Householder's Options to Protect the Environment Inc.
PO Box 6118 Clifford Gardens, Toowoomba QLD 4350
(22 Vacy Street, Toowoomba QLD 4350)
Ph 07 4639 2135; Email: office@hopeaustralia.org.au
Website: http://www.hopeaustralia.org.au
ABN 48 036 173 161

HOPE Enews Bulletin 2015 #8 --- 20 Aug 2015

The following items have been gathered from various e-newsletters received by HOPE in recent times; and/or prepared specifically by HOPE members and supporters. If you have any news to contribute, please forward to office@hopeaustralia.org.au.

Deadline for articles is 15th day of the month. If you would like to discuss news items displayed or have letters for the editor please contact the office or <newsletter editor - hotlink>

Editorial

Here we are again. There are several items in this month's edition, all of which are need to read :> There are several *save the dates* as well so don't forget to put these in your diary.

Were there any specific items you enjoyed from last month's newsletter? If so, please let our office manager know, or put it on our social media sites.

Are you interested in climate change? Then check out the Beyond Zero Emissions article. Seen something in the news or online that you would like to discuss about climate change? Drop us a line and let us know.

Are you a geek or a nerd? Then maybe this upcoming National Science Week is for you. It's a go for beakers and Bunsen burners :>

If anyone is, or would like to become a conservation volunteer, read this article for some interesting information.

As always, let us know what you think, what you liked and more importantly – what you want to see in our next edition or on any of our social media pages. Facebook | Twitter | Website

Charmaine – Newsletter Editor and Social Network Administrator

atkinson.charmaine@hotmail.com

Calendar of events

Search the national environmental events calendar and/or national community calendar for any events that might interest you.

International Year of Light - http://en.wikipedia.org/wiki/International_Year_of_Light

International Year of Soils - http://www.fao.org/soils-2015/en/

AUGUST

- 15-23 National Science Week
- 19 World Humanitarian Day
- **19 HOPE information display at U3A Toowoomba's Seniors Expo**
- 24-30 Keep Australia Beautiful Week
- 23-28 World Water Week

SEPTEMBER

- 1 National Wattle Day
- 1-30 Biodiversity Month
- **5 HOPE community forum: national Sustainable House Day (Toowoomba)**
- 7 National Threatened Species Day
- **12 HOPE Ordinary Meeting, Toowoomba**
- **14-16 Toowoomba leg of Youth Leading the World (YLtW) Congress** – supported by Queensland Murray-Darling Committee (QMDC), Amaroo Environmental Education Centre and HOPE

Date Claimer

HOPE community forum: Sustainable House Day - Saturday 5 September 2015

Come and be a part of the action on national *Sustainable House Day* http://sustainablehouseday.com/ , Saturday 5th of September!

Householders' Options to Protect the Environment (HOPE) is facilitating the Toowoomba activities for this nation-wide event, with a mixture of sustainable 'Open House' sites (homes and gardens, facilities) for residents to visit as well as a Community Forum featuring speakers on sustainable building design, renewable energy and landscaping.

HOPE welcomes your attendance at either or both aspects of the Toowoomba's *Sustainable House Day* activities. This is your chance to see and hear first-hand about what's possible and to be inspired to apply some of these measures at your place.

In the morning of Saturday 5 September, facilities open to the public include a sustainable house and gardens at 210 West Street, Toowoomba and Excel Solar's *Solar Farm 7SD* located at lots 24-25 Croft Crescent, Toowoomba.

If you too would like to open your sustainable house/garden or business premises on the 5 September, please contact the HOPE office by Friday 21 August.

The afternoon component of *Sustainable House Day* is a community forum being held at the Dr Price Room, 6 Little St, Toowoomba, from 4pm to 6pm.

Speakers include Ms. Joanne Galea from the Building Designers Association of Queensland (BDAQ), Mr Terry Davis from Excel Solar and Mr Jerry Coleby-Williams from Gardening Australia.

For further information and/or to register your interest in participating in Toowoomba's *Sustainable House Day* event on Saturday 5 September, please contact the HOPE office on ph: 07 4639 2135 or email: office@hopeaustralia.org.au . Admission to both activities are FREE of charge – but bookings are essential.

HOPE requests

WANTED – USED POSTAGE STAMPS

HOPE collects used postage stamps and/or un-wanted stamp albums for community groups' fund-raising purposes.

Please consider collecting used postage stamps from home and/or work, and forwarding a pack of used stamps to the HOPE (Householders' Options to Protect the Environment) office, PO Box 6118 - Clifford Gardens, Toowoomba, QLD 4350; or drop them off at 22 Vacy St, Toowoomba.

WANTED – PHOTOCOPY PAPER

HOPE has used up its current stock of photocopy paper and we are asking our members and supporters to donate a ream or two of A4 photocopy paper. Donations of paper can be left on the table in the carport at 22 Vacy St, Toowoomba.
Alternately, cash or cheque donations can be made online at http://www.hopeaustralia.org.au/annual-pledgedonation/ or posted to HOPE Inc., PO Box 6118 -Clifford Gardens Toowoomba QLD 4350.

