



Welcome to the new year and the new Executive Committee here at Bellinger Landcare. There are some changes:

We lost Joe Losurdo and Dave Guinness who are both busy with other activities in their lives. I thank both for their diligent commitment to Bellinger Landcare and Landcare in general. Dave was our treasurer for many years and as the coordinator for the Brierfield Rivercare Group, he was involved with Bellinger Landcare from the beginning.

And Joe joined our committee in 2015 and his hands-on knowledge as a bush regenerator and his practical support with plant fairs and whenever needed was very much appreciated.

We now have a new treasurer in Frank Wynen, who has been an active Landcare group member at Hydes Creek ever since he moved here in 2005.

Craig Stehn, Dorin Hart, Kim Cheney, Amanda Norman , Martin Frank and John Allen are continuing as Executive Committee members. As far as our staffing is concerned, we had to make some changes as unfortunately Kara Smith is still not well enough to return to work. She was improving



for some weeks in August and September, but had to withdraw again due to the health problems caused by tick-borne organisms. So, Amanda Norman continues as administrative assistant and support person to Natasha but now just for 7 hours per week and Colin Matthews has offered to do our financial administration.

This year we will finalise our Strategic Plan, strengthen our relationship with Bellingen Council, firm up more of our governance mechanisms and hopefully grow the Landcare movement in the Bellingen Shire. Happy Landcaring and best wishes,

Pía Dollmann

LLS would like to hear your opinion on Pest animals

Local Land Services is conducting a survey to understand the needs of landholders, their access to services, and any barriers they face where managing pest animals is concerned. The survey is part of a state-wide program to increase the capacity of landholders to manage pest animals.

Go to http://open.lls.nsw.gov.au/pestsurvey to complete the nice & quick Landholder Survey before **Friday 17 February 2017.**







Congratulations to the following recipients of Bellingen Shire Council's Environmental Levy Grants :

Hungry Head Community, Environment and Arts Project.

The Urunga Landcare Group is comprised of a small group of community minded people from Urunga and Hungry Head who have a keen interest in the conservation, protection and enhancement of the local natural environment.



A mission of the group is to encourage residents of the Bellingen community and visitors to the Shire to better understand and appreciate our natural assets, and to live in harmony with the natural environment. The group aims to do this through education, on-ground works and fostering support for caring for these assets into the future.

This project hopes to provide increased understanding of the natural environment in the area through participation in the workshops, leading to greater engagement with Landcare and other groups. This includes: understanding of habitat needs and threats to fauna, locally significant plants, animals and ecosystems: awareness of the importance of the catchment to the health of Urunga Lagoon and Dalhousie Creek : knowledge of existing and emerging noxious and environmental weeds.

Other outcomes include interpretive signage erected at strategic locations which will identify and signpost environmental features, and upgraded information on the Discovery App.

Gateway artworks are also to be installed, inspired with input from the Gumbaynggirr community and local residents, which aim to draw attention to the local flora and the fauna that use this vibrant corridor.

Also proposed is a database of wildlife monitored in the area, built with community input and used as an ongoing record. It would include information on known corridors that can inform decisions related to signage.

Mylestom Landcare - Bush Regeneration of Alma Doepel Reserve

The purpose of this project is to continue bush regeneration works on site to eradicate the extensive weed populations and replant with endemic species to provide diversity in the plant communities and stability on the exposed open areas and steep banks of the hind dunes and the river bank.



Mylestom Landcare has approval for manual hand removal and cut/scrape and paint techniques for herbicide use and the Levy will enable the group to continue with this as well as planting. The use of a bush regeneration contractor initially will give the group the head start that they require. The area is extensive with little diversity, and the dense weed populations require the experience of a professional and approval to spray broad scale herbicide.

Mylestom are also developing a small tube stock nursery that will reduce costs in the long term. A workshop will be held focusing on plant identification, seed collection and propagation relevant to the specific area. Other ideas of education and fund raising will also be considered.



Connell Creek Riparian Regeneration

Connell Creek Landcare Group is a recently established small group of people who live adjacent to Connell Creek. Members of the group have an interest in native flora propagation, bush regeneration, conservation, biodiversity and maintenance of the local natural environment.

Their primary mission statement is to live responsibly with nature and to enhance it's sustainability for the well being of humanity. Connell Creek is an integral urban feature with a major walking thoroughfare and picturesque access to Bellingen High School and Bellingen Shire Council reserves. It provides a backdrop to green spaces for local community use. This reach of Connell Creek is threatened by environmental weeds limiting natural resilience, biodiversity and water quality.

