



OCT/NOV 2011

EDITION 32

Echidna Creek 10 years on

In the beginning by engaging the landowners of 5 adjoining properties in the headwaters of Echidna Creek, this project aimed at improving water quality with revegetating and demonstrating a practical and cost effective model of successful riparian rehabilitation. Project objectives also included two goals for vegetation biomass: to ensure canopy closure of 75% within two years and to achieve a plant survival rate of 90% after two years.

Outcomes

The revegetation of the riparian zone of Echidna Creek has significantly improved water quality in a number of ways. Endemic plants filter nutrients and stabilise banks thereby improving water quality. Shading provided by an increasing canopy has had a positive effect on in-stream temperatures, by keeping water temperatures at a more stable level. This has eliminated large temperature fluctuations having a positive influence on other parameters such as Dissolved Oxygen.

These improvements in water quality have greatly increased the biodiversity of the creek, evident by the emergence of many species of native fauna. The physical changes to this aquatic environment were obvious to the landholders themselves. Prior to the project there was high turbidity lasting for up to a week now there are distinct improvements in water quality with clear water that only remains turbid for a day and a half after rain. Riparian vegetation has also greatly increased soil stability, creating a buffer for nutrient runoff, greatly reducing erosion and eutrophication due to nutrient loading.

The on-ground maintenance of riparian revegetation and improvement in eco-system, water quality, growing rate of

survival of plants, control of soil erosion are the key achievement of this project. Due to revegetation and fencing, it is changing shape with the recent rains, widening and getting down to bedrock in some areas. There is incredible change in birdlife and water weed.

The diversity of attitudes, concerns, requirements and expectations, embodied within the community of landholders on Echidna Creek was one of the major challenges facing this project. Six of the properties lying within the project area carried livestock. Each of these properties had different management objectives. The

different situations on each property meant that equitable distribution of funds between properties was not feasible. To overcome this challenge, every attempt was made to seek equity through a balancing of financial and non financial benefits. Landowners were approached individually in the initial planning stages. This personal approach was used to gauge each individual's interest in the venture proposed. The roles and responsibilities of each stakeholder were set out early in the

implementation of the project at various group meetings

Interesting and unexpected outcomes were revealed.

Previously the creek had not been perceived as an entity worthy of protection. Now it has evolved from an unnoticed feature of the rural landscape into a valued asset. A number of the landholders have changed their attitudes towards the environment and continued to extend the project throughout additional areas of their property of their own accord.

The revegetation contractor for this project found great value in the on-ground experience which has given rise to many other work opportunities. The project trained and employed 20 people during its course.

The owner of Limousin Cattle Stud (landowner) mentioned a number of improvements to his property and farming



landowners celebrate

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www.maroochycathmentcentre.org.au



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Continued from Page 1

practices brought about by this project. Prior to the project, cattle drank directly from the creek. This increased erosion creating boggy hoof trodden banks, also water was often fouled from manure. The fencing off of the riparian rehabilitation zone and introduction of alternative off-stream water supplies decreased cases of worms in cattle stock and significantly reduced erosion. The project created concrete causeways to divert cattle from boggy areas of the creek crossing. This gave easier access to the cattle and landowner and made stock rotation easier.



Connections between neighbouring landowners were established that had not existed prior to the project, networks have been developed, stimulating the custodial connection between people and their creek and creating a more cohesive community in the Echidna Creek catchment.

Despite considerable government and private resources invested in restoration of damaged environments, such as revegetation of riparian zones, little was known about the success of such projects.

The Echidna Creek Project was used by the CRC for catchment hydrology as a trial demonstration site to quantify the effect of this commonly adopted stream rehabilitation methodology.



Echidna Creek rehabilitation was used as the "treatment" and compared against two control streams for a period of two years.

In 2006 Echidna Creek Project was at the forefront of waterways rehabilitation and this continues today. Its success has been deemed significant as one of the only demonstration sites of this magnitude in Queensland.

Land owners have given overall positive feedback on the project. They were appreciative of the fact they were able to give their own opinions and input. This innovative and unique nature meant they did not feel "locked in" to any conditions or covenants over their land. Landholders involved in this project are keen to extend the project and want to continue the revegetation on their properties beyond the project area. A strong connection has been established between the land owners and value of the properties has been increased.

It was also the first time council had been involved in such a project, which meant that it was able to understand the real cost of riparian rehabilitation, and to realise that developer contributions are now a necessary part of urban developments.

The Echidna Creek Project has been exclusive in collaborating a huge contribution from people or organisations working together such as the then Maroochy Shire Council, Healthy Waterways, Indigenous Groups, DEEDI, SEQ Catchments, Maroochy Waterwatch, Griffith University and Land Owners.

from the editor

I had the unexpected privilege to be able to attend the birthday bash for Echidna Creek. Managing to get there early I was also able to sit in on the Healthy Waterways meeting prior to the Barbie and cake.

