



NEWSLETTER 1 – SUMMER 2014

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With good news stories hard to come by in the current political climate, I thought this newsletter should at least start on a positive note. **John**

“Puggles” - by Patricia Edwards

Baby echidnas are notoriously difficult to rear, so when I was handed Puggles on 25 Oct I accepted him with reservations. I hadn't even seen one this small, never mind raised one. But there it was, a circular 150g grey globule with some strange appendages that appeared on occasions. And it was alive. That was the oddest thing about it. It moved. It lived, on the planet, with us, in this day and age.



“Welcome 'Puggles'”. A Puggle is a baby Echidna

Puggles' mother was hit by a car on the Brooms Head Road, and while she had sped away seemingly uninjured, her tiny puggle had fallen from her temporary makeshift pouch and been left on the road, facing certain death within minutes on a hot day.

He had spent 36 hours with his rescuer before he came to me, and he hadn't eaten. Even that small a baby echidna can go for a couple of days without

food, but now he would be ready to eat. I knew about the dripping milk on the palm feeding technique from our training courses, and how he would nuzzle and sup it up. It sounded easy. It wasn't. It was impossible to hold a strong, squirming blob in one hand, try to keep its nose facing forward, keep some milk on the palm of the other, and keep dripping milk - with what? It was messy, and entirely unsuccessful. The milk kept disappearing, but obviously not into the echidna. I ended up with wet pants every time, and 4 days later he still hadn't eaten, or if he had, I had no idea how - or how much.

I broke all the rules. I was told to put him away after each feeding attempt and not try again for another 24 hours. Refusing to let him fall into a coma I woke him 3 times a day to teach him to eat. On the fifth day he was looking lumpy, with a hint of a backbone and baggy skin. I phoned our small mammal coordinator and warned her I was going to lose him. Then in desperation I gave him an injection of rehydration fluid and tucked him back into his box, quite certain I had killed him. Two hours later I was astonished to find him awake and active, rustling around and nosing the air. I warmed his milk, poured some into a little dish, held him gently, let him roll around as he pleased until I could see which end was which, then dipped his nose in the dish. He blew bubbles and sneezed. Then an unexpected thing happened. He raised his head, stretched out his neck, and his little pink tongue suddenly protruded from the end of his beak. It was the first time I'd seen it. Gently I lowered it into the milk and he took a couple of laps.

From then on I knew I could raise him. It was a long time before he regained the weight he had lost, and for several days I fed him twice a day, letting him wake slowly, not allowing him to sleep his life away as he would have liked. In time he was

taking 10 or so erratic mls and was down to one feed a day. A day or two later he was taking 16-18mls, very slowly, and moved himself to 2-day feeds.



Puggles growing hair

Right until now feeding has not been easy or natural for him, he slurps and nose-dives, blows bubbles and still sneezes into the milk and needs to be guided into the dish. But he eats. Now he can at times guzzle a wallop of 30mls, quite quickly and determinedly, and is heading towards 250g. He is on stronger milk, he is bristly, and when he sleeps stretched out with his nose out of his pants he looks like an echidna.



Puggles growing bristles

I have to say, from the moment I first saw him I adored him. While accepting that they either eat or they don't, and are virtually impossible to raise if they don't, it still would have broken my heart if he had died. You cannot get pleasure from

something when you are scared for its life. He has been an incredible challenge, a definite labour of love, but only now am I truly enjoying him. I would not have missed the experience - but only because he made up his mind to live. *Patricia.*

Biomass

Burning wood to generate electricity is still a spectre hovering over our native forests, with the potential to see the devastating wood-chip industry morph into full scale harvesting of fire wood to run massive power generators.

To muddy the waters, there has always been the claim that only forest and mill waste would be used, and sensible arguments that that material would be burned anyway, so why not put it to work.

There have of course been a number of co-generation plants operating in our region for some time. At least one timber mill uses timber waste to heat the kilns that dry the wood, while at the same time using that heat to generate electricity. Sugar mills too have turned into mini power stations by burning waste material from the mill, bagasse, to run the milling operation. Those mills originally intended to burn cane trash, but found that too difficult to feed into the furnaces, so weed timber such as Camphor Laurel has also been burned.

Towards the end of 2013, we learned that a company called Capital Dynamics's planned to acquire the electricity co-generation plants at Condong and Broadwater sugar mills, but while the CEC has always supported co-generation of electricity, the fact that the co-generation side of the operation was to be privatised, raised some concerns.

First and foremost, was the fact that the power production plant would now become a year-round operation, where currently it only operates for a few months a year during the sugar harvest. With no mill waste to fuel the turbines, what then did the new owners intend to burn?

Unfortunately, the NSW State Government is set to allow the burning of what it describes as "forest waste" to generate electricity, something we are vehemently opposed to because of the history of such proposals, specifically wood-chipping, where the industry defines "waste" as anything in the forest that is not suitable for timber production, i.e. size, structure or species of tree.

The federal government too, appears to be supportive of the concept of burning forests to generate electricity, rightly claiming it to be

'renewable energy', but ignoring the fact that its emissions are similar to coal. Emissions will certainly not worry the federal government, the leaders of which do not accept the science of climate change.

The reality is that our native forests are already being over-logged ("above sustainable levels", is how the industry describes the current strategy), something that they plan to continue for another decade (to 2023) with the expiry of current contracts.

That strategy is having a devastating impact on biodiversity, a concept that current governments, state and federal, appear unable or unwilling, to grasp.

Experience has also shown that true logging waste, tree crowns, stumps, etc, are simply too costly to treat and transport, so only the trunks of trees are taken. This results in even greater quantities of 'true waste' being left in the forest where it is invariably burned.

We wrote to Capital Dynamics to gain an assurance that they will not be burning native forest trees. Not surprisingly, 3 months later, we have still to receive a response. *John Edwards*

The latest on recreational hunting on public land

Last year's inquiry findings that the NSW Game Council was badly compromised by being both the promoter and regulator of recreational hunting, saw that organisation dismantled, and its functions taken over by the NSW Department of Primary Industry.