The aim of this project is the strategic and staged removal of these weeds, followed by riparian planting of



indigenous species with community engagement and education.

Workshops and working bees with Connell Creek Landcare Group and students from Bellingen High School will also be organized. If you are interested in this project please contact the Landcare Office 66550588.

More on the Levy

As identified in the Shire of Bellingen 2030 Community Vision, the Environment levy supports the implementation of projects to achieve the strategic directions, outcomes and aspirations for the future from our local community.

The key focus areas are as follows; Invasive plant management/Biodiversity management; Coastline, estuary and river management; Sustainable food production; and Climate change adaptation and mitigation.

Project Update



Bush Connect is shaping up to be an exciting project with the Year 1 activities achieved. The essence of the Bush Connect Project is to support a partnered approach to conserving, enhancing and protecting the natural environment and improving connectivity across a unique biodiverse area in northern NSW that includes a World Heritage area. The mapping of LM10 demonstrates the extensive connectivity of this project with the sites as stepping stones. The project area, that is the sites where work is occurring, totals approximately 184 hectares.

Year 1 of this project has demonstrated the commitment and expertise of all those currently involved and as a consequence, a sound foundation has been laid for future years. All landowners are committed and on-board, contractors engaged and delivering, and partners are supporting efforts. One of the participants planted approximately 300 tube stock to reconnect areas of their property to the adjacent National Park., supported by Joe Losurdo as a contractor working alongside them. These photos, taken by Joe, show the area in August 2016 (top photo) and in November 2016.

This culminated with an interesting presentation from these landholders at our Bush Connect Event held in Dor-

rigo. Topics included a presentation on local butterflies, the importance of tree hollows and old growth, how ants are adapting to climate change and a final discussion of the new Biodiversity legislation and what it will mean for NSW. We will be hosting another event in 2017 with regards to establishing and protecting native vegetation.



Projects Update

Bellinger River Freshwater Habitat Project



We are planning new workshops for this project around river health. (see page 8.) In particular we will undertake on-ground works and host an information session on the dynamics of the river system and the importance of instream habitat and how landholders can protect their own riverbank. In light of everything that concerns turtle health, low river levels and potential future flooding, I have reprinted Colin Matthews' short excerpt on Tim Cohen's thesis, which is an interesting reminder of the system we are now living with.

Clues form the past - the history of the Bellinger River's eroding banks

Looking for a report in the office the other day, I came across Tim Cohen's PhD thesis once again. Tim is a geomorphologist – someone who studies landscapes and how they evolve and change over time. His thesis, entitled "Late Holocene Floodplain Processes and Post European Channel Dynamics in a Partly Confined Valley of New South Wales Australia" weighs in at 426 pages and doesn't sound as though it would be very promising reading. However, it contains some interesting insights into our river and how it has changed over time, what is causing it to continue to change and approaches we need to make to manage the key issues of bank and bed erosion.

The thesis presents data about changes to the river channel between Thora and Bellingen over the past 10,000 years. Tim's conclusions were inferred by his research which involved a range of techniques from historical map and landscape analysis, to ground penetrating radar and some basic hole digging in the channel bed and floodplain to age deposits.

Tim found that the length of the 15km stretch of river has shortened by 1 km over an historical timeframe.

This reduction in length corresponds to a 5 % increase in slope - a substantial amount given the volume of water and amount of energy it carries. The shortening has been largely caused by bends and meanders being cut off during dramatic flood events which has resulted in a straighter channel. Historically, the catchment was at its most cleared of trees during the 1950's, a decade which also saw a number of serious flood events which altered channel dynamics. The thesis also indicates that before European settlement the river was migrating within the flood plain by 0.2 to 0.5 m per year. Today, this figure is around 1 m per year.

A feature of the past few decades has been the stabilisation of gravel bars within the channel through colonisation of River Oaks. These bars are stabilising at a faster rate than the banks of the river which in many reaches are being grazed and have little woody vegetation to help stabilise highly erodible soils. This im-

Projects continued

balance of strong in-channel developments versus weak channel sides is a major factor causing serious bank erosion with associated problems. Tim concludes that removal of in-channel vegetation alone without the strengthening of the banks will not repair the channel sufficiently in order to reduce future damage to banks.

