little Street, Manunda

### Enquiries

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