

# Permaculture Cairns 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)

---

## JANUARY NEWSLETTER

### PERMACULTURE CAIRNS MEETING

Tuesday 17<sup>th</sup> January 6pm for a 6.30 start

ARC Disability Centre 92 Little Street Manunda

Members free, but bring some nibbles for the cuppa break  
and a dollar for the raffle, which helps pay for the venue.

Non members \$5

#### AGENDA

*Welcome to new members and visitors*

*Upcoming workshops and events*

*Permaculture Principle Number 1, a practical explanation.*

Guest Speakers:

**Emma Lodge from Cinderella's Cleaning Services will be teaching us how to clean our homes totally chemically free.**

**Rose from FNQ Wildlife Rescue will be telling us about the native animals we find in our backyards and procedures to follow for sick and injured wildlife.**

Plant of the Month, Tool of the Month, Book of the Month

and if anyone has something to add please bring it up on the night before we break for a cuppa and nibbles.

**Meeting close and now we enjoy a snack with a cuppa, now is a good time to mingle amongst friends**

**All finished by 8.45pm.**

*Here is an interesting piece on Bill Mollison, it gives more insight into the man than all the other articles I have read. (Editor)*

## **BILL MOLLISON, TIME SCOUT**

DECEMBER 30, 2016 BY [THE PERMACULTURE RESEARCH INSTITUTE](#) & FILED UNDER [WHY PERMACULTURE?](#)



We cannot describe here all of the many ways in which Bill influenced the world, or the many different hats he wore during his rich and adventurous life, but, to close 2016, there is one more that we would like to highlight: Time scout.

What is a time scout? It is, in many ways, what Bill devoted his life to becoming. In his autobiography *Travels in Dreams*,

When we design, we are always building for future floods, future fires, future droughts, and planting a tree a few inches tall that will be future forest giants, throw future shadows. Future populations will need future soils and forest resources, shelter, security. So somebody needs to range ahead in time, scout out the next century. We are not daydreaming. We are time scouts.

These few lines can't capture the entirety of a man like Bill Mollison, but they do perhaps give us a glimpse of the essence of who he was, what he believed, and how he chose to live his life. In this passage, he is describing one of the priorities of permaculture — a movement that Bill helped to found.

Permaculture is a portmanteau that fuses the words "permanent" and "agriculture." Here, permanent does not refer to something monolithically unchanging, but rather something that can evolve and grow and adapt with changes in the environment to continue to sustain those that nurture it. It is not the opposite of ephemeral, but rather the opposite of disposable. Where industrialized agriculture and lifestyles draw what resources they can and move on, disposing of the now-depleted land behind them without a second thought, permaculture design looks to emulate the cyclical, replenishing processes of nature. Nothing in nature is "disposable" — it goes on to serve some new purpose, to give back.

Throughout his life and many different career and academic experiences, Bill has always sought out opportunities to transform the act of taking into one of giving. This philosophy is one which has been at the forefront of many of his actions, as when he participated in helping Aboriginal communities raise money for education through the sale of wallaby skins.

Bill's life was not one which was tidy — and he himself would have agreed. He told Glenn Mulcaster, a writer for the *The Age*, that there should be awards for untidy towns. It isn't litter and mess that Bill reveres. Instead, it's the desire to roll up one's sleeves and participate in life

itself and to take responsibility for life itself, rather than relegate these roles and responsibilities to faceless corporations. A tidy façade that hides the poisoning and depletion of the planet is far uglier than growing beans on one's front lawn — and doing so is, in Bill's opinion, one of the best ways to address the growing obsession with false tidiness.

Permaculture, for Bill, was also more than the “beneficial assembly of plants and animals in relation to human settlements.” It was also a manifestation of his desire to improve the world with positive actions, rather than opposition. His experiences as a scientist with CSIRO and the Tasmanian Inland Fisheries Department solidified his conviction that our current way of life was unsustainable, “killing us and the world around us,” and at first, he chose protest as a way to combat these practices.

But protest did not result in success, not in changing the industrial and political systems, nor in satisfying his need to feel that his contributions were meaningful. Two years later, the principles of permaculture began to emerge in his mind. It was the answer to his sincere goal to not “oppose anything ever again and waste time. I wanted to come back only with something very positive, something that would allow us all to exist without the wholesale collapse of biological systems.”

His permaculture ideals drew on his rich and varied life experiences. In 1959, he looked around him at the abundant life in the Tasmanian rain forests, “inspired and awed by the interconnectedness of this ecosystem.” The seed was planted — could human beings look to complex, abundant, and self-sustaining ecosystems for a way to nurture both themselves and the environment?

Bill devoted a great deal of his life to making sure that the answer to that question was “Yes.” His writings on permaculture, including *Permaculture One* and *Two*, *Permaculture—A Designer's Manual*, and *Introduction to Permaculture*, among others, have educated and informed an entire generation. A generation which is now teaching its own children that the human way of life need not to be simply taking and taking from our environment, but living in harmony with it. There are now many organizations dedicated to teaching the very permaculture ideals that Bill began to formulate over half a century ago. Permaculture Institutes around the world have taught hundreds of thousands of people new ways to live in an abundant, sustainable environment.



From Left, Lisa Mollison, Bill Mollison (hungry and eyeing an orange), Geoff Lawton and Lindsay Smith-Moir.

He was always generous with his knowledge, and indeed, with himself. When asked if he was going to patent an apartment gardening method he developed in Sweden, Bill said “Oh, that’s ridiculous. You want to give it away and teach it so that every Swede is happy in their room.” And note his language—not “you must give it away,” not “you should give it away,” but “you want to give it away.” Any other thought process would have been alien to Bill. He said everyone “should do something to help themselves and others,” just as every element in permaculture design gives as much as it takes.

Bill lived his life as an adventurer, a traveller, a fisherman, a scientist, a lecturer, a farmer, and much more than that. His life did not, perhaps, take the most traditional path — or at least, not the one we’ve been conditioned to believe is traditional. In a 2001 interview with Scott Vlaun for Seeds of Change, Bill says, “I saw that Nature never has a single system. It never just grows pines or just grows anything, really.” Bill was not a man to just grow one idea, to just learn one way of living, any more than Nature tends gardens of just one type of tree. He embraced mistakes, seeing them as learning opportunities, believing that self-awareness and awareness of our surroundings could help us say “Look, I want to get to where I was going, but this way is not the way. I’ll try another way.”