While that was indeed good news, the reality is that only the names have changed. However, thanks to the public out-cry over the proposal to open national parks to sporting shooters, the State Government was forced to massively scale down the proposal, to the point where, to save face with the Shooters and Fishers Party, only a few trials will be carried out under the strict supervision of National Parks and Wildlife staff.

While the inquiry was under way, recreational hunting in state forests was also suspended, but has been recommenced with a range of increased conditions. Nevertheless, the Clarence Environment Centre has written to Minister, Katrina Hodgkinson, expressing disappointment at her decision, pointing out that Forest Corporation NSW (FCNSW) is actively promoting those forests

for use by the general public for a wide range of activities, from passive bush walking, bird-watching, fishing and picnicking, to more active pursuits such as mountain biking, horse riding, and responsible trail biking and 4 wheel driving. The thought of including uncontrolled shooters who, as evidence has shown, will likely combine their activities with alcohol consumption, pig-dogging, hooliganism and other incompatible pastimes, is completely untenable.

We also pointed out to the Minister, that it was our understanding that research into the effectiveness of previous recreational hunting in the control of feral animals in state forests, would be undertaken before hunting was allowed to continue, and that it was also our understanding that no such research had yet been conducted.

We believe the Environment Minister has got it right when accepting the services of **fully trained and supervised** volunteers to assist national parks' staff with appropriately managed feral animal control programs. However, whether or not we can trust the government to keep to that promise, is something else. The Minister's decision to allow untrained hunters, including children, to blast off with high-powered weapons in areas that are used by other persons will, in our opinion, only end in tragedy.

This issue has become personal for the Clarence Environment Centre which is currently embarking on a very large pest eradication program, much of which will be undertaken in close proximity to state forests in the Pillar Valley. If hunting is allowed in those forests, the fact that stray bullets can kill people several kilometres away would mean placing our workers at risk. This is a situation that applies to any landowner living within at least 3km of a state forest, and one that we believe is unacceptable.

Part of our government-funded project is to eliminate feral pigs, the most effective way of which is trapping, using feed to lure them into the trap. If hunters are introduced, a few pigs may well be shot, but the others will be spooked and will disperse into inaccessible areas, making our task impossible. Again this applies to other landowners around the state trying to eliminate pest species such as wild dogs, goats and deer.

We also learned from the Hodgkinson media release that the move to allow hunting to resume was dependent on a risk assessment from FCNSW, which prompted us to contact their

Coffs Harbour office to find out what FCNSW workers felt about recreational hunters with high powered rifles roaming around their work area. They responded by telling us they had no power to change the Minister's mind, but that they shared our concerns for their own staff.

I wonder if that message was included in the FCNSW risk assessment, and if so why did the Minister still approve the hunting? We live in strange times.

John Edwards

An on-going environmental disaster - the Pacific Highway upgrade

A recent response by the Pacific Highway upgrade's General Manager Bob Higgins, shows an arrogant disregard for the welfare of wildlife. His letter was in response to a complaint forwarded by the North Coast Environment Council, which detailed the carnage that has occurred in the form of road-kill on the newly opened Kempsey Bypass.

Mr Higgins admits that 39 animals were killed on the particular stretch of concern, 22 in the first fortnight after opening, but then goes on to point out that the death rate is declining. A cynic might say this is because there are now a lot fewer animals left to be hit. However, after detailing all the measures that are available to keep wildlife off the motorway, strategically placed fences, wildlife underpasses, and overhead wire crossings, he then, incredibly, explains that the section of highway in question had been constructed in such a way that exclusion fencing could not be installed, due to the *"limited number of culverts and bridges"*.

This is completely unacceptable. What is the point of all the ecological assessments, and laws that are in place to protect the environment if they simply ignore them? The RMS has once again proven that the welfare of wildlife is of no consequence, and in this instance, knowing that high-speed collisions with macropods can be fatal to humans as well, has shown that the safety of drivers is also of little concern.

The Clarence Environment Centre has requested, more than once, for concerned community groups, to be allowed to participate in some way during the construction phase to ensure that best practice is employed to ensure our wildlife is protected. In refusing that request, the RMS has repeatedly argued that it liaises closely with the Office of

Environment and Heritage (OEH), to ensure the best possible outcomes for wildlife. That being the case, how has there been such a failure in relation to the Kempsey Bypass?

This is not the first time the RMS and OEH have failed in their duty of care, in fact there has been a long history of dismal performance in that regard.

Prior to the construction of the Glenugie upgrade, for example, approval had been granted, with OEH's whole-hearted support, without any avoidance or mitigation measures proposed to offset the enormous loss of threatened Square-fruited Ironbarks that had been identified as growing along the proposed alignment (some 8,000 in all). Even though Glenugie was known to support the core population of this locally endemic species, the OEH did not require a rethink of the alignment, or demand the clearing of forest for the corridor be reduced. They didn't even require a Biobank offset or land to be set aside as compensatory habitat.



Thousands of threatened Ironbarks destroyed for the Glenugie State forest for highway upgrade

All that was left to the Clarence Environment Centre, which successfully lobbied the Federal Minister to call the project in as a controlled action, a move that finally resulted in the then Minister Peter Garrett, insisting on a width reduction of the road corridor, some hundred hectares of land containing Square-fruited Ironbarks to be set aside as compensatory habitat, and further cleared land to be regenerated with the species.

Of course some 4 years after construction, although that offset land has been acquired, no move has been made to place a covenant on the land, nor has a single Square-fruited Ironbark seedling been planted. In fact it is our understanding that RMS has yet to collect seed for

propagation. Our concern is that, given the abysmal record of both the OEH and the federal environment department, when it comes to compliance monitoring, that the required planting will never eventuate.