Office Hours
HOPE's office is open every Monday from 9am to 5pm; with the library resources available at the same time. Other times by appointment only.

Phone the office on 07 4639 2135 to signal your interest in coming along for a chat or to access the library.

Office News Report – August 2015

Good afternoon folks,

Another busy and productive month for HOPE.

(Frank at TCLF event, 9 August 2015)

We held a community forum on Sustainable Forest Management on 1 August; and provided information displays for the Toowoomba Languages and Cultures Festival (9 Aug) and the U3A Seniors Expo (19 Aug). All events were well patronised.

A big thanks to all of the agencies who provided literature for these events and those held earlier in the year – especially Toowoomba's Gardenfest held on 9-10 May. The materials were well received by event attendees.

September is shaping up to be another busy month with a community forum on 5th promoting Sustainable House Day; our quarterly Ordinary Meeting on 12th; and the Toowoomba leg of the Youth Leading the World (YLtW) Congress on 14th – 16th.
All are welcome to attend these events

Regards,

Frank Ondrus, President – HOPE Inc., ph 07 4639 2135, office@hopeaustralia.org.au

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Annual Pledge/Donation - http://www.hopeaustralia.org.au/annual-pledgedonation/
We invite members and supporters to consider making an annual financial contribution to help cover our operating costs of approximately $20,500 p.a.

Currently, our income is derived from project grants, fund-raising, corporate sponsorship and donations, but falls well short of our requirements.

Your financial support, by way of an annual pledge or donation, will considerably help us to achieve better financial viability.

POSITIONS VACANT

Due to the recent departures of key committee and admin support staff, we are in urgent need of extra personnel to fill the following vacancies:

- Vice President - duties include chairing meetings; and provide media comment projects, campaigns and general activities
- Website Manager - maintain 'freshness' of website by doing regular maintenance; and sourcing new material
- Admin support – various tasks from helping with internet research, article writing, media support and staffing of information displays, etc. at community events
- State Liaison Officers to be responsible for promoting HOPE in their jurisdictions
- Newsletter Team to solicit and/or write articles – with the editor compiling the newsletter
- Media Team to prepare media releases, community service announcements, date claimers, etc.; and to assist with research and writing (feature) articles
- Website Manager to keep information up-to-date
- Librarian – to complete the cataloguing of our resources; and to undertake weekly maintenance updates

So, if you have some spare time and talents to offer, please give the office a call on 07 4639 2135 or email office@hopeaustralia.org.au .

Community Forum: Sustainable House Day – Saturday, 5 September 2015

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HOPE Ordinary Meeting – Saturday 12, September 2015

HOPE's quarterly get-together is at the HOPE office and home of Frank & Mary Ondrus, 22 Vacy St, Toowoomba commencing at 10am sharp. Morning tea is provided. Please RSVP by 11 September to assist with catering and seating arrangements. A copy of the meeting's agenda will be issued by the end of August.

Toowoomba leg of Youth Leading the World (YLtW) Congress, 14-16 September 2015

Toowoomba's 2nd *OzGreen "Youth Leading the World (YLTW) Congress"* is a 3 day intensive process with Youth which explore local and global issues of sustainability, measure and understand their own eco-footprint, and work on action plans to make changes in their lives, schools and communities.

Students from secondary schools throughout the region are welcome to attend this free event being hosted by Queensland Murray-Darling Committee (QMDC), Amaroo Environmental Education Centre (EEC) and HOPE.

Registration forms are available from Mr. Cam Mackenzie, Principal - Amaroo EEC, email cmack18@eq.edu.au .

Where: The Cedar Centre, Baker Street, Toowoomba (southern side of University of Southern Queensland (USQ) Campus)
Who: Environmentally-minded students from year 10-12
Costs: Free! Students will need to get to and from the congress and provide their own food on day 1 and 2.

Community Forum – Wednesday, 16 September 2015

Alison Dickson Lecture Theatre - 1:30-2:30pm
University of Southern Queensland Campus, West St, Toowoomba

Come, Listen, Be Inspired!
Invitation to government, local business, Indigenous leaders, community members and parents. Contact Cam via cmack18@eq.edu.au for more information or to RSVP (by September 15) for catering purposes.

TO SAVE THE PLANET, WE MUST SAVE THE SOIL – www.soilsforlife.org.au

By Major General The Honourable Michael Jeffery, National Advocate for Soil Health

I have been appointed by the Federal Government as Australia's first Advocate for Soil Health. As the Advocate, I raise public awareness of the critical role soil plays in underpinning sustainable productivity, delivering high quality ecosystem services and helping to meet global challenges, including food security and climate change.

2015 has been declared the *International Year of Soils* by the United Nations General Assembly, and I hope that by the end of 2015 we can establish a simple message in the minds of the broader Australian public. That is –

- that soil underpins life as we know it
- that at home and abroad our soils are under threat from degradation, competing land uses and the demands of a booming world population
- that we have the knowledge and means to change the way soils are managed and in so doing to reverse degradation, boost productivity and build a sustainable future
- that now is the time for action.

