

Permaculture Cairns Newsletter

EMPOWERING COMMUNITIES WITH SUSTAINABLE SOLUTIONS FOR 10 YEARS



Care for the Earth, Care for people, Fair share the excess

Permaculture Cairns Incorporated Web Site: www.permaculturecairns.org.au

Contact is via email at info@permaculturecairns.org.au

APRIL MEETING

Tuesday 20th APRIL 6pm for a 6.30pm start.

Members free, please bring some nibbles for cuppa break, non-members \$5

Venue: Endeavour Living & Lifestyle Building

Entrance: 4 Warner Street. Manunda

There are procedures required for Covid19 which include taking temperatures and recording of names and phone numbers on entry. If you have any flu like symptoms please stay home.

AGENDA

Welcome

Local upcoming events

Mushroom Workshop, who wants to do the workshop??????

Ecofiesta involvement

Tropical Vegetable of the Month – Sweet Leaf

**Guest Speaker: Satya will demonstrate how to Prune and how to Marcott
this will an hour long demonstration with question time**

Does anyone have some tips or information to add??

Meeting close 8pm now time for a cuppa and a chat with like-minded people

Report on the March Meeting.

Mason Campbell and Stephen McKenna from the Australian Quaranten Services gave a fascinating and informative presentation on what the Services do in our region of the world. They also identified lots of weeds that members brought to the meeting, and provided lots of site on the internet for identification of plants, here is the list, so no excuses. Once you have the correct name all the info on the plants become available. Do some research, see if you can eat the plants or if they are of medicinal use.

Some of the Weeds identified: Emilia souchifolia, Synedrella nodiflora, Euphorbia heterophylla, Callisia repens, Phyllanthus debilis, Drymaria cordata, Desmodium triflorum, Pityrogramma calomelanos, Crotalaria grahamiana, Crotalaria pallida, Pepperomia pellucida, Eleusine indica, Centella asiatica, Spermacoce remota, Hemigraphis reptans, Pouzolzia zeylanica, Cyperus sphacelatur,

- Weed spotter network
 - A voluntary citizen scientists and professional practitioners that aim to document find and document new weeds. They have a useful App' (Android only) that allows users to send images of unknown potential weeds to the Queensland Herbarium for identification.
 - <https://www.qld.gov.au/environment/plants-animals/plants/herbarium/weeds/weed-spotters>
- Australian Tropical Herbarium
 - An arm of the Australian National Herbarium which is based at the James Cook University Cairns campus. They house a collection of approximately 180 000 dried plant samples and have a useful public reference herbarium and a computer with many identification programs where people can take in unidentified specimens and attempt to identify them.
 - <https://www.ath.org.au/>
- Queensland Herbarium
 - The state herbarium which houses approximately 850 000 dried plant samples collected over at least 150 years. They have a free identification service- which requires samples to be sent in. Please read the website for further information.
 - <https://www.qld.gov.au/environment/plants-animals/plants/herbarium>
 - The following is a link to a pdf which is a very thorough example of how to appropriately collect a plant sample:
 - https://www.qld.gov.au/data/assets/pdf_file/0032/67469/collecting-manual-edition-2.pdf
- Australian Tropical Rainforest Plants
 - An extremely comprehensive plant identification key and database of fact sheets maintained by the Australian Tropical Herbarium and compiled over many decades via government botanists/foresters. This key covers both native and many exotic species found across the north of Australia in mesic (moist) habitats. The key does require an understanding of plant anatomy and scientific terminology.
 - <https://apps.lucidcentral.org/rainforest/text/intro/index.html>
- Australian Tropical Rainforest Orchids
 - A "sister" key to the Australian Tropical Rainforest Plants key above that has a comprehensive native orchid identification key and database of fact sheets maintained by the Australian Tropical Herbarium.
 - The key does require an understanding of plant anatomy and scientific terminology.
 - <http://www.canbr.gov.au/cpbr/cd-keys/RFKOrchids/key/rfkorchids/Media/Html/index.htm>
- Plants of the James Cook University Campus Cairns and Townsville
 - An interesting site for local plants with factsheets for all the species compiled by JCU botanists. Covering both native and exotic species it has the capacity to search for plants using numerous, non-technical, topics such as flower colour.
 - <https://www.jcu.edu.au/discover-nature-at-jcu/plants>
- Numerous websites related to specific plant groups.
 - Many of these sites are developed by experts in certain plant groups. They are often highly technical, and some may be outdated as the expert who developed them leaves a certain job or even passes away. However, they are very useful for identifying species within these large groups.
 - Eucalypts
 - <https://apps.lucidcentral.org/euclid/text/intro/index.html>