Following construction of the Glenugie section, the worst possible fencing was constructed, apparently once again given the OEH tick of approval, and remains in place today. The fence, wire mesh to 1m high, has 2 strands of lethal barbed wire above, which is bound to snag numerous Flying Foxes, Owls and Gliders in the years to come. It is also low enough for an adult Kangaroo to hop over from a standing start and play in the traffic, while its joey is trapped on the other side by the impenetrable mesh. The half dozen or so standard 1.5 metre high box culverts, that are laughingly described as wildlife underpasses, are worse than useless, and the 3 overhead wire structures for 7kms of forest bordered road is completely inadequate.

Again, some 4 years after construction, a decent fence has still not been erected.



Inappropriate fence construction at Glenugie

At Arrawarra, north of Woolgoolga, the RMS decided to construct a 'service hub' with associated fuel stations, fast food outlets, vehicle parking, and extensive on and off ramps. However, true to form, the RMS did not choose cleared or degraded land for this feature, but bulldozed some of the highest conservation value forest habitat in the area, including known habitat for threatened gliders. Again, despite numerous submissions opposing the vandalism, OEH remained conspicuously silent and allowed the destruction to proceed.

The Woolgoolga to Ballina upgrade (much of it not an upgrade, but a separate motorway) is

destroying high conservation value forests at a rate never seen before. One Catchment Management Authority officer has observed that, in the Clarence Valley, the upgrade will destroy more forest than all the land-care and other programs have rehabilitated over the past 20 years.

They have chosen the worst possible route through the Valley for the endangered Coastal Emu, whose numbers have been reduced to less than 100 individuals, choosing a route that cuts the Emu's habitat in half, without making any real attempt to provide crossing points for the birds. Only one dedicated crossing structure is proposed in over 40km, with the other nominated crossing points being assorted road bridges and box culverts, ignoring the obvious fact that roads and emus do not mix. This will likely see road-kills increase significantly and ensure the species' decline into extinction. Again, all approved by the OEH liaison team.

The Clarence Environment Centre, and other concerned organisations raised hundreds of concerns in submissions. Now, we have been provided with a very impressive DVD containing a further 20 documents or so, with more than 3,200 pages of material responding to those concerns, and 3 weeks to comment further.

The information provided for comment includes an 871 page Biodiversity Assessment which, after a cursory scan, would appear to contain nothing more than justifications for doing nothing to address any of our concerns. The document is full of suggested actions that never require any more than a commitment to 'best practice', or an assurance that the work will be undertaken "*in consultation with OEH*", all of which are accompanied by 'get out of jail free' clauses whereby actions can be taken "*where possible*" or "*where reasonably practicable*".

So what is going on? What have the OEH officers who were nominated to liaise with RMS been doing, and what, if anything, have they achieved to minimise impacts on the environment? **J. E.**

RMS Response to our submission on the Pacific Highway upgrade

It is interesting to note that of the 145 submissions received by the RMS, only 3% supported the project while 52% objected (comments from the remaining 45% provided neutral comment).

We have learned from experience that our submissions will not result in any changes to RMS's plans, and a comprehensive assessment of the 3,200 pages in the time available is impossible. Even a reasonable assessment of RMS's 871 page "Biodiversity Assessment" cannot be undertaken by us with our available resources. Therefore we concentrated on just one example of the complete disregard the RMS has displayed when dealing with biodiversity and threatened species.

In our submission early in 2013, we made the following comment: ***"In about 2010, several sightings of the endangered Giant Dragonfly were made on the motorway corridor south of Tyndale, and photographs were forwarded to the Museum in Sydney for confirmation. However, the species receives no mention in the EIS, so we suggest this be addressed as a matter of urgency"***.



Photograph of Giant Dragonfly recorded south of Tyndale

In fact we erred in the wording of that paragraph which should have read ***"the new record receives no mention in the EIS"***. Therefore the RMS's response that: *"The Giant Dragonfly was considered in the previous assessments for the Wells Crossing to Iluka Road project..."*, was predictable.

The original consultant's working paper, was compiled using information collected from field surveys undertaken in 2005-06. In it, they identified the depressing fact that, *"there was a minimal potential of it (the Dragonfly) being present in the project boundary"*, pointing out that: *"The majority of wetland areas in the lower catchment, such as those on the Clarence floodplain illustrate degradation as a result of land clearance and stock access. Such wetlands are unlikely to hold populations of the Giant Dragonfly given that degradation of wetland habitats is thought to be a contributing factor in its decline, and the absence of records on the Clarence floodplains."*

While we do not expect the consultants to have sighted this particularly cryptic species during their surveys, we believe their assumption that wet-lands along their chosen route are unlikely to support the Dragonfly, is unsupported and irresponsible. What it did allow the RMS to do, was avoid undertaking any targeted surveys for the species.

The multiple sightings south of Tyndale in the vicinity of the proposed route in 2009, with photographs of both male and female specimens, including mating, was sufficient for the Australian Museum to confirm the species identification. Our query to OEH resulted in the following confirmation that it had been entered on the NSW Wildlife Atlas, stating: *"The sighting was entered into our system on 3 December 2009 and accepted as valid. Notes include that it was identified by Gunther Theischinger. Gunther works for OEH in the Water & Coastal Science Section, based in Lidcombe"*.

The Response to our submission is absolutely unacceptable. Despite our alerting RMS of the existence of new Atlas records, they claimed: *"This species was not detected during field surveys (undertaken 6 years earlier), and: ***It should also be noted that this record did not appear on the NSW Wildlife Atlas database which were consulted as part of the EIS assessment"****.

So instead of responding to the unexpected good news that the Giant Dragonfly isn't locally extinct, and suggest plans to avoid the destruction of now known Dragonfly habitat, the RMS has essentially refused to revisit the NSW Atlas database to confirm the new record. Frankly we were amazed that the discovery that, against all odds, this highly endangered species has managed to survive the ravages of human advances over the past 170 years, is deemed to be so unimportant.