Fundamentally the world has to almost double its sustainable food production by 2050 to meet a projected population increase from 7 billion to perhaps 10 billion, and it has to do this when the globe is losing around 1 percent of its arable land annually. Soils are becoming less fertile through run-down of nutrients and carbon, eroded through overgrazing and ground cover removal, and wildfires are burning the equivalent of the continent of India every year. Critical aquifer water supply for irrigated agriculture in China, India, Africa, the Middle East and even California is running out, and most of the great rivers passing through populated areas of the undeveloped countries are heavily polluted.

These are indeed very serious and complex challenges. But what I am excited about is that we can equip ourselves to better deal with these impending challenges. By managing our soil, water, vegetation and biodiversity in an integrated way – in our vast agricultural landscapes and even in our own backyards – we can reverse land degradation and support sustainable production.

Fundamentally, we need to ensure that our soils have a healthy structural, mineral and biological balance. An important step in achieving this is to increase the amount of organic matter and carbon in the soil. The carbon content of soil is one of the key indicators of its health and is a master variable that controls numerous processes. It is the carbon content of soil that largely governs its capacity to absorb, retain and supply moisture within the soil. A well-structured soil, high in organic matter and soil carbon essentially acts as a sponge, releasing retained moisture slowly for plants and animals to maintain production over a much longer period. Soil carbon also helps support a healthy balance of nutrients, minerals and soil microbial ecologies, improving soil fertility. Through this, healthy soils promote vigorous plant growth and plant and animal resistance to disease and insect infestation. Diverse vegetation adds organic matter to the soil and provides a protective cover to control evaporation and soil loss through wind and water erosion.

This integrated system turns sunlight energy into the food and fibre we need - and provides the ecosystem services that are fundamental to human survival. We need to support this natural system to perform optimally.

So who is responsible for this management? We all are. In Australia, our farmers and graziers between them manage almost 60 per cent of the landscape, so it is imperative that they all learn, understand and apply good soil management – which many already do. I also take every opportunity to stress that urban Australians need to better understand the importance of rural and regional Australia, in terms of food production, the provision of clean air and water for all Australians, the value of the natural environment and the social contribution made by rural communities.

We can all get involved, be it through the practices we apply in our own gardens and backyards, through volunteering with Landcare, or, a personal favourite of mine, establishing school gardens nationally, such that our young people can be taught about the science underlying food production and landscape processes, including by focusing on soil biology, photosynthesis, the water cycle and the fundamental role that green cover can play in reducing carbon emissions.

It is possible that the impending global food, water and climate crisis may be the most significant challenge humanity faces this century and, ultimately, it all devolves around how we look after our soil.

The 2015 International Year of Soils provides the ideal platform from which to renew our focus on this critical issue. May I suggest, that "to save the planet, we must save the soil."

Soil as Medicine by Graeme Sait - http://blog.nutri-tech.com.au/ (13 August 2015)

During my diverse travels and research I am constantly seeking new tools to improve the lives and productivity of food producers. There is compelling research to suggest that soil is more than just the fragile layer that produces our food. It is also good for us in other ways.

Soil Life Boosts Your Life

I have always felt at peace with the world when surrounded by the sweet smell of healthy soil, with the sun on my shoulder and the sweat on my brow. I figured that my meditative gardening vibe related to communing with nature, but who would have thought that it could have a microbial link? It now seems that growers have yet another motivation to restore their soil life with Nutrition Farming® strategies. Healthy, living soils contain thousands of different species of bacteria and several of these are important for our own health and happiness. Look after your soil and it will look after you, in many unexpected ways.

London oncologist **Dr Mary Marsden** experimented with inoculating cancer patients with a beneficial bacterium found in healthy soils, called Mycobacterium vaccae. She soon realised that the treated lung cancer patients suffered less symptoms, but they also had more energy, they felt happier and their cognitive function improved.

Dr Chris Lowry from Bristol University in the UK decided to further explore this remarkable new finding. He hypothesised that the "feel good" hormone, **serotonin**, might be produced as a by-product of our immune response to this particular bacteria. In studies involving injected mice, he found increased cytokine levels (a precursor to serotonin) in the treated animals. He also found a marked stress reduction in those that had been injected.

Then, two US researchers, **Dorothy Matthews** and **Susan Jenks**, decided to directly feed the bacteria to the mice in their study, rather than injecting it. They subjected the treated mice and the untreated control group to a challenge involving difficult mazes. They found that the mice who had consumed Mycobacterium vaccae "navigated the maze twice as fast and exhibited half of the anxiety behaviours". Serotonin is thought to play a role in learning and concentration, along with its many other benefits.

Serotonin, or the lack of it, is very often the root cause of anxiety and **depression**. Antidepressant drugs are generally based upon boosting serotonin. There are other ways that we can help ensure adequate serotonin production. For example, it is important to sleep in **complete darkness** because that is a primary requirement for your pineal gland to manufacture serotonin and melatonin. I carry masking tape in my suitcase to silence the LED lights in the many hotel rooms I visit during my seminar tours. I need sleep to maintain my hectic schedule and, if melatonin production is slowed, it is a recipe for insomnia.