I was profoundly humbled and moved by the wealth of talent and enthusiasm that was evident at the meeting. People from various areas, including council representatives and even Unity Water viewed current goals and possible future projects. Not daunted by governments' lack of foresight with regards the necessity for long term planning and corresponding long term funding for environment sustainability the speakers were pragmatic but optimistic...even humorous at times. I particularly loved the sustainable white board i.e. the dirt floor....the white marker...a stick. The diagrams although very temporary were sufficiently informative on the day.

Then, just as we were about to have lunch - down came the rain. Angie and her merry gang of Green Army rose to the event and a good time was had by all.

The longer I volunteer at Maroochy Waterwatch the more sure I am that our grandchildren's future is in good hands.

Talking about grandchildren, I have recently been introduced to our new granddaughter.....our seventh grandchild - each a precious gift - and I am confident their future is in safe keeping whilst the work like minded-people worldwide are carrying out on and for the environment. **No photos I promise!**

Lesya

Landholder Environment Grants

Private landholders of the Sunshine Coast, who have satisfactorily met all acquittal conditions of previous council grants can apply for Landholder Environment Grants.

Projects must be on privately-owned land within the Sunshine Coast Council area. Landholders can apply for assistance to carry out natural resource management activities such as:

- fencing to restrict stock access to significant vegetation, wetlands or riparian areas (fencing must be for the prevention or restriction of livestock, access to revegetation plots, remnant vegetation, wetlands or riparian areas - creek or river banks).
- installing off-stream stock watering points and stock crossings
- planting of local native tubestock for the purposes of rehabilitating degraded areas or establishing vegetation corridors and buffer zones
- soil conservation works, sediment and erosion control
- environmental weed control and bush regeneration to rehabilitate native vegetation areas
- works or activities aimed at restoring known habitat for rare or threatened species
- modification of existing fencing to make it more wildlife friendly
- other activities may be considered after consultation with a Conservation Partnerships Officer

Note: The following costs are eligible for funding:

- hire of specialised equipment, essential for the completion of the project
- purchase of herbicides, plants, stakes, mulch and other materials
- fees for engagement of a suitably qualified and experienced contractor.

www.sunshinecoast.qld.gov.au/sitePage.cfm?code=landholder-details

Garden Expo 2011 was a hectic time for all involved at



Coolum Community Native Nursery. Volunteers did a great job of labelling nearly 4000 tubestock and preparing 40 starter packs in preparation. The starter packs consisted of a variety of species for a particular planting (e.g. frog ponds, seaside shrubs, groundcovers) 8 in total per pack.

Other tasks included labelling display stock, creating stall signage, collecting display seed for the seed collecting display (which was separate to our sales stall) and preparing signage for this display.

This was followed by the tasks of moving nearly 3000 tubestock plus all associated stall necessities, display stock, seed collecting display, to the expo on the

Thursday, setting up the stall (with our co-partners Barung Nursery), and packing up on the following Monday.

Over 1200 native tubes were sold (similar numbers to Barung) and peak times were from mid-morning until mid-afternoon. We also handed out nearly 1000 free plant vouchers to get customers visiting the nursery, which seems to be working.

Being a part of the "Living Backyards" area turned out



really well as many "like-minded" stall holders took part here, along with Sunshine Coast Council. We certainly had a captive audience when the various presentations took place right next to our stall!

What is most encouraging is the interest people have in native plants. Many people are enthusiastic but need more practical advice, so we spent a large part of our day simply answering gardening and landscaping questions. Volunteers did a wonderful job of staffing the stall to ensure there were always three of us on hand (plus Barung crew) to answer questions and complete plant sales.

Garden Expo is a large captive audience and not just the usual suspects, it really crosses land care over into the mainstream at a grassroots level.

Jake Hazzard.

Coolum Community Native Nursery
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Ph: 07 5473 9322
Mob: 0427 022 038 (Jake Hazzard)
www.coolumnatives.com

Water Quality

A number of Maroochy Waterwatch volunteers have been asking specific questions about the significance of particular water quality parameters lately. This sparked the idea of re-visiting the topic of water quality parameters and what our volunteers' data means in the "bigger picture" of river health. I realize some of our readers are more than familiar with this area of science and it has been explained in newsletters and workshops in past years. So, for the benefit of those who are "rusty", read on for a crash course in Water Quality.

The parameters; pH, Turbidity, Electrical Conductivity, Dissolved Oxygen and Salinity will be broken down into sections in the newsletters of following months.

This month we will feature Dissolved Oxygen (DO) this article has been written by **Lenin Raj**, our trainee who is getting back to basics with water quality and also getting a crash course in Aussie culture!

Dissolved Oxygen is the key dissolved gas important to aquatic systems. It is an important factor for sustaining life within a stream, pond, lake, river or ocean and absolutely essential for the survival of all aquatic life. Aquatic animals, plants and most bacteria need it for respiration as well as for some chemical reactions.