However, this is typical RMS style. It presents its plans, and those plans are never open to any sort of negotiation, particularly not on environmental grounds, and definitely not from members of the public. **To them, community consultation is a cynical one way street – the RMS tells the community what it intends to do, the community is given an opportunity to comment, and the RMS simply dismisses any suggestions that would require a change to their plan.**

The Giant Dragonfly is just one of 125 threatened species, and 337 hectares of

Endangered Ecological Communities that have similarly been treated with disdain by the RMS, the habitat fragmentation that will be caused by the indiscriminate bulldozing and fencing of a 150m wide corridor through native forests, which make up the bulk of the planned route, is just an added threat to the ultimate survival of these species.

The current system only requires a developer, including the RMS, to assess the impacts on listed threatened species, populations and endangered communities. Each species is assessed individually, and if there are other populations that are conserved in national parks or reserves, it can always be argued that the loss of a few individuals will not lead to species extinction, and therefore not assessed as a “significant” impact.

These impacts are never considered at a landscape level, despite a requirement to consider cumulative impacts. For example, In November I accompanied two specialist ecologists on a walk through that same section of forest south of Tyndale where the Giant Dragonfly was found.

At this stage, we are still unsure exactly what is being proposed for that section of motorway. The forest was bedecked with pink flagging tape, assuring us that that particular patch of forest is doomed. We know that there will be an intersection with the existing highway, and that the corridor at that point will be cleared of all vegetation to a width of 450m. However, we have since learned that a service hub/truck stop will also be built in the vicinity.

Our walk was no more than 3 hours duration, assessing the values of the forest habitat, and it should be noted that most of the values we found have been acknowledged individually by the RMS, but never collectively.



Endangered Grevillea quadricauda

Despite there having been some past logging activity throughout the forest, the percentage of canopy made up of senescent trees clearly identified the forest as old-growth. To add to the Giant Dragonfly record, we encountered endangered Screw Ferns, and a sedge, *Eleocharis tetraquetra*, both listed threatened wetland species. Further along were endangered *Grevillea quadricauda* and the very rare *Quasia sp* Moonee Creek. Our specialist botanist also examined a Beard Orchid and pronounced it to be an undescribed species, a view later confirmed by orchid specialist David Jones (B.Ag.Sc.,Dip Hort). That orchid probably grows nowhere else in the world.



Undescribed Beard Orchid

The forest was clearly old-growth, containing trees with large hollows that would probably be three to four hundred years old. Not that that bothers the RMS which has admitted that their chosen route will decimate many hundreds of hectares of high conservation value old-growth forest. Not surprisingly we also identified Powerful Owls and observed Emu scats along the way.

This was a truly unique forest ecosystem, containing extremely high levels of biodiversity, rainforest, orchids, epiphytes, ferns and other unique fauna and flora, but at the end of the day there is nothing in place to protect it. Our

planning system provides no way to place a dollar value on forest, its carbon storage qualities, its provision of oxygen to breathe and filtered water to drink, so the assessment of “no significant impact” pretty well sums up the complete failure of both the Planning and environmental laws to protect these unique, and critically important ecosystems.

The greatest tragedy is, there are viable, and possibly cheaper, alternative routes that could have been chosen to avoid the upcoming carnage, but the RMS will simply not change its mind.

Also in our January 1013 submission we alerted the RMS to the following new species also found in the area just south of Tyndale, alerting them to the fact that: “A rare *Bursaria* species, which is currently being described by botanists attached to the New England University, is likely to occur along the route. In fact the largest known sub-population of the species, approximately 50 plants, has been identified near Bostock Road in close proximity to the motorway corridor.” That *Bursaria* has since been described and presented for public scrutiny in the scientific “Telopea” publication. Now named *Bursaria cayzerii*, the species is described as “highly vulnerable” as few of their known populations occur in conservation reserves.

RMS's response to that was: “The NSW Wildlife Atlas database was accessed for the EIS (in 2006) to obtain threatened flora records for the area. No records of a threatened *Bursaria* species was identified in the project boundary. The presence of this *Bursaria* species would be considered in flora surveys undertaken during detailed design”.

Obviously, a species that has never been described would not have been listed as threatened, so the response is ridiculous and, clearly, the RMS has taken no steps to confirm the veracity of our claim, and the “detailed design” will definitely not be altered even if further flora surveys are undertaken to confirm their presence, which we doubt.

As has already been pointed out, these are the environmental issues we have identified along just one short 5km section of the proposed upgrade, out of the total 155km. However, we are reliably told that the ecological impacts of other areas, particularly on the Richmond River section are even greater. The long-term impacts from the resultant fragmentation of habitat on species like

the Endangered Coastal Emu population could be catastrophic.

John Edwards

Proposed burning of Ellis State Forest for grazing purposes

It was with great concern that we recently received a report that Forest Corporation NSW (FCNSW) is planning to burn parts of Ellis State Forest, on the Dorrigo Plateau, at the behest of a local grazier who holds a grazing lease in the forest.

It is a well-known fact that grazing by cattle is a key threatening process, identified as a major contributor to the decline of the majority of threatened flora, and to a wide range of terrestrial fauna species that call state forests home. All state forests contain areas of rainforest, and/or high conservation value old growth forests, that are supposed to be protected. None of those protected areas are fenced off, and yet Forests Corporation, the agency responsible for their protection, is not only allowing cattle grazing to occur, but is now cow-towing to the grazier concerned and adding yet another key threatening process, high frequency burning, to this environmental vandalism.

To add to this litany of incompetence, those responsible for approving this burning are trying to con us into accepting that this is a hazard reduction burn, generally undertaken for asset protection. However, we are reliably informed that local graziers have regularly been 'dropping matches' in that forest for decades with a clear agenda to kill off under-storey shrubbery in favour of grass for their livestock.

More than a decade ago the then Minister for Primary Industry assured us that grazing in state forests was being phased out, particularly within urban water supply catchments. I needn't remind you that the Dorrigo Plateau is the catchment area for the drinking water of some 150,000 people living in the Coffs – Clarence Regional Water Supply area, yet nothing has happened to prevent grazing activities from polluting that water.