Tryptophan is the amino acid ‘building block’ for serotonin. Supplementation with this natural substance has outperformed antidepressant drugs in several published studies.
This new research suggests that farming or gardening in living, healthy soils may boost our wellbeing – particularly if we consume a little of that healthy soil from time to time. There are other beneficial organisms in soil that can effectively make healthy topsoil a **probiotic-like** input. It has served this purpose for centuries prior to our obsession with "germs". Root vegetables were once coated in a little of the soil that produced that crop. Now we scrub and wash them sparkling clean; although it is probably a good practice, considering the nematicides, pesticides and herbicides that are now used in industrial agriculture.

Bacillus subtilis is a wonderful example of the possible probiotic effect of soil. This creature protects from mould diseases on plants and helps to solubilise phosphorus in the soil, but it is also a powerful immune elicitor. Anything that boosts plant immunity also boosts yield.
Interestingly, ***Bacillus subtilis*** is also an important component of our personal protective biology. This organism is remarkably tough. It can survive the bile salts and hydrochloric acid and successfully colonise the digestive tract. Studies have shown that it can help counter Irritable Bowel Syndrome (IBS). It can also help neutralise a variety of unwanted pathogens, while supporting and enhancing the growth of protective Lactobacillus.

In Conclusion

The message is clear. Let your children play in chemical-free soil and eat organic, fresh vegetables. The words" humus" and "human" mean the same thing – "of and for the earth". We are increasingly recognising the wisdom in this ancient definition.

Lichen – Boring and Uninteresting or Just Misunderstood

By Steve Cupitt, Senior Environmental Scientist - CROSSROADS Rural & Environment Pty Ltd

The humble lichen is often disregarded as boring and uninteresting. It in fact is a very misunderstood 'plant' that plays a critical role in the environment. As they are generally coloured drab green, grey, yellow or brown, have no leaves, roots, flowers or stems, they are often overlooked and seldom viewed in any great detail. Many people will walk right past a lichen without giving it a second thought, or if they do, it is do complain about them growing on our gutters or roof.

What is a Lichen?

Lichen is a flowerless structure that consists of two organisms (generally a fungus and an algae) living together in a symbiotic relationship. Lichens provide an outstanding example of mutualism, the kind of symbiotic relationship in which both partners benefit. The alga can make its own food, but needs water to grow, while the fungus can absorb water rapidly but can't make its own food. In this relationship, the fungus provides nutrients, moisture, shelter and support via it's network of hyphae, while the alga photosynthesis's and passes most of its food to the fungus and enables the lichen to grow.

The fungus usually makes up most of the structural body while the cells of the algae are distributed within it. Because lichens have no roots, they can grow only when moistened by dew or rain, hence lichens in dry regions do not grow or increase in size until moisture becomes available. It is interesting to note that algae rarely grow independently nor do fungi grow well when separated from their partners, yet in combination these organisms can often grow in places where few others can live. Lichens can grow in soils where they occur as "crusts", but unlike most organisms, can also grow on surfaces such as tree bark, bare rock and our house rooves/gutters.

Botanists generally recognise three groups of lichen according to their general appearance. The first group are the *Crustose* Lichen which lay flat and are found mostly on rocks. The second groups are the *fruticose* lichen that are found predominantly in deserts as lichen crusts because they are more efficient at capturing water from moist air. The third groups are the *foliose* lichen found growing on the bark of trees.

How are lichen classified?

Lichens present a problem in classification. As they are not simple organisms, but mixtures of two or more different species (algae/cyanobacteria and fungi) growing together and reliant on each other to survive, how should the taxonomist classify them? If they are to be described as a species, into which phylum should they be placed? If each organism is classified separately, this ignores the fact that the partnership looks and behaves as an independent organism. Currently lichen are classified according to their fungal part with most now belonging to the phylum *Eumycophyta;* Class *Ascomycetes* with a few others belonging to Class *Basidiomycetes.* However this is likely to change in the near future. To date, over 18,000 species have been identified with their distribution ranging from the cold extremes of the Arctic to dry deserts and dense rainforests.

Reproduction

Lichens can reproduce in three ways. The most common is where the fungus release spores in to the air. If a fungus spore lands next to a suitable alga, new lichen may develop. Lichens may also reproduce by means of cells called *soredia. Soredia* consist of several algal cells surrounded by a few strands of fungus. They grow on the surface of the lichen and are broken off and carried away by the wind or water. If *soredia* become trapped in a crack of a tree or rock, they begin to grow into new lichens. The third type of lichen reproduction occurs in the species that have *insidia. Insidia* are tiny growths on the lichen's surface and like *soridia*, they are broken off and distributed by wind or water.

Lichens in the environment

Lichens play a critical role in the environment as pioneer species. They are active in the formation of soils, erosion control and in the arid zone, assist in plant germination. In some cases Lichen fix atmospheric nitrogen and leach back to the soil, stabilise fragile soils and are often used as environmental health indicators.

