



AABR NEWS

Australian Association of Bush Regenerators

working with natural processes

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AABR site tours

1 Norah Head Restoration project



Friday 17 January 2014 8:30am

Join AABR member Scott Meier for a morning tour of restoration work in coastal bushland surrounding Norah Head lighthouse, on the NSW Central Coast. The walk will include a lighthouse tour at 9 am.

Meet at 8.30 am in the car park on Bush Street, just before the Lighthouse. BYO drinking water, hat and sunscreen. Contact Scott on 0414 395 419 if you are running late or lost.

2 Woollahra Council's long term restoration sites

Friday 14 March 2.30pm

Join AABR member Rudi Adlmayer for an afternoon site tour of some of council's bushland restoration sites worked at over the last 25 years. Followed by Friday afternoon drinks and networking at a nearby pub or cafe.

RSVP to secretary@aabr.org.au or 0407 002 921.

President's Perspective

Hi all,

AABR's restructuring and renewal process. You'll be pleased to know that the renewal process that we have been working on for a couple of years now is completed. The launch of the 'new AABR' at October's seminar was a resounding success, with an outstanding set of presentations that were very well received by all comers. (See the article on page 4). I was personally very invigorated and inspired by the many talks, all of which reminded me of a lesson I will never tire of: nature has great capacity to regenerate if we give it the help needed!

This event marked the big change in AABR—that membership is now open to any interested person and that accreditation for Bush Regeneration practitioners now functions separately to membership. (See article on below about AABR's new accreditation sub-committee and what this might mean for you.)

An immediate response to this change has been registered, with an additional 57 new members joining on and since the launch.

AABR's constitution has also been changed and registered, after unanimous support from those at the AGM. The most important change is that we are dropping the 'NSW' from our name in recognition of the fact that there are now members of AABR in many states of Australia. Another important change is that we are now able to take applications from organisations (i.e. businesses, government and non-government organisations). See the 'membership' section of the AABR website and the back page of this newsletter for details.

Where to next? The AABR committee is committed to continuing our work on a range of issues affecting members (including educational events, networking with other NGOs and

submissions to all levels of government on issue of importance. The main initiative in the pipeline now, though, is a Business Plan which will develop directions for AABR's future projects and ways to finance them, drawing on last year's survey of members' views and the contributions of new members.

Tein McDonald
President AABR

Surprise jump in TAFE fees on the NSW North Coast.

The North Coast Institute of TAFE has decided to charge CLM students full commercial fees commencing in 2014 (around \$ 3000 for Cert 3, \$4600 for Cert 4 and \$12 000 for the Diploma).

This is happening prior to the NSW 'Smart and Skilled' introduction of fees in 2015 and despite the courses being on the NSW Skills List (see page 3).

AABR is working hard to raise awareness of this and has requested a meeting with the Institute to request a reconsideration on the grounds that it will have a dampening effect on the industry.

Please find time to send an email of protest

(see tips under news items on www.aabr.org.au) to Institute Director Elizabeth.McGregor@tafensw.edu.au and (Cluster director Geoff.Baldry@tafensw.edu.au

AABR'S new accreditation system

AABR has recently set up a seven-person sub-committee to consider applications for AABR 'Bush Regenerator' accreditation under our new system. All the committee members are AABR assessors and are joined on the assessment team by six other people from regional NSW and South East Qld.

AABR Accreditation' is generally accepted as recognition of a person's competency as a bush regenerator. As such it is highly regarded by employers and by people wishing to engage contractors. Contractors can also promote their business on the basis of how many of their bush regeneration staff are AABR-accredited practitioners.

If you are a trained and experienced bush regenerator but are not yet AABR-accredited, it is definitely worth your while to go to the Accreditation section of the AABR website (www.aabr.org.au/about-aabr/accreditation/) to check out whether you would like to apply. If you were a member of AABR before Oct 2013, you have automatically been accredited. (Note: There are two pathways—standard and non-standard—depending on your qualification and supervised bush regeneration field experience, with non-standard applicants generally needing some kind of special assessment.)