Adequate dissolved oxygen is necessary for good water quality. Persistently low dissolved oxygen will harm most aquatic life by restricting their ability to carry out essential bodily functions.

Most living organisms, including aquatic organisms, require certain levels of oxygen to carry out normal metabolic processes. The dissolved oxygen of a healthy aquatic ecosystem typically ranges from about 4 to 8 ppm (parts per million) or (mg/litre). In general, dissolved oxygen of below 4 ppm in a river or lake represents a very unhealthy situation for fish and other organisms.

Oxygen is dissolved in water by variety of processes such as diffusion between the atmosphere and water at its surface (look up Henry's law), turbulence as water flows over different obstacles, churning of water by waves and wind, and photosynthesis of aquatic plants. Dissolved oxygen (DO) is highly dependent upon temperature, the solubility of oxygen decreases as temperature increases. (Gas Laws)

Dissolved oxygen levels fluctuate according to process of aquatic flora and fauna. Aquatic plants and algae release oxygen into the water via photosynthesis during daylight hours. During the night, plants and animals continue to consume oxygen causing a decrease in dissolved oxygen.

The water quality parameters are all in one way or another, directly or inversely related to each other. In many cases, an increase in turbidity will result in decreased dissolved oxygen. One reason for this being, increased heat absorbency by suspended particles in turbid water can lead to increased water temperatures, in turn decreasing solubility of oxygen. This process is commonly termed "thermal pollution". An excess of suspended particles in a water body can smother beneficial macrophytes (aquatic plants) hindering photosynthesis and their oxygen production.

Shortly after the floods this year we noticed a slump in Dissolved Oxygen across many water testing sites that followed a massive peak in Turbidity.

Maroochy Waterwatch practices good management strategies, such as re-vegetation of riparian zones and removal of debris from water ways. This reduces nutrients entering via runoff, stabilizes water temperature, minimizes the sediment load and increases biodiversity. In the next newsletter we will re-visit another parameter. .

Oil Slicks

I have had several emails and queries from a number of concerned water watchers early this month. The concerned river carers were all claiming to have "oil slicks" in their stream. After asking a few questions about the appearance of these so called slicks - **a culprit was found!**



The oily looking slicks being sighted are actually naturally occurring Bio-films. These bio-films are caused by a group of bacteria called *chemolithotrophs*. These microorganisms have the ability to gain energy from minerals in the river substrate or water column instead of light energy. These biofilms sometimes have a rainbow appearance, which makes them appear to be oil slicks. A good way to tell is by lightly touching the surface with your finger. A biofilm will usually break and drift apart in tiny cracks, whereas oil will stay held together.



Some biofilms are also caused by a type of algae called Diatoms; some genera, I am familiar with, have also been known to create a rusty orange colour. This rusty orange scum may also look concerning as it is similar in appearance to a condition called "Yellow Boy" caused by Iron Hydroxide pollution of waterways from acid mine drainage.

The presence of these bacterial colonies comes and goes with seasons and water-flows such as droughts. When conditions are right the microorganism colonies are able to build up to numbers that create a visible film on the water's surface. It is a natural phenomenon that is harmless to the water quality, so while these microbes are around

just enjoy the rainbow!

Shay Allen

HEALTHY WATERWAYS

Because we're all in the same boat



2011 Report Card

A representative of the Healthy Waterways Scientific Expert Panel, Professor Paul Greenfield presented the 2011 Report Cards results to Environment Minister, Vicky Darling MP on Wednesday 19th October.

Professor Greenfield commented that considering the magnitude of the flood, the 2011 Report Card grades are more positive than expected, particularly in freshwater streams and estuaries. The impact of major rainfall events on waterway health highlights the need to build the resilience of our catchments. We must prepare our catchments for rainfall events by managing erosion, stabilizing creek channels, rehabilitating riparian (or riverbank) areas, investing in good agricultural practices and sustainably managing urban water.



Maroochy tops health score

On a positive note, the 2011 Report Card shows some freshwater streams and estuaries improved in grade, reflecting the positive influence of high waterflows. Maroochy and Pine are among 10 freshwater catchments that received the highest health score since monitoring began in 1999."

Freshwater	2010	2011
Maroochy	C	B -
Noosa	B	A -
Mooloolah	B -	B
Pumicestone	C -	C +

The water quality of Eastern Bay, Eastern Banks as well as the Pimpama, Tingalpa, Maroochy and Mooloolah estuaries were downgraded.

Estuaries	2010	2011
Noosa	B +	B +
Maroochy	C	D +
Mooloolah	B	B -

Healthy Waterways CEO Dr Peter Schneider said to improve water quality, creek and river banks need to

be restored with grasses and trees after mass clearings for farms and urban developments. This would help prevent banks being washed or eroded away during floods. A new focus also needs to be placed on stopping erosion from large areas that have been cleared and left bare for urban developments.