Pioneer species

Following the Mount St Helens eruption in 1983 and the Krakatoa eruptions in 1883, lichens were one of the first species to reappear. In these environments, soil is generally scarce, temperatures quite variable due to the exposed landscape and conditions difficult for any plant life to establish. The only organisms able to survive in such conditions are those that can be dispersed there easily, do not require soil or a source of food

and can tolerate a variable environment. Lichens thrive in these conditions and begin soil formation process by breaking down the rocks.

Some species of lichen produce acids that break down rock into simple soils in which other plants can take root. As a result of changing temperatures, wind and rain, small crevices form in the rock surface. Ions go into solution from minerals in the rock followed by microorganisms that use the lichen's dead remains as food material. As time

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Queensland News

SAVOUR SOIL PERMACULTURE WORKSHOPS

10 October - Buzz'd about bees: Balanced beekeeping - https://www.facebook.com/events/1507514609538963/

21 November - Backyard Aquaponics - https://www.facebook.com/events/162723874059179/

Both are also noted on website at http://www.savoursoilpermaculture.com.au/ .

WILDLIFE AND PLANTS

BIRDER'S PARADISE | As the millions of tourists who have flocked to see the Rainbow Lorikeets at Currumbin Wildlife Sanctuary will attest, the Gold Coast is one of the 'bird capitals' of the world. In recognition of this glorious avian bounty, Birdlife Southern Queensland's Gold Coast branch has compiled an exceptionally helpful and thorough brochure on all the locations around us that are birdwatching hotspots. Some sites would be very familiar to Gecko members; Springbrook National Park and the Elanora Wetlands (directly opposite Gecko House!) are both featured. Other places are less well-known, and the brochure provides a marvellous opportunity to explore the Gold Coast for all kinds of birds, whether they be our common favourites like the Willie Wagtail, or unusual species like the Barking Owl. This beautiful publication can be downloaded here, or obtained from one of the many organisations that assisted in its creation, including Birdlife Southern Queensland, Birds Queensland, Federation Walk, SEQ Catchments, the National Trust, Currumbin Wildlife Sanctuary and the Gold Coast City Council.

CONSERVATION VOLUNTEERS

Conservation Volunteers is a national, not-for-profit, community based organisation that is dedicated to involving the community in practical conservation natural resource management programs. We welcome volunteers from across Australia and around the world, to join programs for a day, a week or longer.

Conservation Volunteers projects are designed to enable you to make a real difference to conserving the environment. You will be part of a team of up to 10 volunteers, though sometimes teams are smaller depending on the task we're doing and the number of people choosing to volunteer that week. You'll be accompanied by a Conservation Volunteers Team Leader. Your Team Leader will explain the project aims to you, and help you to complete each project safely and effectively.

Typical projects include: Planting trees, removing weeds, collecting native seeds, Building/maintaining tracks and trails, Restoring habitats and Heritage restoration

Conservation projects take place in both urban and rural areas. Project hours are usually from 8am – 3pm, although this varies depending on the project location. Projects normally leave from, and return to, 333 Bennetts Road (Brisbane CVA office), though we can sometimes arrange to meet you on site or pick you up at a convenient point on the way to the project site.

Join us! We need your support now more than ever. Help us protect our landscapes, wildlife and heritage!

E: Brisbane@conservationvolunteers.com.au | W http://www.conservationvolunteers.com.au/

National News

STEPHANIE ALEXANDER KITCHEN GARDEN FOUNDATION

www.kitchengardenfoundation.org.au

The Stephanie Alexander Kitchen Garden Foundation is a not-for-profit aimed at providing skills, support, and inspiration to schools participating in the Kitchen Garden Program. The foundation was established in 2004 by chef, restaurateur, and author Stephanie Alexander after the initial success of her Kitchen Garden Program.

The program is backed by the Australian Government and addresses the current rise in childhood obesity by educating school children about the growth, harvest, and preparation of fresh, seasonal foods. Participants of the program are aged between 8 and 12 years of age and are taught the fundamentals of healthy eating in the hope they will form lifelong habits and make positive lifestyle choices.

The program began in 2001, when Stephanie visited Melbourne's Collingwood College and established the first Kitchen Garden Program. There are now 837 schools participating in the program, each child enjoying the satisfaction and goodness of fresh Australian produce.
For more information on the program or to get involved, please visit the website.

BEYOND ZERO EMISSIONS

Established in 2006, **Beyond Zero Emissions Inc**. is a not-for-profit research and education organisation known for its work designing and implementing a zero emissions economy for Australia. It's goal is to transform Australia from a 19th century fossil fuel based, emissions intensive, economy to a 21st-century renewable-energy-powered clean-tech economy.

Through the Zero Carbon Australia (ZCA) research project, BZE is encouraging climate change policy that is in line with the latest science. By sharing this research with thousands of Australians via its public engagement program, BZE is engaging, educating and inspiring the community with real solutions to climate change. In partnership with the University of Melbourne's Energy Institute, BZE has published the Stationary Energy Plan, a fully costed transition plan for getting Australia to zero emissions in ten years using commercially available technology. Research in progress includes zero carbon buildings, transport with High Speed Rail, land use for carbon storage, industrial processes and export industries.