Bill Mollison didn’t just describe ideals. He lived them, and in many cases, embodied them. He tried another way, and another way, and another—and in doing so, provided us all with a way to embrace and sustain ourselves and the earth. He described permaculture as a system of design in which “everything you put in had a multiple purpose and was in the right place to carry out its job.” Thankfully, for each and every one of us, for each and every life he and his teachings have touched, Bill Mollison was in the right place to carry out his job.

But we should also remember that, for a man who understood so much about the complexities of Nature and its cycles, for a man who was always “always building for future floods, future fires, future droughts, and planting a tree a few inches tall that will be future forest giants, throw future shadows” that while we close 2016 without him, he has not truly left us.

He devoted himself to a future he likely would not see, but that was not his concern. His concern was to help us and our children, and our children’s children to get there. Why? Because that is the job of a time scout, and Bill Mollison was nothing less.

Thank you, Bill, for all that you’ve given — the future shadows you throw will be long indeed

---

## ***Permaculture Principle no. 1***

***Observe and interact - Beauty is in the eye of the beholder***

***By taking the time to engage with nature we can design solutions that suit our particular situation.***

***In observing nature it is important to take different perspectives to help***

*understand what is going on with the various elements in the system. The proverb "Beauty is in the eye of the beholder" reminds us that we place our own values on what we observe, yet in nature there is no right or wrong, only different.*

# *Permaculture Cairns Workshop*

Sunday 29th January 2017 9am to 1pm

## **Grow Your Own Nutrient Dense Food**

The first workshop of the series began in October last year. This will be the second workshop, and workshops will continue monthly during 2017.

The plan is to continue the workshops to ensure everyone has the chance to succeed in growing their own nutrient dense food. We will start with the vegetable garden by adding organic matter, re-mineralising the soil, and increasing the diversity of soil microbes. This way we will be feeding the microbes in the soil which in turn will feed the plants. ""

*"Feed the soil not the plant" - a permaculture practice*

Once this is achieved plants will be much healthier. Pests and diseases will be almost non-existent because your nutrient rich plants are no longer attractive to insects.

All workshops will be conducted with Permaculture Ethics, Principle and Practices in mind.

In the first Workshop we covered: soil pH, soil structure, green manure cropping, various methods for making compost, using bokashi, beneficial plants to grow for improving soil, making compost, and for chop and drop mulching. An introduction to tropical perennial vegetables.

### **The second workshop will include**

**How to prepare a soil test**

**Why and how to re-mineralise the soil**

**Making the most of your compost**

**The why/how and what on organic fertilizers**

**How to make and use various compost teas**

**How to make and use Lactobacillus serum.**

**More on growing and using tropical perennial vegetables.**

**Workshops will be held on a permaculture property in the Cairns city area, where many tropical vegetables and fruits are grown.**

**COST: \$40 includes morning tea, workshop notes, seeds and a fertilizer sample.**

**Interested? contact me Carol Laing at – [newsletter@permaculturecairns.org.au](mailto:newsletter@permaculturecairns.org.au)**

**Did you miss the first workshop? Are you interested in attending a rerun of that workshop?**

Perhaps we will create a group of people interested in growing food well and meeting others who are just as dedicated to helping themselves improve their health and the health of their family.

My experience: I completed a Horticulture Certificate Course by correspondence 1983, during the 10yrs I owned and operated a plant nursery, a Permaculture Design Certificate Course 1992, Microbe Course and Chromatography Course with Mashumas 2012, Elaine Ingham's online Microscope Course' 2013, Graeme Sait's 4 day Nutritech Solutions, Certificate in Nutrition Farming 2014, and while attending National Biological Farming Conference 2016 I attended David Hardwick's Workshop on Soils. I also attended workshops on Soils with Terrain, Northern Resource Management and FNQ Biodynamics. I have an extensive library on many subjects, but mostly on how to grow food well using the microbes in the soil.

---

# *Permaculture Australia*

## *Look what has been happening*

### Accredited Permaculture Training

MEDIA RELEASE: 5 October 2016

### LAUNCH OF NEW ERA IN PERMACULTURE EDUCATION

New opportunities in vocational education and training in permaculture have opened up with the inclusion of five qualifications and a skill set in the national Agriculture, Horticulture and Conservation and Land Management (AHC) Training Package.

Endorsed in March 2016, the permaculture offerings comprise 66 units of competency in five qualifications (Certificates I, II, III and IV in Permaculture, and Diploma of Permaculture) as well as a Permaculture Demonstrator Skill Set. Full details are now available on the federal government website, [training.gov.au](http://training.gov.au).

The launch of the newly updated qualifications to representatives of the national permaculture community took place at APC13, the thirteenth bi-annual Australasian Permaculture Convergence held in Perth from first to fifth October 2016.

"The inclusion is a significant step for Permaculture Australia. Rarely has a not-for-profit association contributed such a comprehensive set of qualifications to the national education system. Availability of permaculture through the new AHC training package opens enormous opportunities", said APT Working Group spokesperson, Virginia Solomon.

"Permaculture now has a firm footing in vocational education in Australia. As students graduate from the scheme they will be well placed to join the workforce or advance through higher education. Many will take the initiative to find new solutions to the major challenges of our time".

Permaculture is a design system for improving the resilience of communities and for use by social business and institutions – those with a social purpose and mission.

### DEVELOPMENT

APT was developed by Permaculture Australia, a national, volunteer-based, not-for-profit organisation with a membership base of permaculture practitioners, professional permaculture designers and educators.

A voluntary organisation undertaking the task of developing, then having their course material officially adopted, signifies the level of dedication found among permaculture practitioners.

### ORIGINS

The idea of developing a national curriculum in permaculture was developed during a series of permaculture gatherings between 2000 and 2002. Accredited Permaculture Training was first officially endorsed as an Accredited Course through Queensland Training in July 2003.

Since then there have been many very successful programs including a Diploma of Permaculture (offered over 18 months to adults) and a Certificate I program (offered over a four year period to over 500 Year 9 students) at Eltham College. Certificates II, III and IV have been offered both face-to-face and by distance education through the National Environment Centre (Riverina Campus of TAFE NSW).

Other educational institutions have offered a range of certificate levels.

"Graduates from these training programs are now in paid employment in a range of areas including local government, community development, sustainable food production, alternative energy, sustainable building, teaching and training".