Environment Minister Vicky Darling said given the floods, the freshwater improvements were encouraging. *"High water levels in freshwater streams have improved fish movement, resulting in greater numbers of native species in some streams,"* she said.

For more information go to <http://healthywaterways.org>



National Riverprize

An impressive Sunshine Coast group has taken out one of the World's most prestigious environmental awards – worth \$195,000.

The 2011 Australian National Riverprize



The Sunshine Coast Rivers Initiative is a group of over 30 community groups and government agencies, headed by Sunshine Coast

Council, who have developed and implemented outstanding, visionary and sustainable programs in river management.

Environment Portfolio Councillor Keryn Jones said that it's wonderful to have all the hard work recognised.

"Our environment, economy and lifestyle all depend on having, maintaining and improving clean, functional, healthy waterways," Cr Jones said.

"This award shows that as a community, we're working in the right direction together."

"The Initiative certainly unites an impressive collection of achievements involving improvements to creek-side vegetation, in-stream habitat, and land management practices as well as range of waterway health planning and research projects."

"Council's recently adopted Waterways and Coastal Management Strategy provides a solid foundation for action and with community groups, three levels of government, industry and research organisations all working together – both within and between catchments – we've got a real recipe for success."

Prize money will be used to fund innovative and catalytic waterway management and improvement projects across the Sunshine Coast.

Environmental oddities

Necessity - the mother of invention!



Six years ago, Australian businessman Michael Gravina walked into a cafe in Harare, Zimbabwe. He was travelling at the time and looking for a new project. By chance, he began speaking with Dr. Loki Osborne, an American-born scientist. Loki shared stories about his work in elephant conservation. Loki was looking for a partner to join him in discovering a way to address the conservation of elephants while addressing the poverty issues of African farmers.

Mike and Loki teamed up and began to research solutions to repel elephants from crops. The solution needed to be environmentally sustainable while being friendly to animals, and in the humble chilli pepper they found their answer. Chilli-based repellents were found to repel elephants from fields significantly faster than

the traditional methods. After finding that elephants hate chillies **Elephant Pepper** was born.

Elephant Pepper began to educate and train farmers using the chilli-based deterrents, keeping crops and people safe from hungry elephants, and the elephants safe from angry farmers. Fields of chillies began springing up around food crops, and farmers started dressing their fences with chilli-grease soaked rags. In the evenings, the time when elephants usually raided the crops, many farmers began to burn briquettes made of elephant dung and chillies.

The elephants stayed away.

With people and elephants safe, Mike and Loki looked for ways to increase livelihood opportunities for the Elephant Pepper farmers. The team launched the Elephant Pepper brand, where they could manufacture and sell chilli sauces and other branded products using chillies grown by the same small-scale farmers.

So as to ensure future economic stability for farmers and safety for elephants, ten percent of profits from the spice products are returned to Elephant Pepper projects.

Mike and Loki continue to be the driving force behind Elephant Pepper, a project that would not be possible without the support of customers, and would never have been realized without that chance meeting in a little café in Zimbabwe.

Visit www.elephantpepper.org to find out more.

(Question: Would this work with wallabies...anyone willing to have a go and report back.? Ed)

And another interesting step in our battle to protect our crops from marauding livestock

A lady in North Qld has reported that the use of the plant commonly known as "Mother of Herbs" placed in pots, or grown directly into the ground around the vegetable patch will keep pesky Bush Turkeys in hand.

Plant: Cuban oregano (*Plectranthus amboinicus*)
Variety: Variegatus

An aromatic and culinary herb. Used in the tropics to replace other herbs that just don't survive the humidity.



Also known as Cuban Oregano, Indian Borage, Mother of Herbs or 5 Spice Herb because of its complex aroma and flavour.

FACT OR FICTION?



"I was at a deck party awhile back, and the bugs were having a ball biting everyone. A man at the party sprayed the lawn and deck floor with Listerine, and the little demons disappeared.

The next year I filled a 4-ounce spray bottle and used it around my seat whenever I saw mosquitoes. And voila! That worked as well. It worked at a picnic where we sprayed the area around the food table, the children's swing area, and the standing water nearby.

So, try this, please. It will last a couple of days. Don't spray directly on a wood door (like your front door), but spray around the frame. Spray around the window frames, and even inside the dog house.

Qessi news

Sustainability Education in Schools

This article is designed to give readers a brief insight into the **National Sustainability Curriculum Framework** which was released in 2010. This framework serves as a guide for curriculum developers and policy makers in the development of the new Australian curriculum and shows how education for sustainability may be structured to support a progression of learning from Kindergarten to Year 10. It has been developed through national consultation with experts in education and in education for sustainability, primarily through state and territory government agencies and academics with expertise in these areas. Sustainability is now one of three cross-curriculum priorities of the new Australian Curriculum.