Contractors—it is to your advantage to have your staff's skills recognised by an independent body such as AABR. So why not encourage your qualified and experienced staff to become accredited!

AABR accreditation sub-committee

Danny Hirschfeld	Sydney/Hunter	Chair
Heather Stolle	Sydney	member
Janet Rannard	Sydney west and Blue Mtns	member
Scott Meier	Sydney to Port Macquarie	member
Tein McDonald	Lismore/Ballina	member
Jen Ford	Brisbane/Gold Coast	member
Lynn Rees	Coffs Harbour/Dorrigo	member
Robyn Becket	Brisbane	Assessor
Kris Hely	Coffs Harbour	Assessor
Justin Couper	Coffs Harbour	Assessor
Mike Delaney	Lismore/Ballina	Assessor
Andy Erskine	Lismore/Ballina	Assessor
Rhonda James	Tweed/Gold Coast	Assessor

AABR welcomes our biggest ever intake of new members

Well this is exciting! Welcome to the following 57 people who have joined for the first time. Many of you joined at the seminar, or soon after. We hope you find it worthwhile and decide to stay with us for the long term. We appreciate your feedback about what makes membership worthwhile, and if you are considering an active role, please contact a committee member to discuss how you might be able to help.

AABR's previous largest intake of members was in 1986 when the 13 foundation members came together to create AABR, and an additional 12 joined later that year. The increase has been slow and steady—until now.

AABR's sustainability depends on increasing our membership base and income. Our small pool of volunteers are struggling to provide all the services the industry is asking for. But If AABR gets big enough then we can do much more, and afford to employ contractors to assist our volunteers. Now that you have all decided to join, we are well on the way.

Theresa Adams	John Drury	David Meggitt	Brian Stanley
Julie Adorini	Virginnia Elliott	Alan Midgley	Anne Terley
Stephanie Allen	Paula Ellis	Jonathan Milford	Maree Thompson
Victoria Bakker	Geoffrey Francis	Graeme Mitchell	Robyn Urquhart
Alex Bamforth	Wendy Fuller	Andrew Murdoch	Billie Williams
Darryll Barkley	Paul Gibson Roy	Jeanie Muspratt	Amanda Wilson
Julie Bennett	Mitra Gusheh	Chris Oliver	
Claire Bettington	Adam Halliday	Andre Olsen	
Greg Booker	Shirley Henderson	Pevlin Price	
Lauren Booth	Tricia Hogbin	Peter Ridgeway	
Adrian Carr	Dean Holmes	Kylie Ridley	
Jen Coleman	Robyn Hughes	Tim Roberts	
Robyn Cox	Shaun Keays-Byrne	Jonathan Sanders	
Christine Cullen	Jo Lynch	Peter Semple	
James Dalby-Ball	Lewis Marr	Pat Shirvington	
Simon Day	David Martin	Jamie Smillie	
Andy Doldissen	Justin McGrath	Jake Smith-Maloney	

New AABR accredited practitioners

Kylie Ridley
Greg Booker
Victoria Bakker
Alex Bamforth
Jake Smith-Maloney

Welcome to the following people who have been subscribers, and now, under the new system, have become members. Some of you have been with us for many years and /or have been an active part of AABR. Thanks for staying with us!

Thor Aaso	Gwenda Lister
Mark Anderson	Helen Logie
Sue Baigent	Kate Low
John Balint	Alexander Mackenzie
Terry Barratt	Sharon Mason
Ann Barry	Patricia Meagher
Mark Bibby	Charles Miller
Vicki Campbell	Matthew Pearson
Hugh Capes	Mike Pickles
Calvin Champness	Katrina Roberg
Margarita Clayton	Brian Roweth
Paul Craven	Morag Ryder
Sue Cunningham	Helen Searle
Michael Dixon	Paul Segal
Catriona Duncan	Stephen Shortis
Nola Hancock	Adrian Swain
Diane Harwood	Jean Taylor
Mark Hipsley	Edward Teutsch
Paul Ibbetson	Nancy Wahlquist
Paul Jennings	Craig Whitford
Robyn Lamond	

Long awaited Skills List sees CLM courses listed

AABR members will be familiar with the work done earlier in the year to have the CLM vocational courses listed on the 2014 NSW Skills List. (The list of courses considered critical for industry and therefore attracting at least some subsidy from the State government.)