Now that the qualifications are available through a national training package, many more opportunities will become available.

"It has taken a lot of work by a dedicated group of permaculture educators to achieve inclusion in the new, national AHC training package. Now, at last, we can move forward in offering permaculture in schools, as workplace training and for professional development to skill-up a new generation of permaculture practitioners", said Ms Solomon.

The APT Working Group is developing assessment guides and other training resources and is keen to work with providers to expand the availability of this training.

Launch events are planned around the country in coming months. Anyone interested in gaining practical skills in permaculture or aspiring to deliver this training are invited to contact the APT Working Group of Permaculture Australia.

For more information: Virginia Solomon, APT Working Group

E: [vsolomon@netspace.net.au](mailto:vsolomon@netspace.net.au)

M: 0438 437 919

*Check out the website for info on courses: [permacultureaustralia.org.au/apt](http://permacultureaustralia.org.au/apt)*

---

## *Growing Food in January in The Wet Tropics*

*It has rained a lot lately and the plants in the garden are going ballistic. But that's ok, all those green trimmings will be used either as chop and drop mulch or for the worms or for the compost.*

*Lettuce plants have finally succumbed to the bad weather. So I have replanted using seedlings. Lettuce seeds may not germinate once temperatures go past 27 degrees. Here are some plants that will grow really well now - Amaranth, tree lettuce, kang kong, egg plant, bok choy, open hearted lettuce, cucumbers, snake beans, corn and all the basil.*

*My herbs in pots - thyme, oregano, marjoram, rosemary, mint and sage are doing well and have been for many years. The solution to growing these herbs in the tropics is a large pot with a very well drained potting mix, regular watering and small doses of organic fertilizer throughout the year.*

*The bunching shallots are starting to bulb up, so it would be good to pull some of them up and let them dry a few days, then split them into one and twos before replanting. Don't pull them all, keep some growing for cooking and salads. If you don't replant, they will grow again but will be very crowded and not grow as well. Plant in fresh soil.*

*Blue Lake beans are flowering profusely but not setting beans. It's too hot and humid for this variety now, so plant snake beans.*

*Keep cool, keep gardening, eat fresh and clean food. Cheers, Carol*

## WHAT'S ON AND WHAT'S COMING UP

### FNQ COMMUNITY EXCHANGE UPDATE – JANUARY CALENDAR

ATHERTON – Saturday 7th January 6pm-9pm Shared dinner and Trade Evening 17 Evens Street.  
Bring a plate to share, Irene will provide Kombucha and other drinks Event Host: Irene  
0439914876

KOAH – Saturday 7th January 9am – 1pm Monthly Market and Trade at Koah Community Hall.  
You are invited to be part of the local Koah Monthly Market, an excellent family friendly venue.  
This is a traditional cash Market however LETS members are welcome to participate and trade \$5  
or 5B per stall, set up from 8am.  
Event Host: Tonielle – 0422058995

CASSOWAY COAST – Sunday 15th January 11am – 3pm LETS Trade. Bring Lunch to share  
(BBQ available), items to trade, information on services offered and some good conversation as  
well. Please consider BYO plate & cutlery to save our host excessive dish duties. Car pooling  
recommended when making the trip from the Tablelands. (Weather permitting). Event Host: Bernie  
- 0403523244

YUNGABURRA Sunday 29th January 12noon – 2pm Retro Trade is now on Sunday at the rear of  
The Reds Sheds behind the cafe. Bring along a table or something else to display your wares,  
shared lunch and drinks will be available from the Cafe menu. Child friendly event Event Host:  
Melitta 40952340

CAIRNS CITY – Sunday 29th January 12- 2pm Lafew Teahouse, 33 Sheridan Street. At Lafew we  
provide a prime position opposite Rusty's Market. We offer: Kombucha, tea and coffee. Available  
50/50 Bartles/\$. Bring your trading sheets and goodies. For new members, please drop by and  
chat to the LETS traders, you can sign up on the day.  
Event Host: Lorna – 0475762838

---

### BIODYNAMICS FNQ EVENTS CALENDAR 2017

**January 21st Saturday - 6pm**

New Beginnings Party with the Curlews Band

BBQ supplied, bring salad or dessert. Free members and family.

Friends \$20 head

Bring goodies for raffles

Rainforest Bounty River Pavillion at end of Lindsays Rd, off Glen Allyn Rd, Malanda.

**February 12 Sunday - 10am – 3.30pm**

Master Biodynamic CSA and Market Gardener- growing vegetables for market. Guest speaker:

Mark Patton, Bellingen NSW

Tickets \$25 members \$30 non members

Bring food to share for lunch

Venue: Patrick English Pavilion

Malanda Showground.

**March 5th Sunday - 10am-3.30pm**

Biodynamic Basics for Beginners – About the BD Preps, compost,

Seaweed Tea, stirring 500.  
Bring chairs and food to share for lunch  
Ravenshoe Community Centre, Ascham Rd, Ravenshoe

**April 9th Sunday - 10am – 3.30pm**  
Working with the Biodynamic Calendar.  
Plus garden discussion with Michael and Lindy Alba, Mareeba  
Bring chairs and food to share

**May 14th Sunday -10-3.30pm**  
Horn Burial and AGM  
Collins Farm, 709 Kaban Rd, Kaban  
Bring chairs and food to share for lunch.

**June 11th Sunday - 10am-3.30pm**  
Life in the Soil: Soil Food Web and  
Chromatography and Microscopy  
Patrick English Pavilion Malanda Showground  
Bring food to share

**July 9th Sunday - 10am-3.30pm**  
Biodynamic Cattle and Pasture Management  
Julatten TBC  
Bring chairs and food to share for lunch

**August 13th Sunday - 10am-3.30pm**  
Biodynamic Home Gardening in the Tropics  
Cairns Redlynch  
Bring chairs and food

**September 10th Sunday - 10am-3.30pm**  
Horn Lifting and discussion on making & using Biochar  
Collins Farm 709 Kaban Rd, Kaban  
Bring chairs and food

**19th November Sunday - 10am-3.30pm**  
Minerals and Trace Elements – bringing them into Biodynamic Soils  
Kenneth Keough , Toumoulin Rd, Kaban.  
Bring chairs and food to share for lunch

**Enquiries : Simon Harden 07 40977837 Cheryl Kemp 4095 1119.**

## 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 22nd January 2017

WHERE: Jo's place, 39A Clifton Road, Clifton Beach.