Another feature of the river's "evolution" which has impacts on riparian management is the widening of the main channel largely due to bank erosion. Previously the channel was narrower and had less capacity to carry volumes of water and water flowed over the floodplain sooner and more often than it does now. The floodplains were densely vegetated which provided resistance to the flow and dissipated the water's ener-

Upper Bellinger	Channel width (m)	Cross-sectional area (square metres)	Flow capacity (cubic m per second)	Water flowing over floodplain every	Energy (W) watts / m2
Pre-	63	157	150 - 675	1 – 5 years	70 – 210
Now	128	657	1500 - 1800	25 – 50 years	500 - 800
Lower Bellinger					
Pre-	65	167	130 - 200	1 – 2 years	10 – 30
Now	172	790	2400	50 years	125 – 500

gy. While the vegetation would have suffered some damage, soil erosion would have been much less severe.

The above table shows the changes since European settlement and demonstrates the extent of river channel widening.

So what does this mean for landholders losing land during flood events? The key actions to minimise flood damage to banks are to stabilise the toe of the eroding bank, manage River Oaks to minimise their impacts on adjacent banks, revegetate banks and neighbouring land with native tree species that have evolved the characteristics necessary to cope with this high energy environment and fence the vegetated areas off from stock. Funding to undertake these activities becomes available periodically and it is good to have a plan of attack ready for when these opportunities arise. Both the Landcare office and North Coast Local Land Services have staff and resources to help landholders plan the management of their river banks and are the first point of call for funding.

If you are interested in finding out more or if you would like to have a closer look at Tim's thesis contact us on 6655 0588. There is also an excellent PDF on River Oaks in the Channel if you visit our website under Resources and click on Rivers to Sea.

Information



RegenTV is here!

An inspiring new raft of regenTV resources have made their way onto the AABR website over summer. The additions include presentations from the 2016 AABR Forum 'Experience Counts' and a new set of learning resources on the theme Selecting Appropriate Approaches for Restoration. The new videos provide an opportunity to sit back with a cuppa and experience the

intellectual stimulation of an AABR forum from the comfort of your chosen viewing platform. Visit: http://

www.aabr.org.au/regentv/

NOW OPEN!



Building Better Regions Fund | Community Investments
Business Stream

The Community Investments Stream will fund community building activities including, but not limited to, new or expanded lo-

cal events, strategic regional plans, and leadership and capability building activities. These projects will deliver economic and social benefits to regional and remote communities. Applications for the Community Investments Stream open on **18 January 2017 and close on 31 March 2017. Visit: https://www.business.gov.au/assistance/ building-better-regions-fund/building-better-regions-fund-community-investments**

Funding Available: Small Grants for Rural Communities is the longest running and broadest program FRRR



offers, opening twice per year.

Grants of up to \$5,000 are available for projects and activities that offer clear public benefit for communities in rural, regional or remote Australia. Priority is given to communities of 10,000 or fewer. Hard copy applications must be clearly postmarked on or before Friday, 31 March 2017. Visit http://www.frrr.org.au/grants/ small-grants-for-rural-communities-round31

SAVE THE DATE! This year's NSW Landcare and Local Land Services Conference will be held in Albury from 25th - 27th October



Another great website for upcoming events is Our Living Coast http:// www.ourlivingcoast.com.au/ and obviously the new

I Love Bello website



OUR LIVING COAST



Rainforest Identification Workshop Wed May 17th

Rainforest Plants of Australia – Rockhampton to Victoria, is based on the popular interactive computer key (distributed as a USB) of the same name. The app includes the full identification key to 1140 species, fact sheets for all species and features used in the key, introductory and reference sections and over 8,000 images. This app does cost \$50, so in view of the fact that many of you have expressed interest in a Native Vegetation Identification Workshop, we have engaged John Ross to conduct a Workshop for Bellinger Landcare as part of our Freshwater Habitat Action Project. The workshop aims to teach the basics of keying local rainforest species using the "Red Book ", "Rainforest Trees and Shrubs...A Field guide to their identification ".

The botanical and keying knowledge gained will also assist participants in using the more recently available USB and app devel-

oped from the Red Book. The morning session would include an explanation of "keying "and other plant ID methods/processes. The afternoon session will involve keying out 6 or 7 specimens, working in groups of 2 to 3 people. The workshop is limited to 20 places.