The National Framework provides an explanation of **Sustainability education in Australia** which has built on approaches used by environmental education over the past 30 years but with a more far-reaching scope. It includes the built environment and social and economic considerations as well as the natural environment.

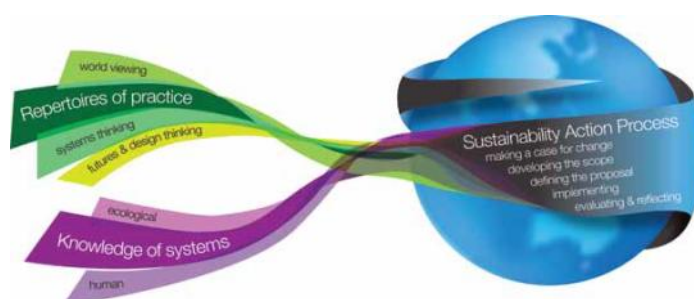
The broad coverage of disciplines required to effectively teach education for sustainability has made it difficult to develop a systematic and cohesive progression of learning from Preschool to Year 10. The cross-disciplinary nature of education for sustainability is challenging to those who seek to develop it, as it represents ways of conceiving of content that are neither traditional nor mainstream, and demands new ways of thinking about curriculum. This framework is a major step towards meeting those challenges.

The framework provides sustainability content in three broad year groupings: P–2, 3–6 and 7–10 year levels with the framework's content structured into three organisers:

- Sustainability action process (ways of investigating issues and making a case for change)
- Knowledge of ecological and human systems
- Repertoires of practice (world views, systems thinking, futures and design thinking)

[*National Sustainability Curriculum Framework, 2010*](#)

For more information, visit: [QESSI Section of Maroochy Waterwatch website](#)



Article by: Sandy McBride & Clare Cox, Sunshine Coast QESSI Hub

Kids teaching kids

(excerpt from "Bush Hands" article by Michael Gilles.)

'In August this year the Sunshine Coast played host to the 4th annual Queensland KTK conference.

The Event was certainly enriched by the involvement and support of local groups such as Sunshine Coast Turtle Care, Mary Cairncross volunteers, Wetland Care, Ray and Pam Seddon and the Richmond Birdwing Butterfly Network, QESSI—Maroochy Catchment Services, Brush Turkey Enterprises and Noosa & District Landcare.

The exciting news for the Sunshine Coast is that 2012 will provide and even greater opportunity for kids from local schools to participate in a newly developed localised version of the Kids teaching Kids programme as part of an overall approach of enhancing engagement opportunities with schools for the region. This will focus on connecting the

community and Council with Schools across the coast in striving to sustain a green and diverse future.

Kids Teaching Kids is an education programme that uses local environmental issues as a theme for learning. It involves kids in sharing the ways their schools are working towards a sustainable future with their communities and other schools.'

This programme is another example of successful partnerships within the community and council that are enriching the environment through education and learning.

For more information on this event please visit

Sunshine Coast Council's website:

<http://www.sunshinecoast.qld.gov.au/>

or for a complete guide to the Kids Teaching Kids programme - visit

<http://kidsteachingkids.com.au>

River Patrol Goes On Line!

DUE TO POPULAR DEMAND AND NEW STOCK ARRIVING DAILY - THE RIVER PATROL CREWS ARE COMMENCING AN ON LINE ORDER BUSINESS TO SUPPLEMENT RUNNING COSTS.

Place your order now!

Doing up the kitchen doors? Refrigerator need replacing? Kitchen chairs/table a bit sad?

Give the Patrol boys a buzz. Stock up that pantry too with unusual treats!

Looking for a special item for the grand kids (toys, dresses, buckets and spades, balls, surf boards, shoes, nappies)? Call us now!

Going camping and need a tent, ropes, and tarp? Try River Patrol.

Your TV or microwave on the way out? Have we got the deal for you! How about a lounge chair and coffee table to match?

Poor old Uncle Bob with one leg embarrassed when he has to buy shoes? Our range of unique and individual footwear is second to none (a thong is currently on special)

Sun-smart caps, visors, t-shirts, boardies, a sock, a jogger, underpants, bikini tops going fast!

Want to get fit and healthy in your new outfit? Push bikes, scooters, shopping trolleys, in a range of styles (some items may need wheels).

Summer is just around the corner so time to revamp your stubbie coolers, water bottles, eskies, folding chairs, large plastic drums for home brewing. Think River Patrol.

Why pay exorbitant prices for car parts when River Patrol can source your tyre and rim, door trim, steering wheel, door handle, brake pedal at a fraction of the cost (older models our specialty) Taxidermy your hobby? We can find something interesting and challenging for you floating by.

And just arrived a wide range of pharmaceutical supplies meticulously sterilised in salt water (needles in assorted colours now in stock with matching bongs).