PHONE: Jo 40553053

WHAT TO BRING: · Organically grown, non-hybrid seeds for our Seed Bank · 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 – 11:00AM Meet'n'greet, general housekeeping, seed sorting and access to Seed Bank

11:00 – 12 Talk by Emma Wilson about "Zero Waste" in the home. Please bring some of your own ideas or inventions for minimizing waste (reduce, reuse and recycle) to share after her talk.

12 - 12:30 Enjoy a shared lunch

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

Tour of Jo's garden – please wear closed shoes.

See you there!

-----

### USEFUL INFO

**All the seed packets in the supermarkets/hardware stores have more seeds in them than is usually required by the home gardener, so have a look at ....**

**The Seed Collection web site, they have seeds for \$1 a packet with 25 – 150 seeds depending on variety.**

**They also have seeds for sprouting and bulk seeds.**

*Going away from home for a few days/weeks - check out this tip.*

*Put a cup of water in the freezer, freeze it solid, then put a coin on top and leave it in the freezer. On your return, check the freezer to see if the coin has fallen to the bottom. If it has, it means the food defrosted and refroze. It would be a great idea to leave this in the freezer all the time.*

*Comments that make you think.*

Today, in the cutest voice, my 8-year-old daughter asked me to start recycling. I chuckled and asked, "Why?" She replied, "So you can help me save the planet." I chuckled again and asked, "And why do you want to save the planet?" "Because that's where I keep all my stuff," she said.

I interviewed a grandmother for part of a research paper I'm working on for my Psychology class. When I asked her to define success in her own words, she said, "Success is when you look back at your life and the memories make you smile."

I asked my mentor - a very successful business man in his 70s - what his top 3 tips are for success. He smiled and said, "Read something no one else is reading, think something no one else is thinking, and do something no one else is doing."

-----

## News From Home And Around The World

### THIS IS SCAREY

You Must Make Time To Read This Article all of it!!!!

By Graeme Sait CEO of Nutri-tech Solutions

## Nutrition and Disease – Interview with Professor Don Huber – Part 2

05 December 2016

In **Part 1** of this interview, Professor Huber shared some fascinating nutrition tips and, amongst many gems, he clarified the kind of reduced sugars that attract insects and those that boost plant resilience. In this second installment, there is a stronger focus upon glyphosate and the many problems associated with the most popular farm chemical on the planet.

---

**Graeme:** I had understood that glyphosate was originally patented as an industrial chelating agent and that it shut down the availability of key minerals, hence killing the weed. However, you have explained that the biological action of this chemical is of most importance. Could you please explain?

**Don:** Well, you are correct in that glyphosate was first patented in 1964 as an industrial chelating agent for manganese, to clean boilers. However, ten years later, Monsanto patented it for killing weeds. Then, in 2000, they also patented the chemical as an antibiotic. It certainly kills microorganisms with its mode of action, but most of the impact is on the good guys. Glyphosate predisposes the plant to disease organisms, to the point that you cannot kill a plant with glyphosate in a sterilised soil.

**Graeme:** Is this biocidal action related to shutting down the Shikimate pathway?

**Don:** Yes. As I have mentioned previously, this chemical gives the plant, and many of the supporting microorganisms, the equivalent of AIDS. It is a synthetic amino acid that can be incorporated as glycine in the proteins of microbes and plants. This aberrant amino acid can then create chaos. The Shikimate pathway is integral to life on the planet and it is seriously impacted. While it is true that mammals do not have a Shikimate pathway, we all house trillions of beneficial organisms that are dependent on this pathway.

**Graeme:** Gut health is integral to every aspect of our wellbeing and disease resistance. Surely this would have a massive negative impact on our health?

**Don:** There is an epidemic of 32 diseases that are related to glyphosate shutting down our access to key nutrients. It is an endocrine disrupter, a virulence enhancer, an enzyme inhibitor, a chronic toxicant, a growth regulator and a DNA mutagen.

**Graeme:** My goodness. It is a major concern when you realise how much of this stuff is used in agriculture. It is everywhere in the food chain. Most supermarket bread in Australia contains around 30% soy flour sourced from US, Roundup Ready soybeans that have had three sprays of glyphosate during the season. We were always assured that it biodegraded rapidly in the soil, but this appears not to be the case. In fact, it is cumulative in our soils.

**Don:** The current usage in the US involves over 225 million pounds per year and it is certainly persistent in the soil. There are now over 40 re-emergent diseases caused by glyphosate. The natural control organisms have been killed by the antibiotic effect. It is a very robust chemical because the carbon phosphate lyase enzyme, required to break it down, is extremely rare in our soils.

**Graeme:** Are there some soil types where glyphosate is more persistent?

**Don:** The higher the clay component, the more the persistence and the more acidic the soil, the greater the persistence.

**Graeme:** I see that the Australian scientist Dr Lukas van Zwieten from the NSW DPI, researching herbicide residues in our soils, has found that our soils contain the equivalent residue of one third of a tank of glyphosate in every hectare and the equivalent of three tanks of AMPA. He also found residues of other herbicides to the point that every hectare contained the equivalent of seven tankfuls of herbicide residues. It is no surprise that many have noted declining crop performance in the face of this chemical lode.

**Don:** AMPA is the breakdown product of glyphosate that persists for about eleven years in the soil. There is no doubt that crop performance and resilience is affected by these residues.

**Graeme:** Is there any evidence that the North American population has higher levels of glyphosate in their tissues considering the scale of the Roundup Ready cropping in their region?

**Don:** Most definitely. The level of glyphosate in breast milk is hundreds of times higher in Americans and Canadians, compared to European women. The levels found in water are also vastly higher. It is also found at concentrations of up to 400 ppm in food.

**Graeme:** How is this impacting our health?

**Don:** It is having a massive impact. It has been strongly linked to endocrine disruption, liver damage, kidney failure, placental damage, various forms of cancer and a host of digestive tract disorders.

**Graeme:** I guess that if you disrupt the immune system and viability of our 100 trillion gut organisms, by shutting down their Shikimate pathway, there must be a price to pay.