We have written to the Minister, urging that she reconsider the appropriateness of cattle grazing in State forests, and put an end to the destruction of biodiversity that results, not only through the trampling and browsing of vegetation, but the uncontrolled burning that occurs as a consequence. We have received no reply. **J. E.**

Upper Coldstream Biodiversity Project adds to scientific knowledge

The Clarence Environment Centre, in partnership with the NSW Nature Conservation Council, is undertaking the project in alliance with more than 40 private landholders and public land managers.

It involves implementing whole-of-landscape works to protect and enhance nationally and internationally significant conservation values across a large section of the Coldstream catchment.

The project will stage workshops and field days and coordinate activities to control the spread of weeds and pest animals, improve habitat condition, reduce the risk of destructive wildfire, maximise carbon storage and enhance ecosystem resilience and connectivity within this major coastal corridor.



Upper Coldstream landscape, Pillar Valley

Scientific and community monitoring will be an integral component of the project, providing a sound basis for demonstrating the benefits of landscape scale rehabilitation and restoration efforts.

Already, some 700 native plant species have been identified within the project boundary, and early surveys have already turned up some significant finds, including 5 endangered and 4 vulnerable species, 8 species categorised as “rare or threatened Australian plants” (RoTAP) and 49 other protected species.

As well, several species have been identified that are growing beyond their previously recorded range, including a sedge, and two annual herbs. Learning that the range of a species is larger than previously thought, is always gratifying.



A new southern limit for Hygrophila angustifolia

The project area covers part of a significant north – south corridor that is crucial for wildlife migration, and provides habitat for dozens of threatened animals, birds, reptiles, amphibians and insects that are known to occur there. The endangered Coastal Emu population also calls the valley home, with owners of most of the 40 project properties having seen the birds on their properties.



Endangered Coastal Emu and chick

This corridor is a centre of endemism, an area supporting significant numbers of plant species that occur nowhere else, so it is expected the project will go some way towards offsetting the massive destruction of vegetation and wildlife habitat that will occur with the nearby construction of the Pacific Highway.

With receipt of an initial payment in early December, the Centre purchased the necessary equipment and herbicide to begin weed eradication work, and hire a team of experienced contractors under the expert guidance of team leader, Tom Davidson, who has been involved with training and leading our bush regeneration team for the last two years.

Following initial weed mapping and flora surveys, weed eradication work began just before Christmas, mainly dealing with Lantana, which is by far the greatest threat to biodiversity across the project area, with small numbers of Mist Flower Camphor Laurel, and others being dealt with in the process.

Already some 70 hectares have been treated, only another 3,000 to go guys!!
John Edwards

Australia, firmly under the spotlight

On 27 November 2013, the Federal Minister for the Environment, Greg Hunt, and NSW Environment Minister, Robyn Parker, released a joint media release, excitedly announcing that NSW and Australia had been chosen by the International Union for the Conservation of Nature (IUCN) to co-host the landmark environmental congress next November.

Mr Hunt was particularly excited by the project, pointing out that: *“Australia is proud to host this once in a decade event, which sets the international agenda for managing some of the most valuable places on earth. We’re expecting more than 3,000 delegates from over 160 countries to gather in Sydney - not just protected area experts and park rangers, but doctors, businessmen, young people – all working together to share ideas on how we can sustain and protect the planet”*.

Incredibly, just ten days later, Minister Hunt set a new standard for 'protecting the planet' by granting approval for Terminal Zero at Abbot Point near the Whitsundays, for what could become the world's biggest coal port, next to a beach where endangered turtles are known to nest. The approval allows, some 3 million cubic metres of seabed, containing sea grass habitat of the endangered Dugong, to be ripped up and dumped inside the Great Barrier Reef World Heritage Area, while bushland on Curtis Island, also World Heritage listed, will be carved through for a fourth gas export plant. All this to make space for an ocean highway for more climate change-fuelling coal ships.

Of course, The Abbott Government does not accept the connection between fossil fuels and climate change, and recently refused to *sign up to a fund to finance climate change initiatives proposed by the recent Commonwealth Heads of Government meeting. No doubt the IUCN members will also be impressed by the on-going*

wholesale destruction of Koala habitat in northern NSW, for logging, urban expansion, and the Pacific Highway upgrade. Perhaps they can find time to inspect the road-kills along the newly opened Kempsey bypass where dozens of wild animals met their demise within the first fortnight after opening because no wildlife crossing points had been constructed. J. E.

Great Barrier Reef under threat from mining

The Clarence Environment Centre does get involved in national environmental issues, and hearing that the Great Barrier Reef Marine Park Authority has bowed to the Federal Government's demand to allow industrial dredging residues to be dumped into the World Heritage area, prompted us to appeal to both the Authority and the Federal Environment Minister.

We figure that if the Abbott Government can despoil the iconic Barrier Reef, and propose to delist Tasmania's world heritage forests, our own local world heritage rainforests could be next on their hit list.

The Federal Minister for the Environment's decision to approve the Abbot Point coal loading facility will now see some three million cubic metres of sea-bed material dredged from the site, and dumped directly into the World Heritage area.

“Coral reefs live in very precise, fragile and balanced marine environments, even the slightest change can have a huge impact on an entire coral ecosystem”. (University of Michigan), so to suggest this dumping can be done without significant impact to the reef's priceless ecosystems, is ludicrous. The Great Barrier Reef, the world's largest and best known, is unique, described by Time Magazine (March 2011) as *“one of the world's natural wonders”*,

“Time” also reports that the Great Barrier Reef: *“covers an area larger than Italy and draws nearly 2 million tourists every year to boat, swim, snorkel and dive amid its elaborate flora and fauna. It generates some \$6 billion in revenue for Australia annually and provides employment to more than 50,000 people. It's also one of the planet's most fragile ecosystems, home to more than 11,000 species that live, if not necessarily in harmony, in a carefully orchestrated symbiotic balance.”*

According to the Michigan University research, “Without the coral reefs, the entire oceanic ecosystem will be thrown off-balance”, showing that the impacts of the Curtis Island proposal have the potential to be felt far beyond the reef itself.