All items come with our guarantee that they are individually picked by hand, and as a special introductory offer, **we include a four day drying off period absolutely FREE.**

And for the readers of this newsletter only, every purchase comes with a **free** rusty fishing tool and fish lure without hooks

Special: a knotted bunch of fishing line complimenting a crab pot float (with a steak knife) included as a super bonus for the first 700 orders !!!!!!!

I know! I know!

I may be talking a lot of old rubbish but this is a small compilation of the gatherings from our own Maroochy River and joining creeks and, the sad part is, it keeps on coming every week, every month, every year, so the crews will never be redundant unfortunately.

PICK UP YOUR LITTER PLEASE!

Glenn and Sandra
River Patrol Coordinators

Drop Bear Season.

ATT: Anyone going out in the field,



Once again it is Drop Bear season.

Please be mindful that these are dangerous animals and their bite can be fatal. In order to meet our WH&S obligations, any staff and volunteers will need to make sure they take appropriate precautions when going out in the field. This is particularly important in sites where there is canopy closure:

1. Wear steel forks on your hair
2. A dab of vegemite behind the ears.

Shalin, I think we only have promite in the office. Can you organise a jar of **vegemite** so that people can take it with them when going out. Better get a large jar as we have a few extra people this year with the Green Army crews.

I have had a look at the website and so far the Sunshine Coast has escaped any attacks, but I don't want Maroochy Waterwatch splashed in the papers with the first attack of the season.

For more information go to

<http://australianmuseum.net.au/Drop-Bear>

Thanks for understanding the seriousness of this issue !!!

Cerran Fawns

Butt Hunters Unite for a Cause

Butt hunting is fast becoming a recreational pastime for residents of the Sunshine Coast with the aim to collect 1 million butts.

The butts are not the human kind, but those dropped by cigarette smokers. Butt hunters across the coast are sick of seeing the cigarette litter thrown everywhere and the Great Butt Muster is now open.

Suzie Temple and a band of volunteers have been collecting butts for a month and are appalled by the number of them, particularly along the Maroochy River.

She said, *"In one short walk along the Maroochy River I picked up over 1000 butts. I am absolutely astonished by the number of them"*.

Ms Temple added, *"Butts flicked onto the ground eventually make their way to rivers and pollute them. What we are picking up are only those butts on the shore. I'd hate to think how many are in the river"*.

The group however now has a new challenge with the donation of a 1m³ see-through perspex box by Maroochy Waterwatch.

Cerran Fawns, CEO of Maroochy Waterwatch said,

"I heard about their efforts and wanted to thank the group for helping look after the river. After meeting up with Suzie, we decided to set the challenge and fill the box with littered butts."

She added, *"We estimate that the box can contain about 1million butts. Once filled it will be used as an educational resource to show people the extent of the problem"*.

A Facebook page has also been developed to track the progress of the project

<http://www.facebook.com/#!/pages/Bin-ur-butts/166878313387480>.

The groups are also calling for more volunteers to help in their crusade. Butts can be collected from any location. Use gloves and place the butts in an old sealable soft drink bottle. Ms Fawns added, *"If you don't have a old bottle at home, there are plenty along the banks of the Maroochy River which you can use!"*.

Collected butts can be dropped off at the Maroochy Waterwatch office, Donaldson Rd, Nambour.

The count so far is almost 70,000

For more details, contact Suzie Temple on 5448 6828 or Cerran Fawns on 07 5476 4777



The Toxic Butt Poem

Suzie Temple.

**Oh toxic butt where do you go, when from the
car window someone doth throw?**

**Out into the air with silent flutter, bounce from
the kerb into the gutter,**

**nestled in leaf litter not far from the drain,
awaiting the next good drop of rain.**

**Above clouds gather a distant rumble, from
the heavens above the raindrops tumble.**

**A few drops then many, soon a good flow, the
butt leaves its port to the drain it will go,**

**over the grate and down round the bend where
it meets up with many a friend.**

**Soon into the ocean their poisons they leach,
until a good wave puts them back on the
beach.**

**There they will stay for a week or twenty, till a
butt hunter comes looking for plenty.**

**Gathers them up to put in the giant Perspex
cube, not a bad life for a small toxic tube!**

Maroochy Waterwatch Annual Membership due for July 2011-June 2012

Tax deductible donations (\$2 and over) will help Waterwatch protect and improve the water quality and biodiversity of our creeks and rives, and the life that depends on them.

http://www.maroochycatchmentcentre.org.au/catchment/wp-content/uploads/2010/07/Waterwatch_Membership_form.pdf

Cross Culture in the Workplace

With many of our staff and volunteers from different cultures it is important that we are aware of our individual differences, whilst respecting those of our own country. Ed

What is Culture?