It will be held on Wednesday, 17th May from 9.30am-3.30pm in Bellingen. If you are interested I would advise letting us know by emailing : nenglishbellingerlandcare@gmail.com

Identifying Eucalyptus-February 20th: 9.30-1pm

There are over 700 species of *Eucalyptus* in the world and most occur in Australia. The *Eucalyptus* genus include the tallest flowering plants on earth. *Corymbia* (Brush Box) and *Angophora* are also described as Eucalypts and this workshop will introduce you to the simple characteristics which will help you to recognize the most common local species. Local botanist and author Ross Macleay is our guide for the day, which will be held at the Coffs Harbour Botanic Gardens, where a large variety of Eucalypts can be seen.

Visit http://coffsharbourlandcare.org.au/events-calendar Places are limited to 25 and bookings are essential.



Join Us

Behind the Bellingen Cemetery is a well-loved patch of forestry planation that runs down to Frenchman's Creek. Locals can be regularly spotted walking their dogs and enjoying the forest conveniently situated right on the towns backdoor. Since 2015, Bellinger Landcare Inc and Forestry Corporation of NSW have partnered with bush regenerators EnviTE to help improve the site by removing weeds and planting a diversity of native trees.

Join us on Tuesday the 28th February for a fun morning of rubbish removal, tree planting, weeding and morning tea!

Wonga Trail Bellingen **Meeting Point:** Bellingen Cemetery Car Park

Start time: 9:00 AM

End time: 1:00 PM





Want to know what's happening in weeds management in the North Coast Region?

Come along to our **FREE** weeds forum, which will feature a number of speakers and displays from local weeds management authorities and state agencies. Topics include:

- Regional and local planning for biosecurity
- Current research projects and bio-control programs
- High priority species and key on-ground projects in the Region

A light lunch and refreshments will be provided. The day will start at 9 am and go to around 3:30 pm.

Places are limited! To register, email info@looklearnact.com or phone (02) 6655 7300 by 12 pm, Monday the 27th February.

Intrepid Landcare provides a common space to inspire, connect and empower young people to join local environmental initiatives in their communities.

If you or anyone you know in the 18 to 30 year old age group might be interested in joining a Youth Workshop presented by Intrepid Landcare, please let Natasha know via email nenglishbellingerland-

care@gmail.com

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Intrepid Landcare are coming to the Mid North Coast in April. Visit their website for information about who they are and to see what they get up to: <u>http://</u> <u>intrepidlandcare.org/who-we-are/the-</u> <u>intrepid-story/</u>

Or call Logan at Nambucca Valley Landcare who is coordinating this event with Bellinger Landcare

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IS YOUR COMMUNITY READY TO EMBRACE THAT ADVENTURE?

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The North Coast Regional Weed Committee and North Coast Local Land Services have prepared a Regional Strategic Weed Management Plan.

The North Coast Regional Strategic Weed Management Plan will be on public exhibition from 8 February to 8 March 2017.

The purpose of the Plan is to guide weed management in the region. The Plan will help implement the NSW weed reforms, Biosecurity Strategy and Invasive Species Plan in relation to weeds for the North Coast region. The North Coast Regional Strategic Weed Management Plan builds on past weed planning efforts and is based on the accumulated experience and expert local knowledge of Regional Weed Committee members and their networks. It identifies priority weeds, their management objectives, and the recommended measures that will allow land managers to meet their General Biosecurity Duty.

Contact Us

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(02) 6655 0588

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Visit us on the web at our NEW website

www.bellingerlandcare.com.au

The Plan is non-regulatory, rather that it prioritises species for management under the Biosecurity Act 2015. As such there are no specific requirements mentioned for control at a regional level. The regulatory control of weeds in our region will remain with the local Control Authorities (Councils) who are responsible for compliance under the Biosecurity Regulations.

Online feedback on the plan can be made from 8 February - 8 March via the North Coast Open website (weblink <u>http://open.lls.nsw.gov.au/nc-weeds</u>). The North Coast Draft Plan, additional supporting information, and feedback process will be available on North Coast Open from Wednesday 8 February.

LISMORE - Wednesday 8 February, 7.30 to 9.30 pm, Lismore Workers Club GRAFTON - Thursday 9 February, 10.00 am to 12.00 pm, Grafton Community Function Centre COFFS HARBOUR - Thursday 9 February, 7.00 pm to 9.00 pm, Coffs Harbour Golf Club KEMPSEY - Wednesday 15 February, 10.00 am to 12.00 pm, Kempsey Macleay RSL

RSVPs are required at least three working days before the meetings to David Merrikin (<u>david.merrikin@lls.nsw.gov.au</u>, ph: 6659 9404)

or Helen McArdle (helen.mcardle@lls.nsw.gov.au, ph: 6659 9401).



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