Not only will the reef be polluted by the dredged material, but the eventual burning of the coal that will be exported from the site, said to become Australia's largest export terminal, will undoubtedly add to global warming, identified as one of the greatest threats to the Reef's long-term survival.

A major tragedy may well be unfolding off the Queensland coast, so it is imperative that we all make our feelings known. Send letters or email to politicians. They don't have to be lengthy, a few lines saying what you think is enough. All politicians have web sites, as well as enormous egos, and have facilities to contact them, so let them know just how you feel. *John Edwards*

The end result of coal

While Australia ramps up its export of greenhouse gas emissions (coal and gas), at the expense of national icons such as the Great Barrier Reef, spare a thought for the recipients in south East Asia as reported in the Guardian.

According to a Greenpeace commissioned report by Dr Andrew Gray, a US-based expert on air pollution, emissions from coal plants in China were responsible for a quarter of a million premature deaths annually, and are damaging the health of hundreds of thousands of Chinese children.

The statistics are staggering, with estimates that coal burning in 2011 alone, “led to 320,000 children and 61,000 adults suffering from asthma, 36,000 babies being born with low weight, was responsible for 340,000 hospital visits, and 141 million days of sick leave”.

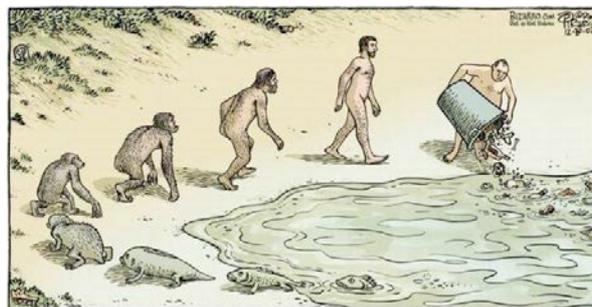
In Shanghai, Jiangsu, and Zhejiang provinces, pollution levels have repeatedly been off the charts, which has led to soaring sales of air purifiers and face masks, with retailers struggling to meet demand. The city of Nanjing recently issued a red alert for pollution for five consecutive days.

It is well known that coal burning, even in modern power plants, produces heavy metal and particulate pollution which, according to the editor of China Dialogue, an independent website

that publishes information and debate on the environment in China, is now occurring in China, “on a scale that is getting quite extraordinary”.

Dr Gray, reports that, “while the growth of coal consumption has slowed, 570 new coal-fired plants are either being built or are planned, and if they go ahead would be responsible for a further 32,000 premature deaths each year”.

The Chinese government has announced a plan to tackle air pollution including, for the first time, measures to cut coal consumption by 2017. That will give the Australian Government four years of increased production, and can justify continuing its plans to increase air pollution to the Hunter Valley, and spread it to areas like Gunnedah and Boggabri; to pollute the Great Barrier Reef, destroy the critically endangered woodland communities of the Leard State Forest, Bimblebox Sanctuary, and the Pilliga State Conservation Area, along with the threatened wildlife that call those forests home. *John Edwards*



Cycle of man

Industrial complex proposed for Harwood Island

With Metgasco, and Red Sky still apparently active with their coal seam gas plans, which includes a possible off-shore loading facility in the region, Harwood Slipways' plans to rezone prime agricultural land on Harwood Island to “working waterfront”, i.e. an industrial complex, is a distinct worry. The elephant in the room (excuse the term) is Clive Palmer who has recently renewed his coal lease at Nymboida.

The current proposal to rezone just 40 hectares of land is unlikely to result in a full-blown export coal and gas terminal on the Clarence, but we do see it as a dangerous precedent.

Also, the loss of cane growing land through the rezoning proposal, combined with the very

significant loss of productive land to the Pacific Highway upgrade, will put extreme pressure on the local sugar co-operative, which is already struggling to survive, with one cane-grower predicting the mill will be forced to close as a result.

The Harwood community, which has had to put up with decades of pollution from the existing slipway operation, is outraged at the proposal, as are members of the local Land Council who have a land claim on crown land, the acquisition of which is incorporated into the proposal. A few hundred metres directly across the river on Palmers Island, owners of prime waterfront residential properties are equally furious, having received no consultation whatsoever.



*Aerial view of proposed Harwood industrial site, red line.
Crown land yellow line*

The Environment Centre was invited by Harwood residents to become involved, and has written letters of concern to Councillors, politicians, and the State Department of Planning, and compiled a lengthy submission to Council. In summary, we raised the following issues:

* We believe that with sufficient available land already zoned industrial across the LGA, there is no need for a separate industrial complex, particularly on the banks of the Clarence River.

* The project site contains some of the best stands of remnant native vegetation left on the island, including threatened species and endangered ecological communities, and these facts have not been identified by Council or the proponent, with no flora and fauna assessment undertaken. This despite the Minister for Planning specifically suggesting Council, “assess the type, quality and significance of native vegetation and habitat found on the site”.

* Flooding issues have been massively understated in the Proposal (up to 1.5 metres of water inundated the site in last year's flood),

incorrect projections have been used and, by the consultant's own admission, the impacts of climate change, with associated sea level rise, have been ignored.

* The proponent has failed to properly identify the presence of crown land, which they intend to exploit for river access, or that it is subject to a native title claim.

* Council's revised mapping showing proposed rezoning, also fails to identify the presence of crown land that is subject to a native title claim.

* There are significant doubts about the veracity of Proponent's claim that areas previously mapped as acid sulphate, actually contain highly acidic soils which are “potential” not “actual” acid sulphate.

* Given a long history of POEO licence breaches by the proponent (see Appendix A), we believe the proponent is not a fit and proper applicant for such a proposal.