BZE's vision is ambitious and achievable - join us to create the future.

We are involved in the following activities:

- research
- education
- transition planning
- corporate education
- network building
- solutions development

We accept the findings of the most current science, which shows that we have already allowed climate change to go too far, and must act immediately to reduce our levels of greenhouse gas emissions to zero and below.

Further information about BZE and its activities can be found at http://www.bze.org.au .

(Article written by Max Logan, HOPE volunteer (Qld))

AUSTRALIAN NETWORK FOR PLANT CONSERVATION (ANPC)

Australasian Systematic Botany Society Annual Conference - Canberra, 29 Nov–4 Dec 2015

The Society will be holding its 2015 conference, with the theme of Building Our Botanical Capital, at the CSIRO Discovery Centre, Black Mountain, providing a forum for presentations and workshops on developments in plant systematics. There will be a particular focus on emerging methods of phylogenetic analysis and on making biological collections data accessible. A conference fieldtrip will also be run in addition to a program of social events for delegates. Early-bird registrations close Friday 16 October 2015. For more details visit the conference website.

MAKING A DIFFERENCE – ONE PIECE OF PLASTIC PACKAGING AT A TIME

According to Clean Up Australia, householders throw away about 7,150 recyclable plastic bags a minute or 429, 000 per hour. And this figure doesn't include the countless bread bags, frozen vegetable bags, pasta bags, biscuit packets and sachets consumers bring home from the supermarket every time they shop.

Plastic bags and packaging can't be collected by most local councils as part of their kerbside pickup. As a result, in the past they have been usually either disposed of in landfill or ended up as litter, harming wildlife and the environment.

Until the advent of the REDCycle Program, that is.

The REDcycle Program is a supermarket-based recycling initiative that invites householders to gather together all their empty soft plastic packaging and unwanted single-use plastic bags and place them in the specially marked bin at their nearest participating Coles or Woolworths supermarket.

The program has been running in Australia since 2012, and now recovers approximately a million pieces of soft plastic each week from 580 supermarket drop off points nationally.

Where does the plastic go?

The collected soft plastic material is picked up by REDcycle drivers, returned to RED Group's facility for initial processing then delivered to Australian manufacturer Replas as the resource to manufacture new recycled-plastic products. These products include fitness circuits, sturdy outdoor furniture, signage and traffic control products suitable for use in schools, parks and other public spaces and commercial premises.

How to REDCycle

Do the scrunch test! If the plastic CAN be scrunched into a ball in your hand, it can be placed in a REDcycle Program drop off bin. If it CAN'T be scrunched, it should be recycled at home via kerbside collection.

Where to REDcycle

Consumers can find their closest participating supermarket by entering their postcode into the Store Locator tool on the REDcycle website.

For those who don't live near a participating supermarket, REDcycle offers a post-in service. Anyone who can't get to one of the 580 drop off points around the country can post their plastic to:

RED Group
Attn: Plastic Packaging Recycling, 10 - 12 Thomas Road, Laverton North VIC 3026

Working together

The REDcycle Program is a voluntary, industry-led initiative and a true product stewardship model where everyone involved in the life cycle of a product – manufacturers, distributors and consumers – choose to share responsibility for the best end-of-life outcome.

In a genuine example of corporate stewardship and collaboration, key brand owners including Arnott's, George Weston Foods, Goodman Fielder, Kellogg's, Kimberly-Clark, Mondelez, Simplot, SunRice and Unilever are supporting the program and actively demonstrating their commitment to a better and more sustainable outcome for their own packaging.

To learn more about the REDcycle Program, please visit **www.redcycle.net.au .**

PLAN TO CULL TWO MILLION FERAL CATS

Australia's first Threatened Species Commissioner, Gregory Andrews, has released the Federal Government's feral cat management plan, which seeks to remove two million feral cats over the next five years in an attempt to save 20 threatened mammals, including bilbies, numbats and bandicoots - http://www.environment.gov.au/biodiversity/threatened/threat-abatement-plans/draft-feral-cats-2015 .

High conservation areas equating to 12 million hectares of land - including national parks, defence land and peninsula areas - will be targeted with a massive baiting program. Exact locations will be determined after consultation with experts, and other programs within the plan may include the trialling of a new pain-free bait called Curiosity, using trained guardian dogs, grooming traps, and a 'feral cat scan' app for people to report sightings.

The Australian Wildlife Conservancy (AWC) will also manage a new 8,000 hectare cat-free mainland enclosure at Astrebla Downs National Park in western Queensland as one of 10 new enclosures planned for the country. The AWC is also researching how feral cats move and hunt by using radio collars and cat-cams.

The feral cat management plan will also seek to contain and reduce the roaming of domestic cats close to identified areas of conservation significance. The plan says the Government will seek public support for expanded "24-hour containment requirements for domestic cats".

It has been estimated that Australia has 20 million feral cats killing 80 million to 100 million native animals every night.