- Grasses
- <http://ausgrass2.myspecies.info/>
- Wattle
- <https://apps.lucidcentral.org/wattle/text/intro/index.html>
- Mangroves
- <https://www.amsn.net.au/world-mangrove-id-app>
- Pea key
- <https://www.anbg.gov.au/cpbr/cd-keys/peakey/key/The%20Pea%20Key/Media/Html/index.html>
- Weeds of Australia, Biosecurity Queensland edition
 - A very useful site with highly detailed fact sheets on many of the established weed species commonly found in Queensland.
 - <https://keyserver.lucidcentral.org/weeds/data/media/Html/index.htm>
- Weeds Australia
 - An old website that is now getting updated with a lot of useful information on many of the weeds having a national impact in Australia. It contains some useful fact sheets on weed species and links to government reports (etc).
 - www.weeds.org.au
- Centre for Australian National Biodiversity Research and Australian National Herbarium
 - A gold mine of information on all things related to Australian plants including many links to plant groups and ways to identify them. A great starting point for learning about Australian plants but also a place with highly specific/professional databases (e.g., those for identifying the current name of plant species in Australia – the Australian Plant Census).
 - www.cpbr.gov.au/cpbr/
- Food Plants International
 - An extremely large database on (supposedly) edible plants of the world and especially of tropical regions- developed by Christian missionaries. Very interesting and useful, though as with anything related to edibility of plants it is worth confirming this across multiple reputable sources.
 - <https://foodplantsinternational.com/>
- Useful Tropical Plants
 - Similar to the above database though includes many species for “useful” traits not just edibility. Again, very interesting and useful, though again it is worth confirming any claims mentioned across multiple reputable sources.
 - <http://tropical.theferns.info/>
- Queensland health poisonous plants and fungi
 - There are many, many species of plants which are poisonous/harmful to humans and/or pets in our local area, Queensland and across Australia. I would politely suggest that if you are considering undertaking “foraging” it would be worth investing time in learning these species not just those listed as “edible” as many have close relatives which can easily be confused by the untrained eye. This website is useful as much of the information has been compiled through direct experience however there are many more books/websites etc that cover this topic which are worth exploring.
 - <https://www.childrens.health.qld.gov.au/chq/our-services/queensland-poisons-information-centre/plants-mushrooms/>

*Please note that this list/information is only personal opinion and not Departmentally approved. It is also not exhaustive (please contact me for further links on a topic if interested) and the information on the listed websites may change regularly. As such, it may be worth contacting the relevant organisations to obtain the most recent information if you are interested in that topic. However, these sites are generally from highly reputable organisations and as such the information within is much more reliable than many other websites on the internet.

We did a survey amongst our members at the February Meeting as to what our members would like to know more about, this is the result.

Workshop Survey Results

Marcotting and Pruning – **April meeting**

Tropical vegetables will be introduced at each meeting as plant of the month

Oyster Mushroom growing – **May workshop, will need numbers for this!!!!**

Beneficial insects – **June meeting or workshop, to be advised**

Tropical Vegetable **will be the focus at June 13th Ecofiesta, need volunteers please!!!.**

Seed Saving & Propagation,

Soil fertility, Crop rotation, Garden Design, Worms, Pest management

Food Preserving & Fermenting & Cheese making

Small Space Garden, Companion Planting, Veg Planting

Tropical Fruit, Aquaponics, Beneficial Plants

Chickens & Native bees

Australian Rainforest Plants ID key usage

April in the Tropical Veggie Patch

Gardening in the hot, wet, humid Tropics

Prepare your garden beds now: Improve the soil by adding a bag of manure and a bag of compost to a one and a half square metre area of garden bed. This adds nutrients and microbes, which feed the worms and the plants. If not using all the bed space right away plant a green manure crop. This is as simple as planting bird seed which has a variety of plants for cut and drop or cutting and incorporating into the soil after about 6 to 8 weeks, or before you are ready to plant. Leave to decompose two weeks before planting out.

What to plant now: Try direct seeding or seeding into pots for later planting out. amaranth, bok choy, pak choy, Darwin lettuce, rocket, corn, beans, Asian greens, cucumbers, radish, melons, mustards, Timor lettuce, tropical lettuce, watercress. Herbs to plant, all the basil, Parsley, tarragon, mint, garlic chives, chives, coriander, lemon thyme, thyme, oregano and spices turmeric, ginger, galangal, cardamom, vanilla, Pandan, shallots bunching shallots and Five in one the substitute for Oregano. Seedlings are best started in full sun, but protected from heavy rain.