**Don:** There most certainly is. The immune system is largely located in the gut, so there is a link to the increase in autoimmune diseases. Gluten intolerance is directly related and there is a strong link to autism, which also has a proven association with gut health. Crohn's disease, ulcerative colitis, celiac disease, leaky gut and Irritable Bowel Syndrome, are all intimately related to this chemical in our food chain.

**Graeme:** My goodness! It is no surprise that they are calling glyphosate the new DDT. It will be very difficult for many farmers to contemplate a life without this herbicide, because no-till systems are totally dependent upon herbicide burn downs. They definitely need to rapidly prepare for the inevitable withdrawal of this chemical. I am amazed that we still have proponents of GMO crops out there, when Roundup Ready crops involve three sprays of this toxin on to the food crop. In Europe, they are happy that they never openly embraced the GM crops, but many consumers there do not realise it is still in their food chain. The EU barely grows protein crops these days. Most of their animal food is Roundup Ready soy or corn. What effect does this herbicide have upon livestock?

**Don:** There are serious health issues. We see manganese deficiency all the time and there are still born, deformed calves. It is difficult to move calcium into the bone without manganese, so knobby joints are common. Inflamed intestines are also common in most livestock but it has been particularly well documented in pigs. We are seeing new animal diseases that didn't exist before the introduction of GMOs. It is interesting to observe the wild animals. Raccoons, deer and rats typically avoid the Roundup Ready crops, even when they are hungry.



**Graeme:** Cattle are our predominant livestock in Australia. Are there specific issues with beef or dairy cattle?

**Don:** Yes, there are. Premature ageing is a major problem, but one of the most serious issues is reproductive failure. There has been a dramatic decline in fertility in the US. In fact, cattle fertility has dropped 30% in the last five years. There are often multiple services required to achieve just a 30% success rate. Just like the soil, we see that beneficial organisms in the rumen become super sensitive, but pathogens become resistant. Chronic botulism is neurotoxic and it kills cattle. It has become a major issue in Germany, due to this antibiotic activity of the Roundup in the GM feed.

**Graeme:** It is amazing that we have allowed this abomination to become the world's most widely-used chemical. What about our precious pollinators. Bees have been dying off with Colony Collapse Disease, to the point that beekeeping is no longer a viable profession in your country. The world lasts just four years without bees. Are the bees impacted by glyphosate?

**Don:** Unfortunately our bees are being seriously impacted by this chemical. In fact, when combined with the impact of the neonicotinoid insecticides, it is an absolute recipe for disaster. Bees can't digest honey when it loses its *Lactobacillus* and *Bifidus* component due to the antibiotic effect of glyphosate. They suffer neurological disruption and become disorientated. Eventually, the inability to digest the honey kills tissue and they die. This antibiotic effect is also impacting frogs and bats.

**Graeme:** I guess the negative impact on the immune system will predispose many species to plagues. It may not be pretty when our world eventually suffers the pandemic that is supposedly overdue.

**Don:** Yes this is correct. The bird flu in the Midwest recently killed 48 million turkeys and chickens. There was not a single death amongst birds fed organic grains that were free from Roundup. There is a huge relationship between glyphosate and compromised immunity.

**Graeme:** It really does seem that GMO crops have been a premature, poorly-researched introduction, based upon multinational greed. In their attempts to control the seed of the world, we have been subjected to many unacceptable risks. The BT gene, inserted in several crops, for example, delivers the BT toxins 24/7. The poison is delivered at much higher rates and for much longer periods than what occurs in Nature. Here, the applied bacterium, *Bacillus thuringiensis*, releases a poison for a couple of weeks to dispose of *Heliothis*. However, when a toxin is constantly present, Nature always adapts and, in this case, the response from the geneticists is counterproductive – they just keep increasing the strength of the toxins that are now exuded from the entire plant. We are now seeing the death of beneficials, and even mycorrhizal fungi are suffering from the onslaught. What is your feeling about the GMO technology?

**Don:** I feel very strongly that this is the greatest hoax that has ever been perpetuated in the history of man and I feel sure that, in years to come, we will look back in amazement at our blind stupidity. It has been all about failed promises and flawed science. It was sold to us on the basis that it would solve world hunger, help counter climate change and improve the finances of farmers. It has failed on every front. There were no food safety studies and we now have a massive global spike in food sensitivity and allergies associated with the introduction of 60 new proteins that we have never seen before. Proteins like nuts and shellfish are common allergens but now we have a suite of disruptive alien proteins. The British Medical Association, for example,

reported a huge increase in allergic responses directly associated with the import of GM soy into the UK.

**Graeme:** In Australia to date, we have thankfully not embraced the GM food crops. We have allowed cotton and canola, but margarine is not a food. Our biggest contamination source is the GM soy flour in supermarket bread, as mentioned earlier. I feel horrified when picturing all of those school children heading to school with lunchboxes laced with this poison and GM proteins potentially predisposing them to problems. There are so many kids out there who have developed food sensitivities.

**Don:** I share your concerns. The fatal flaw relates to the assumption that one gene relates to one function, and this is simply not the case. The inserted genetic material is inherently unstable. There is no substantial equivalence between GMO food and non-GMO food. I strongly suggest that your readers source the book *Altered Genes, Twisted Truth* by Steve Druker. This work offers a well-researched explanation of the multiple issues associated with this technology.

**Graeme:** I am hoping that the GM crops will eventually prove the architect of their own demise. They appear to have very little resilience to climate extremes. They were the first to fail in dry conditions in India, and this is one of the reasons for the mass suicides associated with GM crops in that country. Climate extremes are the shape of the future, so these small rooted crops, designed to prosper in perfect conditions, may become less and less relevant.

**Don:** There is another issue here that relates to vulnerability. I spent forty years in bio-warfare research looking at current diseases and new diseases, and evaluating their potential impact on US food production. We also developed rapid recovery programs, should we encounter disease epidemics or bio-terrorism. A society lives on its stomach and, in this context, there is nothing more important than agriculture. I can assure you that when you look at putting all of your major crops into an extremely susceptible technology, you have simply failed to learn lessons. We had the Texas male sterile incident in the seventies, where 70% of our corn hybrids were made with Texas male sterile. The idea was based in saving labour costs because you didn't have to mechanically detassel. Then, we had a mutation of a pathogen that targeted that particular gene. This mutant devastated those hybrids. Corn prices went crazy and it was only the thirty percent, without the sterile genetic modification, that got us through. The gene that has been replaced to allow for Roundup resistance in the plant has effectively created much less resistance to other things, and this is an extreme vulnerability to food security in uncertain times. This new gene is extremely vulnerable to mutation, and this is recipe for disaster with four of the five major US crops involved.