Education Minister Adrian Piccoli has released the 2014 NSW Skills List, and the good news is that all the bush regeneration-oriented courses are on it—i.e. Conservation and Land Management (CLM) Certs II, III and IV and Diploma, as well as Natural Area Restoration (NAR) III.

All courses offered by Registered Training Organisations (whether TAFEs or private colleges) will involve some level of commercial fee as of 2015, although the actual fee for CLM courses is yet to be announced. A student will have 'an entitlement' to one free course up to Certificate III. (i.e. if you have one Cert III or above already, you will have to pay the commercial fee.) To enable students to afford the courses, there is talk of a HECs-style loan system, but again, no details as yet.

This is all part of a larger vocational education reform program being rolled out in NSW called 'Smart and Skilled' which you can read about on www.training.nsw.gov.au/smartandskilled/index.html



AABR's first seminar— an inspiring success!

The 200-strong sell-out audience at AABR's seminar at Sydney Olympic Park in early October, was treated to a range of impressive, entertaining and thought-provoking presentations. There was an interesting array of stalls, and the lunch was delicious. Unexpected cold, wet weather provided a challenge but we worked around it.

On the day, for the first time in AABR's 25-year history, membership became open to anyone interested in helping the environment, not just qualified bush regenerators.

The program was designed to help people feel positive and informed about restoring our natural landscapes, and to celebrate and promote AABR's renewal. Feedback indicates that we succeeded.

The seminar featured environmental success stories from across New South Wales southeast Queensland, including restoration of endangered ecological communities. As well as eight 'speed talks' on a range of restoration cases up and down the east coast, the program featured four outstanding cases.

What struck even the most time-worn regenerators were the multiple examples of ecological communities starting to function again after restoration treatments; seeing natural regeneration processes kicking in again, and fauna starting to use the sites again as habitat and foraging areas. This, and the inspiring efforts of other practitioners and managers, is what keeps us doing this work.

The seminar was opened by Jon Dee, 2010 NSW Australian of the Year and co-founder of Planet Ark, National Tree Day and World Environment News. Jon is now the Managing Director and founding Chair of 'DoSomething!'—an inspiring organisation working to create and promote positive social and environmental change. Jon spoke of the importance of engaging children and families in simple steps that can help the environment, steps that can lead to further understanding and engagement with our natural environments.

Brendon Levott takes the stage. He is Southern Sydney Bush Regeneration Site Supervisor with Toolijooa Environmental Restoration. His talk described an ingenious method of treating threatened bare-nosed wombats affected by mange at Cobbitty, NSW.



Jon Dee, Managing Director, DoSomething! set the inspirational tone from the start, providing some of the secrets to his success in attracting community support for environmental causes.



Paul Gibson-Roy, Chief Restoration Ecologist, Greening Australia NSW, humbled us all with photos of outstanding reconstruction of grassy understories in Victoria using methods he is now applying on the Cumberland Plain Woodland, Western Sydney NSW:

Many attendees picked Paul Gibson-Roy's presentation as a favourite. He talked about the importance of getting the groundcovers right first in a restoration project, and how to achieve it. His slide says 'and by increasing understorey complexity and restoring habitat, watch the biodiversity 'bloom' in unexpected (or maybe not so unexpected) ways!'



Mike Delaney, Manager, EnvITE Environment reported on outstanding work being done by landholders and regenerators contracted by Big Scrub Landcare in northern NSW: Integrating remnant regeneration, regrowth and plantings across an agricultural landscape.