Composting: Compost all kitchen scraps, but be sure to have some hay, dried leaves, wood chips or sugar cane mulch to cover the wet scraps each time you add to the compost bin. Store shredded paper and torn cardboard for when you have nothing else. Turning is possible inside the bin with a Gardenmate or a garden fork. Insert into compost and lift and shake the contents to incorporate air for the microbes. It is possible to turn the contents if it is no longer than 100mm. Worm farms are good for small households with small amounts of waste. Keep mix moist but not wet.

Tropical Perennial Food Plants: Tropical perennials can be plants all year round in Cairns and district. These will give lots of greens to eat on tap, try growing some ground covers under fruit trees, Sambung, Brazilian, Okinawa, Ceylon spinach, are all good plants to grow all year round. Plants for shaded areas, Rungia, Lebanese cress and Water cress. Taller plants are Sweet leaf grown for the new tips which taste like peas, Tree lettuce, Timor lettuce. The Moringa tree and three variety of Aibika a shrub with edible leaves. Root crops, casava, taro, cocoyam and sweet potatoes.

Grow some flowers for the birds and bees: salvia, portulaca, marigold, coleus, sunflowers, basil all sorts, dianthus, five in one herb, bees also love flowering native plants, flowers on palm, pawpaw especially the males, bananas, shrubs and trees. I have native bees and they love salvia and portulaca and the butterflies love Pentas and Ixoras.

Tropical vegetable plants, flowers and beneficial plants.

I have plants for sale at most times of the year. If you wish to visit my permaculture garden and nursery please message me on Facebook Carol Laing.

*Our Permaculture Cairns Patch
Manoora Community Garden*

Our first garden was started in December it was a fresh patch with any weeds removed, but after the first lot of rain it was infested with NUT GRASS. The garden was started by removing weeds, applying dynamic lifter, watering well and covering the bed with cardboard topped with wood chips. The nutgrass had germinated under the cardboard and come right through in great luxury on the dynamic lifter. All nutgrass was pulled and removed. The decision was to take on the nutgrass challenge and try planting heavily with groundcovers, shrubs small and tall and lots of Pigeon Pea, some pruned to grow straight up and provide shade and some pruned to become bushy and shade out the nutgrass.

During January and February the nutgrass was removed and mass plantings of tropical vegetables were carried out, including basil, sweet potato and moringa seedlings. Si kindly placed some pavers as stepping stones strategically through the patch, the gaps will be filled with wood chips..

Since then there has been lots of rain so I am sure the dreaded nutgrass will be back. The planting of Sweet Leaf, Arrowroot the Brazilian spinach really going great, the Okinawa and Sambung were suffering from the sun but will pick up in the shade of the pigeon peas eventually. The Aibika, Ginger and Turmeric were all growing nicely.

If you are in the patch at any time you are welcome to remove any nutgrass.
The garden is open every day until approx. 4pm.

Our next visit will be on the last Tuesday 30th of March at 4pm to whenever we finish, we will organise the shutting and locking of the gate on that day.

Perhaps it is time for Permaculture Cairns to renew our Energy Exchange Gatherings

What do you think?? Would you take part??

Let us know at info@permaculturecairns.org.au

Mareeba Seed Savers and Gardening Group Event Notice

Our meetings welcome all those interested in Seed Saving and Gardening. It is a time when we meet to share / exchange seeds and plant materials, to swap ideas and gather knowledge from other gardeners

Our next event is scheduled for Sunday 9th May 2021

Come along from 10:00am to 3:00pm. We will pack and register seeds, share lunch, followed by our guest speaker, then wander through the garden finishing up with a cuppa and time to access the seed bank

Venue: Simone Lienert and Barry Caire 769 Bilwon Road, BIB00HRA

(entrance opposite the house with red roof)

** Please bring your chair, and if staying for lunch, bring your own cutlery, mug and plate and lunch / afternoon tea to share, any seeds or plant materials you have to share and a gold coin donation. Also, be sure to remember your hat and sensible shoes for the garden walk **

Guest speaker at 1:00pm - Noelle Saraber
Topic: Seed Saving ~ What is it...and what I do...
~ the day will also cover information on preparing seeds for saving
and logging into our seed bank ~