**Graeme:** I understand that you wrote a detailed, private letter to the Secretary of Agriculture, Vilsack, regarding this vulnerability, but it was not well received.

**Don:** I asked that GM alfalfa should be further researched. I asked that the USDA should be permitted to research this obvious vulnerability of GM crops, because they were prohibited from publishing any of that research. I also alerted him to a new microscopic entity that was always associated with our new, destructive diseases, and with reproductive failure in animals. I asked for research funding to investigate this new issue.

**Graeme:** I read one of your interviews online, and you mentioned your controversial finding that there appears to be a foreign entity associated with glyphosate. It is a weird protein-like substance that grows like a living organism. Could you please elaborate on this intriguing finding?

**Don:** It has been a difficult piece of research to pursue and several of the labs I have enlisted have had to withdraw their services. They came under intense pressure due to their involvement. My research began with investigating a major increase in miscarriage in pigs, cattle, goats, sheep and horses. The owners of stillborn 4-million-dollar foals wanted answers. We checked nutrition and mycotoxins and other obvious things, but there were no answers. A vet friend was diligent and kept on looking. He decided to look at some tissue under an electron microscope in the search for physiological clues. He consistently found an entity that is smaller than a small virus. It was about 20 nanometers and it was definitely not a virus. He only ever found this entity in the placenta or amniotic fluid of an aborted fetus. He wondered if there was a link to the animal feed and he checked. Sure enough the Roundup Ready soybeans were just loaded with the stuff. About the same time, I was involved in researching an explosion in Goss's wilt in corn, in the Midwest. There were different symptoms than we had even seen before, and we checked the tissue with the electron microscope. It, too, was loaded with this entity and there was more of the entity wherever the new symptoms were most pronounced.

**Graeme:** It sounds like an intriguing detective story. What happened next?

**Don:** Well, at that point in 2002, I approached a colleague who specialised in Sudden Death Syndrome linked to *Fusarium*, because *Fusarium* is a carrier for this entity. I had \$10,000 in private research funds available and I asked if he would like to be involved. He was really keen to help until his department head heard about it and totally forbade it. He recognised that it threatened their future endowments if they rocked the boat. So we just kept plugging away ourselves. I really feel that the veterinarian involved should get the Nobel Prize. He is amongst the sharpest and most perceptive individuals I have ever encountered.

**Graeme:** What is his name?

**Don:** At this point we are not releasing those details because two of the veterinarians that were previously involved were brutally treated. We have had six labs that had agreed to help, until the politics got in the way. To grow this entity we had to have a bacteria or fungi growing with it, just like the way you grow a prion. We had to get enough mass to enable testing. We sent the first sample off to England, after collecting about \$40,000 in donations to enable this analysis. There were so many proteins in the sample that the \$40,000 wouldn't even touch it. We eventually managed to grow it on a medium to secure better samples but the lab was suddenly closed down. We were back on our own.

We continued to work, and discovered that this thing grows really well in a fermented medium. It flourishes in silage. It can grow with things like *Saccharomyces* just as well as it does with disease organisms. Then we discovered that horses grazing on pasture fertilised with chicken manure were aborting their foals, so we looked a little further. We checked the grass and it was loaded. We traced the chicken manure and it was also loaded. However, it was also loaded with glyphosate. It turned out to be so packed with glyphosate, you were effectively putting out half the recommended rate of glyphosate with every 4 tonnes of manure.

This is a pervasive thing that is definitely related to glyphosate and we have proven that many times since.

**Graeme:** Where are you at now with this research?

**Don:** Well, to cut a long story short, we believe that this is a prion. You may recall the prion that was linked to Mad Cow Disease.

**Graeme:** How do you theorise that it happened?

**Don:** Well, there are a couple of possibilities. One of them relates to formaldehyde. We have found this chemical in all Roundup Ready food in amounts of up to 200 ppm. Prions thrive in the presence of formaldehyde, when all living things struggle. In one of our studies, we subjected this entity to 1000 ppm of formaldehyde and heated it to 80 degrees centigrade. Low and behold this thing really takes off. This is the classic response of a prion. The prion associated with Mad Cow Disease was linked to the use of an organophosphate insecticide (Phosmet), used to control Warble fly grub. It was poured down the animals spine and hence ending up in the brain. The organophosphate is a copper chelator. The brain proteins are metalloproteins with copper as the stabilising element. When copper is chelated in this manner, the metallo portion of that protein is substituted by manganese. Copper has two bond connections but manganese has six. This messes up protein folding. You grow the protein and it is resistant to protease, to formaldehyde and to temperature, and the darn stuff grows without any DNA or RNA. Glyphosate is a sister to Phosmet.

**Graeme:** Yes, I once met with the English guy, Mark Purdey, the farmer/researcher who discovered this link. He was truly impressive and really tried to spread the word about the link between Phosmet and the creation of the killer prion. I remember him describing how his lawyer and assistant were both killed in suspicious road accidents. For the readers benefit we had better explain a prion. A prion is a very small (smaller than a virus) infectious particle. It is still somewhat mysterious because it does not relate to normal infectious organisms at all. It is actually a misfolded protein that seems to form a template for other proteins to mimic the destructive behaviour. It is commonly linked to progressive neurological disorders and can be linked to amyloid plaques that mess up neuron messaging. In this context, do you think there could be a link between this prion and the plague of Alzheimer's?

**Don:** Well there has definitely been a huge increase in Alzheimer's since the introduction of Roundup-laden GMO food. Mark Purdey was certainly a very special man. When I return to the US, I am expecting test results that give further support that glyphosate has generated a destructive entity in our food chain. This chemical has no further place in agriculture.

**Graeme:** I couldn't agree more. Farmers need to seriously prepare themselves for a life without glyphosate as it will soon be banned. There is always another solution. Cover crops and roller crimpers may be part of that story. I would like to express my sincere thanks and gratitude for your efforts against extreme odds. You are a genuine hero and truth seeker and we are all indebted to you. Thank you so much for your time and for your passion.

**Don:** It was a pleasure. Keep up your good work.

# Christmas Island farm development could feed locals, cut grocery bills in half and inspire remote farmers on the Australian mainland

Christmas Island is commonly known for its immigration detention centre and highly profitable phosphate mining, and not so much for innovative farming.