(Extract from NPAQ e-Bulletin - 3 Aug to 16 Aug 2015)

THE SELF SUFFICIENCY SHOPPE – DITCHING COSTLY COMMERCIAL PRODUCTS FOR CHEAP AND NATURAL ALTERNATIVES – www.theshoppe.com.au

The Self-Sufficiency Shoppe is a website dedicated to promoting natural healthy lifestyles, free from the chemical-based commercial products that people use every day. Run by Adelaide-based former nurse Pam Marshall, who is passionate about teaching affordable ways of living that benefit both planet and people, this website provides information and materials for purchase that will enable people to replace costly commercial products with simple, natural and cheap alternatives found around the home and garden.

Browsing the Self-Sufficiency Shoppe, you will find handy hints about sustainable self-sufficient living throughout the website and an informative newsletter section, as well as some free download charts. These include a Basic Household Alternatives chart listing basic household items such as lemon, salt and oatmeal, and what they can be used for (cleaning, skin care, deodorising etc.) and a Sustainable Alternatives chart, which lists common commercial products such as laundry detergent, moisturiser and shampoo, and the natural alternatives that can be used as their replacements.

The Self-Sufficiency Shoppe is mostly general information and tips, paired with links to booklets available for purchase containing the specific how-to' s of creating particular alternative products. Pam's booklet range is very extensive – there are over 80 available for purchase spanning topics such as home made insect repellent, natural hair care, ways to recycle supermarket plastic bags, beginners composting, green cleaning, making toys from recycled materials, homemade incense, meals on a budget, natural pet care…… the list goes on! Each booklet costs around $8 - $12 or they can be packaged by topic ($25-$95) such as Green Cleaning, Natural Skin Care, Backyard Self-Sufficiency, Practical Gifts and Crafts etc.

Pam also runs Practical Sustainability Workshops in various locations around South Australia and, for those further afar, Workshop @ Home packages can be purchased online. For those particularly inspired, workshop kits are available with materials and information on running your very own workshops.

According to Pam, she is motivated by the pleasure of educating people and, "The look of surprise on people's faces when they make or use something that is 'cheap and simple' is wonderfully encouraging. They are genuinely surprised. It reflects the huge impact consumerism and commercialism has had on people's lives." It certainly gets you thinking……

http://theshoppe.com.au/wp-content/uploads/2009/11/Sustainable-Alternatives-Chart.pdf

GET INVOLVED WITH LANDCARE. GET INVOLVED WITH LIFE

Landcare is celebrating the strength and breadth of the grass-roots movement through an exciting and colourful new campaign called **LIFE – Landcare Is For Everyone.**

The campaign uses 3D animation to illustrate the diversity of Landcare, demonstrating how working to preserve the land sustains the very species that live on it, and the variety of different ways that people can get involved.

Whether you live in a city or a one pub town, on the beach or on a station, in the Top End or the Island State, LIFE is designed to give you ideas on what you can do or how you can join others in caring for the land and our environment, because after all, the land is the reason we exist and the reason we continue to survive.

The concept for the campaign was developed by Mark Collis, with the animation by Mighty Nice, whose previous campaigns include The Girl Effect for Girl Effect Org and The Adventures of Harry Ficus for WWF & FSC. The website was developed by With Collective. The multi-channel campaign was launched on September 3rd, at the 2012 National Landcare Conference in Sydney and comprises of a TVC, a radio ad voiced by Landcare ambassador, Jack Thompson, print and online advertising, and a website.

Director, Darren Price of Mighty Nice is proud to have been involved in working on a campaign for such an iconic environmental brand.

“The sheer scale of Landcare’s great work for Australia at first appeared an overwhelming task to communicate, but their grassroots movement is truly inspiring, and the story really told itself. From swooping high with the birds to a magnified ant, our animation illustrates the far-reaching effects of Landcare’s role in our country and beyond. It was a delight to work with such a passionate client, and Mighty Nice are proud to be a part of this campaign,” he said.

Landcare Australia CEO, Heather Campbell, believes this campaign is the best way to demonstrate just how wide-reaching the Landcare movement is.

“You can be a Landcarer in many different ways – either as an individual or part of a group. People can easily get involved by attending events like National Tree Day or Clean Up Australia Day, working on their own properties, planting a veggie garden, going out with a group of volunteers to clean a local beach or by integrating sustainable farm practices into their operation, and these are only a few of the options out there.” she explained.

“The key point for people to recognise is that Landcare is about caring for the land to help it sustain us into the future and it’s up to everyone to get involved.”

LIFE is about people across Australia getting involved in Landcare in their everyday lives.

Landcare is LIFE. Landcare Is For Everyone.

For more information or to view the TVC, visit www.landcarelife.com.au

NATIONAL SCIENCE WEEK – 15-23 AUGUST 2015

Science buffs Australia wide are preparing for our biggest annual celebration of science and technology; National Science Week (http://www.scienceweek.net.au/), running from the 15th to the 23rd of August.

Around Australia more than 1000 events will be offered by universities, schools, research institutions, libraries, museums and science-centres. With something for everyone from children through to science professionals over one million people will participate in events across the nation.