"Culture is the learned, shared patterns of beliefs, behaviors and characteristics of a society or population." Ember, CR and Ember M 1988, Anthropology

Impacts that define Cultural Practices: Food, Music, Dance, Language, Family Roles, Ceremonies, Celebrations, Religion, Spirituality, Gender Expectations, Dress, Sports, Recreation, Architecture, Customs, Prohibitions, Taboos and Laws.

Self Awareness is the core underlying process that allows cultural competency to occur. (When we try to step outside ourselves in order to gain an objective view of ourselves.)

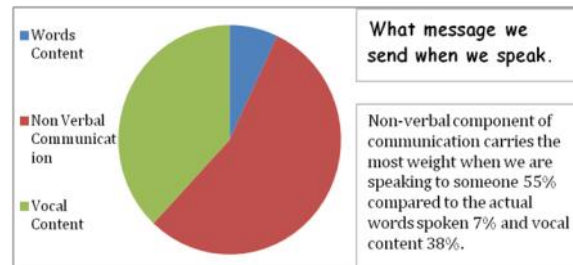
Things that prevent us being self aware may include:

- Identifying with a person or situation very closely
- Being so focused on one thing that it is difficult to take a step back
- Personal morals, ethics, beliefs and traumatic or stressful situations
- Certain personality traits (some people see this issue as being unimportant)
- Particular individual's cultural & spiritual needs
- Communication skills of people from diverse backgrounds
- The need for continued interaction with the cultural community
- Code of behaviour for men and women, older and young people
- Religious symbols, place of worship and religious texts
- Privacy needs to reflect on spiritual and ceremonial observances.

Awareness of others and cultural differences

- Preferred way of greeting; cultural name, title,
 - Cultural history and background – in the person's country of origin
 - Ways of communication; verbal and non-verbal
 - Family and gender roles and relationship
 - Personal needs, dietary customs and other needs
 - Observance of special days and cultural-specific social activities
 - Location, how and when people worship; special religious practices
 - Customs relating to death and dying; family needs during periods of palliative care and grieving.
 - Consideration while communicating with people of diverse cultural backgrounds, including word choices and questioning, not assuming English proficiency and non-verbal communication. In some cases a professional interpreter may be needed if a person cannot easily carry out your instructions, answer your questions easily and repeat back information accurately. Why use interpreters?... It's good practice, a duty of care, reduces stress, prevents mistakes, is a human right and is also covered by Government policy/Legislation.
- 24hour 7 day a week information **131 450.**

In summary, if we are aware of our own self, we are better able to communicate with people who are different from us. Every person is unique and has different beliefs, values, experiences, education and abilities.



I have learnt to use the word WE instead of US & THEM

"Let's embrace the word 'we' in our lives!"

overview by Shalin Day

Some websites that are of use in understanding culture are:

CIA World Factbook

<https://www.cia.gov/library/publications/the-world-factbook/>

Executive Planet

http://www.executiveplanet.com/index.php?title=Main_Page

We would like to welcome a new Green Army team to



Maroochy Waterwatch. As part of the Government's *Skilling Queenslanders for Work initiative* participants have the opportunity to be involved in projects that conserve and restore the natural environment.

Over the next few months the crew will be trained in revegetation and nursery skills while getting their hands dirty undertaking works in the Petrie Creek Catchment focusing on weed control, bush regeneration, revegetation and general site Catchment focusing on weed control, bush regeneration, revegetation and general site maintenance.

Coming and Goings !!!

Colleen Long

Natural Resource Manager

Hi I'm Colleen Long

I have been on the Sunshine Coast for 9 years and you may have seen me scratching around the bush land before on various projects. I have recently been appointed as the new Natural Resource Manager for Maroochy Waterwatch.

My love for nature developed many years ago while living and playing in the Colorado high mountains, I suppose I would call myself a naturalist.

I have been working in the Natural Area Management industry for around 16 years. I have a background in Bush Regeneration and Natural Area works planning mostly with local government focusing on community engagement and bush land management. I look forward to working with everyone and building on existing projects and works in our beautiful region.



Lenin Raj is participating in the 16 weeks Trainee Scheme hoping to further his work prospects and make full use of his Science degree.

Nidhi Bajaj has been working with HR Block.

Akiko Iwata volunteers every Thursday and continues to study accounting

Shay Allan has followed her heart to Newcastle, NSW. We wish her well.

Deffy Tsang

(Tsang Wing Nga)

grew up in Hong Kong and moved to Australia in 2008. She is on a 15 weeks State Government funded work placement program with Maroochy Waterwatch, in partnership with the Maroochy Neighbourhood Centre.

She obtained a Diploma in Community Welfare Work in Dec 2009 and would like to pursue a career in the community service sector. With her passion and positive attitude as well as life experience, she



believes she can make a real difference in our community. Hence she is taking advantage of this placement program to gain solid administration experience in the non-profit organization.

She takes this opportunity to thank the funding body – Department of Employment, also Maroochy Neighbourhood Centre and Maroochy Waterwatch. Special thanks for all the support from staff members and volunteers in the Maroochy Waterwatch Family.