For further information contact Maria Gillies on 0421 210 136

AUSSIE BEE EMAIL UPDATE Number 40 / April 2021

<https://apac01.safelinks.protection.outlook.com/?url=https%3A%2F%2Fwww.aussiebee.com.au%2F&data=04%7C01%7C%7Cfc7f1233ae6d4c5c16c808d8fb013329%7C84df9e7fe9f640afb435aaaaaaaaaaaa%7C1%7C0%7C637535329861541106%7CUnknown%7CTWFPbGZsb3d8eyJWljojMC4wLjAwMDAiLCJQIjoiV2luMzliLCJBTiI6I1haWwiLCJXVCi6Mn0%3D%7C1000&sdata=g8ITNPb3u1fXL%2B9bWXfUkWGGLG7tQDA3E08GCd9ra0%3D&reserved=0>

Topics in this Issue:

1. A NEW GUIDEBOOK ON AUSTRALIAN BEES AND BENEFICIAL INSECTS
2. WILD POLLINATOR COUNT STARTS ON SUNDAY
3. HOW TO RESCUE AND BOX A NEST OF STINGLESS BEES
4. REMARKABLE DISCOVERIES FROM THE WORLD OF NATIVE BEES
5. SEEKING A COPY OF 'A CLUSTER OF BEES'
6. UPCOMING NATIVE BEE EVENTS

Hi, my name is: Mealybug

Describe yourself: I'm about 4mm long, and I'm a real sweetie, covered in a lovely layer of white powder. Although I may look cuddly, I'm a really hard worker, and enjoy hanging out with my mates on the cool undersides of leaves and stems.

Hobbies: I love nothing more than sucking sap from leaves and stems! Exuding honeydew is a special talent, which encourages sooty mould. I also release toxic saliva that can seriously damage plants.

Likes: Citrus plants, orchids, ferns, loads of ornamental plants and shade houses. I like warm and humid weather... it just makes me want to breed! Oh, and I love ants, they really look out for me!

Dislikes: Being scrapped off a plant with a stick, home made veggie oil soap mixes or store bought alternatives. I really don't get on with parasitic wasps and Ladybirds.

You'll know you've met me when: New growth on your plant looks weird and the plant has a sprinkling of white furry stuff on leaves. You can also see me and my mates hanging out along the veins of leaves and on stems.

Breaking up ain't hard to do... if you:

-
- Stop my ant friends from coming around by growing tansy or other ant repellent plants! Ants tend to our every need and protect us from garden bullies. Without their protection we are all alone in the world.
- Irritate me by putting a flattened square of aluminium foil around the base of plants to bounce light on the undersides of leaves.
- Spray me with a home made garlic or chilli soap. Or even a store bought insecticidal soap and target the undersides of the leaves.
- Spray your plants' leaves with water and knock me and my mates right off our perch!



- Pay your neighbours kids to come round and wipe me off with a stick!
- Buy some Ladybirds or Parasitic Wasps, and release them onto the infected plants.
- Use plants that have a milky sap or furry leaves... we hate them!
- Dab us with rubbing alcohol or methylated spirits.....man, that burns (but it won't harm your plants).



Photographs:

Pic 1: Photo by Michael Masiuk woodypests.cas.psu.edu

Pic 2: <http://wihort.uwex.edu>

Pic 3: www.bugsforbugs.com.au Desc: Australian Native Ladybird... destroyers of mealybugs!



SOIL SCIENCE AUSTRALIA

Basic Soils Refresher Training

Tuesday 27 April and Wednesday 28 April 2021

Two Day Online Virtual Course

Training includes:

- Soils and landscapes
- Soil chemistry
- Dispersive, sodic and saline soils
- Acid soils
- Field tests and soil texturing
- Describing soils
- Classification
- Accessing soil formation
- Virtual soil pit session

Learn from some of Australia's most experienced soil professionals

- Assoc Prof Venessa Wong CPSS
- Assoc Prof Luke Mosley CPSS
- Mr Bernie Powell CPSS
- Mr Dennis Baker CPSS
- and guest speakers TBC

A statement of Attendance will be provided upon successful course completion, if requested.

Soil science Australia refresher course

Been a while since you last did some soil training? Soil Science Australia has your back! This month Soil Science Australia is running Basic Soils Refresher Training, a two day intensive course which will introduce you to soils, their uses, formation, components, structure and texture. The course features basic soil chemistry theory/practice using relevant case studies and problem solving using a unique online experience. Learn from some of Australia's most experienced soil professionals:

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

Permaculture Cairns

Membership Form 2021

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:.....

Enquiries

President:	Carol Laing	info@permaculturecairns.org.au
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You can join online and pay into our account or join at our meetings, third Tuesday of the month.