[Photo: Christmas Island farm concept \(ABC News\)](#)

It sits in the Indian Ocean, 400 kilometres from Indonesia, and 2,600 kilometres from Perth. That isolation means that if you are buying your weekly groceries there, be prepared to empty your wallet.

An iceberg lettuce can cost up to \$19 and a cauliflower \$15, because fruit and vegetables travel thousands of kilometres by plane or ship to get there.

But that is all set to change if a sustainable farming company has its way.

Mark Bennett is the director of Christmas Island Hidden Garden Farms, based on Queensland's Sunshine Coast, which has just started a 21-year lease of 54 acres of crown land from the Australian Government with the aim of supplying the local community with fresh fruit and vegetables at an affordable price.

"What we intend to do is set up a diversified sustainable farming model, which would include a number of different growing strategies, from traditional open-row cropping to greenhouse strategies, aquaponics, chickens. We want to harvest eggs, honey," he said.

"Basically, we want to get as much as we would find in a normal supermarket growing in a field on Christmas Island, so that the local community can experience what we have here."

The company will limit its use of chemical fertilisers and pesticides and will nourish its crops using compost developed from the local community's organic waste.

## **Fresh food prices could be halved**

Mr Bennett grew up on the island and said his company hoped to help change the prices people pay for fresh food.

"If you go to a restaurant on Christmas Island and you get a steak and chips and salad, it's often joked that the most expensive part of the meal was the salad," he said.

"It's not uncommon for a family to spend \$500 on a weekly fresh fruit and veg bill and we hope to reduce that family food bill by half."

*On Christmas Island, a single iceberg lettuce can cost up to \$19 and a cauliflower, \$15*

Gordon Thomson, shire president of Christmas Island, believed the new farm had every chance of succeeding.

"The people who are proposing to grow the vegies are people who know what they're doing," he said.

"They are well supported morally and perhaps materially by the mine and the community generally."

Mr Thomson said it would also provide a sense of sustainability to the 1,500 people living on the island.

"If we can feed ourselves, this will be a great boost to our confidence as a community," he said.

"A community that can stand on its own two feet in every way is going to be a much more confident community and grow and perhaps retain more of the local population than we do at the moment."

But if you look at the history of Christmas Island, it is rare to find a successful large-scale business.

## A litany of failed ventures

The Christmas Island Casino survived for five years but went bust in 1998, and an ambitious satellite launch facility built in 2001 was a failure.



[Photo: Hidden Garden farm design for Christmas Island \(Supplied:](#)

[Hidden Garden Sustainable Farms\)](#)

This is the first farming venture of this size attempted on Christmas Island.

There has recently been a smaller banana and avocado farm, and an aquaculture farm was damaged during a cyclone in March 2014.

Other older farming ventures were halted by colonial attitudes and stupidity.

In the early 1900s, the British Phosphate Mining Company was like a big brother to its Chinese workforce, the so-called "Coolies", stopping them from any form of farming on a large scale.

The rare few had very small hidden garden farms, a practice that inspired Hidden Garden Farms' name.

Historian John Hunt said most of the Coolies survived on a diet of white rice and dried fish given to them by the mining company.

"The Coolies were in a vitamin deficiency diet and hundreds of them died from beri-beri, a vitamin B1 deficiency disease. The worst of it was over in 1904 and 1905," he said.

Despite this tragedy, the population continued to rely on imported food.

*"Basically we want to get as much as we would find in a normal supermarket growing in a field on Christmas Island so that the local community can experience what we have here"*

Mark Bennett, Christmas Island Hidden Garden Farms

In the 1980s, two businessmen came close to establishing a large pig farm. Unfortunately, there was a cultural hurdle - they built it right next to the Muslim cemetery.

"They put in thousands of dollars, they put in concrete pigsties, they had water trough, and then the Malays woke up to what was going on and the whole thing ground to a halt," Mr Hunt said.

Hunt believed Christmas Islanders had avoided setting up commercial farms because importing fresh food had proven to be too easy, and this might be the biggest hurdle for the new venture.

Hidden Garden Farms' Mark Bennett said if his venture did succeed, it would go some way to securing the island's food supply.

"If we look at the community of Christmas Island, they're exposed to the distribution system. So if the flights don't come in, if the ships don't come in, which it often doesn't during the wet season, they have to rely on reserves," he said.

"Ninety-five per cent of their nutritional input comes from those freight lines. That is a terrible exposure to have on a community.

"So in the best way you can secure your nutritional requirements is by growing your own food very close to home."

Mr Bennett said developing the farm was his way of giving back to the island on which he grew up.

He said it could be a blueprint for remote towns on the mainland as well.

Construction at the site started this month.

*If anyone has information they think should be included in this newsletter, especially about workshops and events, please send me the information in a way that I can copy and paste into the newsletter.*

*Editor, Carol Laing - [newsletter@permaculturecairns.org.au](mailto:newsletter@permaculturecairns.org.au)*

Permaculture Cairns Incorporated - Established July, 2007

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

Email: [info@permaculturecairns.org.au](mailto:info@permaculturecairns.org.au)

Web Site:



---

# *PERMACULTURE CAIRNS INC*

## *AGM MINUTES*

---

**Date:** Tuesday 13 December 2016

**Venue:** ARC Disability Centre 92 Little Street

**Time:** 6:30pm

**ATTENDEES:**

Jenny McGrath (President)  
Craig Phillipson (Treasurer)  
Niki Biro  
Donna Pansino  
Len Specht  
Bernie Nolan  
Carol Laing  
Bruce Zell

Jenny Hubbard  
Letizin De Rose  
Ernst Briet  
Sharon Bunn  
Hamish Fairbrother  
Michael Hyde  
Gordon Gettwielder

**OBSERVERS:**

Nil

**APOLOGIES:**

Nil

**CHAIRPERSON OF THE MEETING:**

Jenny McGrath

**QUORUM:**

The chairperson declared that a quorum was represented and the meeting was declared open at 7:00pm.