For more information on events, registering your own events or simply to find out more about our nations scientific and technological achievements visit National Science Week.

(Written by David Graham, HOPE member, Qld)

Global News

WORLD HUMANITARIAN DAY – 19 AUGUST 2015

World Humanitarian Day (http://www.un.org/en/events/humanitarianday/) on the 19th August, commemorates the 2003 bombing at the UN headquarters in Baghdad. 22 aid workers lives were lost. It's a day to honour those who have lost their lives in humanitarian service and to celebrate the spirit that continues to inspire humanitarian work.

This year World Humanitarian Day is about celebrating the Humanitarian Heroes. This World Humanitarian Day we celebrate the extraordinary people willing to risk everything to help those in need.

Worldwide, more people then ever before are in need of humanitarian support. Join a global movement on the 19th August, and take a stand for humanity. Use *#humanitarianheroes* on all social media platforms and show your support for those who continue to risk their lives daily. Visit World Humanitarian Day for more information and to hear the stories behind our Humanitarian Heroes.

(Written by David Graham, HOPE member, Qld)

Explainer: ocean acidification

The carbon sequestration service provided by the oceans comes at a price. The cost of this carbon dioxide uptake is a gradual increase in the acidity levels of the oceans, which could have serious impacts on marine life.

Read more about ocean acidification

Conservation International - http://www.conservation.org/Pages/default.aspx

We've just published our **2015 Impact Report**, which focuses on the human side of conservation: the real people who benefit from our work. You'll meet Gopar, an Indonesian rice farmer; Medardo, an Amazonian village leader; and other everyday folks who rely on nature to support themselves and their families. These global citizens, and millions like them, are our VIPs.

Working with countries, companies and communities around the world, CI is caring for nature and transforming the way people manage their resources. Thanks for supporting them, and us, on this amazing journey. **http://www.conservation.org/impact**

Advertising Rates

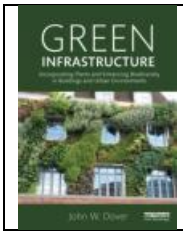
HOPE is keen to raise some much needed revenue through the introduction of paid advertising in our newsletter.

At this stage, we are offering business card sized adverts for $30 + $3 GST per edition; OR $300 + $30 GST for a full year.

If interested, please send your advert to office@hopeaustrlia.org.au and your payment to HOPE Inc., PO Box 6118 – Clifford Gardens, Toowoomba QLD 4350.

(Direct debit banking details available on request.)

Resources



Green Infrastructure

Incorporating Plants and Enhancing Biodiversity in Buildings and Urban Environments, by John W. Dover

Read more...

PRACTICAL SUSTAINABILITY IN THE HOME
SNIPPETS FROM THE SELF-SUFFICIENCY SHOPPE, http://theshoppe.com.au/

Vinegar:

Basic uses - Cheap generic vinegar: cleaning, disinfecting, deodorising, anti-bacterial agent, insect repellent
Better quality cider or white vinegar: hair conditioner, culinary, skin astringent, personal deodorant, therapeutic uses, preservative (food)

Useful Tip - Use plain vinegar in place of commercial preparations as a disinfectant or make something similar by half filling a recycled plastic bottle (an old vinegar bottle is ideal) with cheap (white) vinegar. Fill the remainder of the bottle with water. Add a few drops eucalyptus oil and 2 drops green food colouring. Apply lid and shake. (For Lavender disinfectant use lavender oil and pink/purple colouring). Looks and works just like commercial disinfectant!

More information e-Book No. 33 Versatile Vinegar - download information here

Bicarb Soda:

Basic Uses - abrasive Cleaner, deodoriser, whitener, stain removal

Useful Tip - Make a quick Carpet and Room Deodoriser by three-quarter filling a clean medium-sized jar with bicarbonate soda. Add 6 drops eucalyptus or lavender oil. Apply lid. Shake well to blend. Leave 24 hours for the perfume to permeate the bicarbonate soda. Punch holes into the lid of the jar to form a sprinkle-top container. To Use: Sprinkle onto the carpet area, focusing specifically on areas that require extra deodorising. Leave 30 minutes - then vacuum or brush off. Deodorises the room as well as the carpet.

More Information e-Book No. 9 Amazing Bicarb! - download information here

Eucalyptus Oil:

Basic Uses - stain removal, deodorising, disinfecting, cleaning, therapeutic, insect repellent

Useful Tip - Make a very versatile and useful All-purpose Grime/Stain Remover and Surface Spray by mixing together 1/3 cup each of water, cloudy ammonia* and liquid soap-jelly**. Add 8-10 drops eucalyptus oil. Mix and pour into a recycled spray container. Cleans everything: Stains on clothing (apply before washing) or spray onto surfaces to remove grime, grease and dirt from walls, vinyl, stove top, tiles, around light switches, etc.
* cloudy ammonia has a strong odour - replace with vinegar if preferred
** see recipe above or use bio-degradable dish-washing detergent if soap jelly is not available.

More information e-Book No. 23 - Green Cleaning - down-load information here