* Sedimentation is one of the problems with operating businesses on a floodplain. We believe the proponent has deliberately avoided mentioning the potential problems of sediment disposal. The proponent's existing operation required the construction of 7.5 ha of sediment ponds. How much land would 10 more industrial complexes require to handle their sediment?

* We believe that in a world where starvation and malnutrition is a major problem, turning prime agricultural land into an unneeded industrial complex, is highly immoral.

* Other than identifying the strong competition from the Pacific Highway upgrade and the West Yamba development for the massive amount of fill that will be required, the proponent ignores the cumulative environmental impact at quarry sites to provide that fill.

* Contrary to claims in the Proposal that the plan is consistent (or more commonly “*justifiably inconsistent*”) with the objectives and actions contained within the Mid North Coast Regional Strategy, we disagree. That strategy does not identify Harwood Island as a potential industrial zone, and focuses very heavily on the potential for tourism development. We believe the last thing tourists would want to see is an industrial complex on the banks of the iconic Clarence River.

* Likewise we disagree with the proponent's claims that the proposal is consistent with the aims of the "Clarence Marine Precinct / Clarence River Way Master plan". The former clearly states: "*The sector's growth potential is linked to tourism*", and that, "*this combined with the affordability and capacity of the Clarence, opens doors for fresh thinking around moor, boat and drive particularly targeted at the south east Queensland recreational market*".

* The water table on the island is very close to the surface, with anecdotal evidence of houses shaking and walls cracking as a result of heavy vehicles passing nearby. There is also a large section of accreted land (build-up of soil on the river bank) at one location along the river bank, which has seen the bank extend southwards by approximately 100 metres over the past 150 years. Yet there has been no investigation by either the proponent or the Council into soil stability on the site. And finally:

* The Proposal has already caused deep divisions within what was previously a harmonious rural community.

It is interesting to note that several of those campaigning against the proposal have received threatening letters from the proponent's solicitor, and one person has received a threat of legal action from the Environmental Protection Agency (EPA), after admitting that, in frustration over the lack of EPA responses to community reports of pollution at the Slipway, he had recorded conversations with EPA officers without first advising them.

Again, we live in strange times, where certain individuals and companies can flout the law, while those alleging the criminal activity find themselves under threat, not only from the alleged offenders, but also from those that should be enforcing the regulations. *John Edwards*

Council's listening

Clarence Valley Council recently announced it's "we are listening" campaign, with an invitation for ratepayers to comment and attend community forums. While it is pleasing to think that our Council really wants our opinion on how we envision the Valley in the future, we are a little perplexed about why the community was only given two weeks to comply.

Many of us had previous commitments so were unable to attend forums or put much effort into doing what we seem to be asked to do over and over again, but the Centre did send in a brief comment. In it we focused on beautiful landscape pictures lifted from Council's promotional material aimed at would-be tourists, explaining that it was those landscapes that prompts residents to remain in the district, and attracted many of us to the district in the first place. We then compared those images with the type of landscape preferred by outside mining interests, devastated by gas field infrastructure and massive open cut mines. The comparison is stark, and while acknowledging that mining is State regulated, it is hoped Council might be shamed into taking a more proactive stance against mining in the Clarence Valley, similar to other Councils to the north of us.



Boyd River, Dalmorton. What locals would like to see



Gas-drilling-and-coal, what locals do not want to see

We also have to question the effectiveness of these types of community consultation exercises that have generated numerous plans and strategies over the years, now presumably gathering dust on Council's shelves. These include (please excuse name errors) Local Environment Plans, Development Control Plans, Council's Sustainability Initiative, Climate Change policy, the Clarence River Master Plan, the Clarence Valley

Biodiversity Strategy, and a plethora of other social and environmental policy documents, all compiled with community input.

Surely by now Council has some understanding of what the community wants. Nevertheless, we did point out the following in our submission in the hope that Council is really listening.

The Mid North Coast Regional Strategy, which was formulated by State Government in extensive consultation with the community, focused on the reality that the Clarence Valley population will grow significantly over the next 20 years, that increase made up in the main by retirees, attracted by a laidback lifestyle, agreeable climate and relatively cheap real estate.



Gas Fields. Also what locals do not want to see

Across the valley, tourism and leisure is by far the major economic driver, and is clearly set to grow into the future. Tourists are attracted by the natural environment that surrounds us - the world-renowned world heritage rainforests, our pristine beaches, amazing wilderness areas and wild rivers, and unique flora and fauna.

Not only do these natural wonders attract tourists and newcomers, they are the reason why we, the current residents, choose to live here, so the focus should be on developing and enhancing the natural environment and building on the opportunities presented by an aging population.

Currently, the Clarence Valley's internationally recognised biodiversity, forests and magnificent river system, is under serious threat from the unconventional gas industry, an inappropriate Pacific Highway realignment, and nonsensical floodplain development that will require whole mountains to be excavated to provide fill to ensure homes are out of reach of floods and rising sea levels.

John Edwards

Kungala quarry proposal

The original proposal for a gravel quarry at Kungala included an area along a sandstone ridge which, in terms of biodiversity, is in relatively pristine condition with few weeds, and containing an endangered population of Stringybark, She oaks, and numerous old-growth trees to provide nesting, roosting and hollows for fauna.

Fortunately, the consulting ecologists, one of whom is a member of the CEC, advised against any incursion into that as yet untouched ridge line, and it appears that the proponent has accepted that advice, and has opted to re-work the old quarry site which closed more than a decade ago, and is now a weed infested wasteland. Therefore, from a biodiversity standpoint there are no longer any strong arguments against the proposal.

Earlier plans to operate 24 hours a day have also apparently been scaled back to normal day time operating hours, so the local community should suffer much lower levels of impact than originally anticipated. Nevertheless, there will still be significant disruption to their lives through a massive increase in heavy transport vehicles on the narrow Kungala Road, noise pollution and possibly dust.