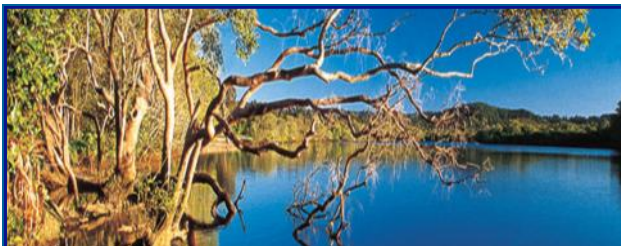
Jacqui Smythe

Environmental Projects Officer

Jacqui joins the Waterwatch team with many qualifications in the environmental field including Conservation Management and Restoration, Ecology, Hydrology/Geomorphology, River and Floodplain Ecology, Environmental Impact Assessment and has obtained a Bachelor of Environmental Science (Land and Water), Charles Sturt University. Jacqui has recently been involved with the Aquatic Development Programme with Entura (Hydro Tasmania Consulting). This involvement included environmental impact assessments, hydrological investigations, water quality monitoring and vegetation rehabilitation and restoration. We look forward to her contribution to our programmes.



out and about — events & workshops



The Board of Maroochy Waterwatch Inc extend a warm welcome to members to attend the Annual General Meeting of Maroochy Waterwatch Inc.

ANNUAL GENERAL MEETING 2011

Friday 18 November 2011

Location

37 Coronation Avenue, Nambour

(Entry via Donaldson Road, behind Uniting Church)

Agenda

8am - 10am

Maroochy Waterwatch AGM— Meeting Room

10am - 11am Morning Tea

RSVP

By Monday 14 November 2011 to Shalin Day on (07) 5476 4777 or

shalin@maroochycatchmentcenter.org.au

Hello River Carers !

The Sunshine Coast Council is currently needing information from residents to determine if there is a need for establishing marine zones or if other interventions are required in the Maroochy, Mooloolah and Pumicestone estuaries. To have your say on how the waterways should be managed please click on the link below. Also on the webpage is more information about marine zones. The survey should only take around 10 minutes to complete and closes 20th November.

<http://www.sunshinecoast.qld.gov.au/sitePage.cfm?code=marine-zone-investigation>

Cerran

Goings on

Summer is fast on its way and from all weather media reports, it looks like we are all going to be in for another wet summer. The Spanish beauty, La Nina, is hard at work in the Pacific Ocean as we speak and let's hope we don't see any of the devastation like the Summer of Sorrow. With the bit of rain that we have had I have noticed our frogs have started calling. However, the toads are also out in force and the toad hunting has begun for many people. Please be mindful that they are still animals and need to be

killed in a humane fashion. Place them in a fridge for a couple of hours to reduce their core temperature and then put them in the freezer. Then what do you do with the toads? Why not compost them? Well.... I was severely reprimanded by Clare Cox the other day when I inadvertently put a toad in our compost bin which is clearly labelled 'NO MEAT'. Unfortunately everyone knew the toad was mine (yes, it was a hand delivered package and opened during morning tea much to the disgust of some sitting at the table), so there was no getting out of it and blaming someone else. It was only a small toad but apparently toads are 'meat'! Who would have thought! I am only a scientist with a zoology major after all. LOL.

On more serious matters, we have just compiled some data on volunteering. Would you believe that we have a number of water testing volunteers who have been 'doing their dip' for over 15 years. That is commitment and as a way of valuing their time and effort we will be getting some comments about why the program and volunteering is important to these people. Amongst other things, I would also love to start capturing some of this information on video and compiling why the environment, rivers, plants, animals and people are important to the lives of so many. If there is a budding volunteer filmmaker who would like to take this project on board, please give me a call.

It is with regret that we say goodbye to Angelique Lahey who managed our Green Armies and revegetation projects. In addition, Shay Allen has followed her heart back to NSW. Both ladies will be missed by the volunteers in the office and out in the field. Replacing them is Colleen Long and Jacqui Smythe who bring a range of scientific and technical expertise to the team. Our volunteer ranks are the usual bustle of activity and I thought I might enlighten readers on some of the more unusual volunteering opportunities we cater for. If you are in the office on Tuesday or Thursday mornings, you will be treated to barista made cappuccinos by Les Bauer. To add to our gastronomic delight, Jacqui Smythe replaces Shay Allen in the cake making department for Friday morning tea. We are however on the lookout for a Chai Tea maker for Mondays and Wednesdays. If you are thinking about volunteering, we can usually match you with a job that suits your needs.

Cerran Fawns BSc (Hons) CEO

This newsletter is proudly brought to you by:

Maroochy Waterwatch Inc.

Queensland Environmental Sustainable Schools Initiative

Maroochy Catchment Services

Cooloom Community Native Nursery