**PRESIDENTS REPORT:**

Delivered by Jenny McGrath

2016 Summary (see appendix)

**TREASURERS REPORT:**

Delivered by Craig Phillipson

2016 Summary (see appendix)

**ELECTION OF 2017 PERMACULTURE CAIRNS COMMITTEE:**

**PRESIDENT**

Nomination: Jenny McGrath

Nominated by: Craig Phillipson

Seconded by: Len Specht

Outcome: Jenny McGrath – Elected unopposed

**TREASURER**

Nomination: Jason Webber Craig Phillipson

Nominated by: Ben Webber

Seconded by: Jenny McGrath

Outcome: Jason Webber – Elected unopposed

## **SECRETARY**

Nomination: Craig Phillipson

Nominated by: Jenny McGrath

Seconded by: Niki Biro

Outcome: Craig Phillipson – Elected unopposed

## **GENERAL COMMITTEE – for the purpose of helping to organise and run special events**

Bruce Zell

Carol Laing

Michael Hyde

Hamish Fairbrother

## **GENERAL ISSUES**

Jenny spoke of the importance of running workshops with the funding we have received from Council. She also spoke of the importance of obtaining a PDC (Permaculture Design Certificate)

Jenny also talked about her experience of the recent Farmers Conference held in Cairns and this turned into general conversation of Farming in the Cairns Region.

Bruce Zell talked a bit about the life of Bill Mollison and the Legacy he has left.

Craig finished up the meeting with some light hearted helpful tips on having a more sustainable Christmas.

## **MEETING CLOSED**

8:20pm

# APPENDIX



Care of the Earth, Care of

People, Share the excess

## Permaculture Cairns Inc

Empowering communities with sustainable solutions

Permaculture Cairns Inc. Established July, 2007 Inc. No. IA35907

ABN:36068129173

Treasurer: Craig Phillipson

### **ANNUAL FINANCIAL STATEMENT for the year ended 30 November 2016**

<u>INCOME</u>	<u>2015/16</u>
Memberships	780.00
Door Meetings	85.00
Raffles Meetings	147.45
Events/ Expo	1132.00
Sales (Books & Mags)	191.50
Workshops fees	125.00
Sale equipment	1023.00
Donation	300.00
Interest	.66
<b>TOTAL INCOME</b>	<b>\$ 3784.61</b>

<u>EXPENDITURE:</u>	
Books, Mags for resale	1440.26
Donation World cassowary Day	150.00
Event expenses	587.07
Insurance	127.91
Meeting/ AGM expenses	222.00
Rent – Meetings	562.50
Stationery, Printing	119.44
Subscriptions	152.00
Workshop presenter fees	150.00
<b>TOTAL EXPENSES</b>	<b>\$3511.18</b>

### **Net Income for year** \$ 273.43

Cash Book balance as at 1 <sup>st</sup> Dec 2015	6158.52
Plus Income	3784.61
Less Expenses	3511.18
<b>Cash Book balance as at 30<sup>th</sup> November 2016</b>	<b>\$6431.95</b>

### Represented by:

Cash on hand - Petty Cash float	21.00
Cairns Penny Bank Account as at 30 <sup>th</sup> November 2016	6410.95
<b>Total</b>	<b>\$6431.95</b>

I, Craig Phillipson, Treasurer for Permaculture Cairns for 2016 state that the association keeps financial records in a way to properly record the association's income and expenditure and dealings with its assets and liabilities.

Signed:

## **Permaculture Cairns Inc**

### ***President's Report for 2016 AGM***

It has been another great year for Permaculture Cairns and the management committee; Peter Spooner (Secretary), Craig Phillipson (Treasurer) and I were kept very busy. It has been a joy working with Peter and Craig. Whilst our membership has remained steady, our newsletter subscription is growing. We now send our newsletter to over 500 people. Our monthly newsletter is a treasure trove of information and I thank Carol Laing for the huge effort she has done for being our newsletter editor.

This year we alternated our program with "backyard meetings" occurring on Saturday mornings or Sundays. These backyard meetings included: Weed workshop, Centenary Lakes Food Forest tour, Johnstone River Community garden tour, Wicking Bed workshop and a Food forest workshop.

Our nightly meetings in Little Street have been well attended and the social aspect has been enjoyed very much. The members and guests have acquired a lot of knowledge from our guest speakers.

Permaculture Cairns biggest event of the year was our May Expo on International Permaculture Day. We managed to inform, inspire, feed and entertain over 350 people who attended. The day was a great success and we had some amazing volunteers. We would like to thank:

Michael Hyde, Yujong Song, Terina Sylvester, Caroline Tomlinson, Hans Wilde, Nick McGrath, Niki Biro, Yumico Tanaka, Lindy Sinclair, Julie Norton, Carol Laing, Vanilda Cavalcante, Jason Webber, Martha, Paul Spooner, Bruce Zell and Judy Noller. It is times like these when we pull together that we appreciate the Principle no 8 ..Integrate rather than Segregate ..many hands make light work.

Permaculture Cairns also set up information booths at Cairns Ecofiesta and Carnivale on Collins.

This was an opportunity for the committee to engage with the community.

There are many more adventures to come in the next year and I encourage all the members to participate and volunteer at our events. There is always room for more ideas and more sharing. You are all invited to communicate with the new management committee and bring forth any suggestions for making Permaculture Cairns even better in 2017.

Thank you

Jenny McGrath

President 2016

Please **PRINT – SIGN – SCAN** and **RETURN** by email to  
treasurer@permaculturecairns.org.au.



## Permaculture Cairns

### Membership Form 2017

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

- |  |                       |                                       |                       |
|--|-----------------------|---------------------------------------|-----------------------|
| <input type="radio"/> Household membership \$30  | <input type="radio"/> | <input type="radio"/> Renewing Member | <input type="radio"/> |
| <input type="radio"/> Individual membership \$20 | <input type="radio"/> | <input type="radio"/> New Member      | <input type="radio"/> |

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 Every month on the Third Tuesday of month Jan to Nov (Second Tuesday Dec). Doors open 6pm, meeting starts at 6.30pm at: ARC Disability Centre, 92 Little Street, Manunda

### Enquiries

President: Jenny McGrath [president@permaculturecairns.org.au](mailto:president@permaculturecairns.org.au)  
Secretary: Craig Phillipson [info@permaculturecairns.org.au](mailto:info@permaculturecairns.org.au)  
Treasurer: Jason Webber [treasurer@permaculturecairns.org.au](mailto:treasurer@permaculturecairns.org.au)  
Website: [www.permaculturecairns.org.au](http://www.permaculturecairns.org.au)