In our submission to Council we stressed that any approval of the project must contain a consent condition that protects the unquarried ridgeline from any incursions as a result of the quarry operations, such as the dumping of over-burden, materials storage or vehicle parking.

We also suggested stringent conditions should be imposed to ensure proper rehabilitation of the site is undertaken, and not left in the same appalling condition as the original. We also sought an assurance that no stationary machinery be allowed to operate overnight, and daytime noise and dust be mitigated.

As we see it, traffic volumes along Kungala Road is by far the greatest concern, pointing out that the road is sub-standard, and clearly unsuitable for the proposed volume of heavy transport vehicles, suggesting an upgrade and widening needs to be a priority, including shoulder construction and centre line marking, before the quarry is reopened.

The DA claims that truck movements will be "primarily" east to the Pacific Highway. However, given the traffic disruptions that will occur during the highway construction period, we

believe that much of the heavy transport bringing in material for blending, will likely chose to use the Orara Way. Therefore, because of the dangerous road conditions, blind corners, single lane bridges etc, we urged Council to ensure an upgrade of Kungala Road be undertaken along the entire stretch from the Pacific Highway to the Orara Way.

We also expressed concern over the fact that the road is the local school bus route, and suggested that, as a consent condition, truck movements to and from the quarry be halted during the relevant pick up and set down periods.

Consent conditions are only as good as the compliance monitoring and enforcement by the relevant authorities, something I'm sure the residents will keep an eye on. *John Edwards*

Land for Wildlife bush regeneration team making a difference

by **Patricia Edwards** (*Land for Wildlife bush regeneration team coordinator*)

Orara Reserve

In the Autumn newsletter we reported on our bush regeneration team's Cat's Claw and other weed removal activity at the Orara Reserve, a small, relatively isolated reserve used mainly as a time-filler venue by daytime visitors, with the main form of recreation being picnicking and swimming.

Later examination of treated areas showed large areas of dead cat's claw vine, but still a good deal left to be done. Work was carried out this time using a directed light spray over the scraped stems instead of painting. This made handling the various pieces of equipment easier, and without the risk of spillage. There was also some direct foliage spraying where matted vines had grown over flood debris.

At this stage there is a good growth of native ground layer species in patches where the soil has been exposed. These plants are also displaying a good percentage of flowering.

In summary, a large number of tender native vine shoots are returning, mostly over now exposed dead logs and shrubs. *Parsonsia straminea* is also becoming slightly more evident in places on larger trees among dead Cat's Claw vines. However there is still much work to be done to complete the eradication of Cat's Claw.

Fosters Hut Road, Pillar Valley

While surveying the lantana problem across the Pillar Valley properties included in the Upper Coldstream weed eradication program, ecologist Mark Graham noticed an area of Cork Passionflower (*Passiflora suberosa*) taking over a patch of creek side vegetation on Jan Taylor's and David Wales' Land for Wildlife property, off Foster's hut Road.



Corky Passionfruit, Passiflora suberosa.

While not listed as a noxious or nationally significant weed, this invasive creeper can nevertheless take over tracts of bushland and become difficult to eradicate if left to its own devices. It had to come out, but with the labour force tied up facing daunting lantana forests and deadlines to deal with them, my remnant Land for Wildlife bush regen volunteers seemed the best and only way.

Nick and Anne Reeve quickly stepped up to help, and after an online check of the recognised best way of dealing with it, the 4 of us (including John) set out on Friday 31st to do battle with the pest.

Against the odds as it turned out. The problem was considerably larger than the first assessment from Mark's bouncing car across the causeway had given them to believe. Still in early growth stage the vine had yet to find its way up the trees to any degree, but it had already formed a dense carpet across the ground, smothering any young native seedlings and packing its roots in an intertwined mat under the soil on both sides of a slashed track.



Corky Passionfruit Vine invasion

We had come prepared to deal with it as the Cat's Claw creeper at Lanitza, by scraping the skin from the stems, spraying the exposed lengths with a strong solution of aquasafe Glyphosate and severing the vine above the treated area. But the resilient corky bark of the more mature vines and the very tender young stems mixed in among them made this difficult, to a point of being virtually unworkable, and after a while John and I stopped spraying and instead dipped the cut ends straight into the herbicide. Nick and Anne meanwhile worked patiently at another area carefully exposing young native seedlings, pulling up roots where feasible, and gradually the severed vines formed a good stack along with their many hundreds of ripening berries.



Volunteers removing the invasive Corky Passionfruit

Once the first delineated patch was pleasingly clear we called it a day. But with the worst of it still to be done I was unsure how to tackle it. Mark had suggested blanket spraying where it lay thick on the ground, but when a careful check through the mat revealed numerous native vines and ground cover plants this option was scrapped. After a few days of mulling it over, John and I returned alone to try another swing at the enemy from a different tack. This time John was to go off weed mapping and adding to the Wales' considerable flora list, while I tried tackling the vine from below, digging it up by the roots with a trowel and a simple daisy grubber.

After the hour and a half we had set for the experiment, outwardly at least it appeared to work quite well. The stack of loose vines was as high as previously and about the same sized patch had been cleared, and all without the cost of herbicide. However the soil was dry and rock hard under the surface, the roots were long and densely intertwined, and most of them ran deep. The work was hard, tough on the hands after a time, and with virtually every root broken underground was highly unlikely to be successful. This was definitely not the way to go.

Wondering what to do next we set about gently exposing native plants from the obvious hummocks made by the vines, and in time, doing that, it became the next obvious way of dealing with it – expose the natives, pull up the vines and roll them back across the ground regardless of whether the roots come with them or not. At least that way the native plants would get a breather, the vines would no longer be fruiting, and any regrowing leaves could be easily spot-sprayed later when they showed up again.

This next effort is still has to happen and we'll keep you informed on progress. In the meantime if anyone has any suggestions about dealing with the pest, or if anyone feels they would like to join our bush regeneration team for some on site training, both the input and the assistance would be most welcome.

Happy weeding everyone!