Ross Rapmund, Community Nursery & Bushwalk Coordinator, Hornsby Shire Council, spoke about his efficient and effective methods of collecting seed, and plant production for restoration.



Peter Jensen, Environment Officer, Sydney Harbour Federation Trust, stunned the audience with photos of regeneration of a lawn to a full grown Eastern Suburbs Banksia Scrub after removal of mowing and weeds at North Head Sanctuary, Manly, NSW.



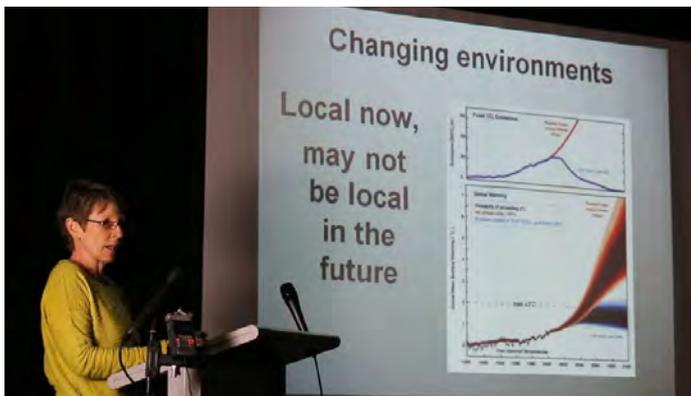
Gerard Proust, Principal, Proust Bushland Services presented evidence of how work on threatened species at Gooseberry and Hooka Islands, Illawarra, NSW, can be expanded to benefit whole communities.



Peggy Svoboda, Project Manager, Hunter-Central Rivers CMA showed us convincing results of converting a degraded paddock into a functional saltmarsh using an excavator and tidal flushing at Kooragang Wetland Rehabilitation Project, Hunter Valley, NSW.



Spencer Shaw, Principal, Brush Turkey Enterprises, showed us how reducing impacts by people triggered regeneration at the Woorim Dune Recovery Project, Moreton Bay Qld.



Nola Hancock, Post-Doctoral Research Fellow, Macquarie University spoke about the need for restorationists to face the realities of climate change and fragmentation and consider more distant seed sources to ensure functionality.



Scott Meier from BARRC (Bushland & Rainforest Restoration & Consulting) illustrated dramatic recovery of native vegetation at Norah Head, Wyong NSW after Bitou control and other treatments.



Nerida Gill, Catchment Officer at Hawkesbury-Nepean CMA spoke about saltmarsh rehabilitation at Kurnell NSW. The slide shows a saltmarsh that has been stripped of its vegetation because of disturbance from cars and trail bikes. The many small dark things are crabs.



The stalls from contractors provided further opportunities to talk with people doing works on the ground. Chester Gooden from Arborgreen is seen here engaging with one of the delegates to the seminar.



Deb Holloman Bush Regeneration Coordinator, NSW National Parks and Wildlife Service inspired us all with her story about the success of the Dune and Littoral Rainforest Restoration at Wamberal Lagoon Nature Reserve, Foresters Beach NSW.



Kim Cheney's Safari Life permethrin treated clothing drew a lot of interest.



Jennifer O'Meara, Parklands Ecologist, Sydney Olympic Park Authority capped off the presentations by overviewing the outstanding restoration projects at Sydney Olympic Park, prior to a guided walk to some of the sites.



Matt Edney from BARRC and Rod Mitchell from Bush-it.



AABR President Dr Tein McDonald kept the show rolling along on time. In the months leading up to the seminar, Tein dedicated a vast amount of time and energy to make it happen.



Melanie Tan and others at the BARRC table (including new AABR stickers). The BARRC team put a huge effort into making the seminar a success, including setting up and packing up. All photos in this article: Virginia Bear.

Thankyou to everyone who helped with organising, all the presenters, and also to everyone who attended.

Also thanks to those who set up stalls and displays, for your patience and good cheer in rather crowded conditions.

Feedback

Feedback has been very positive, with a strong call to make it a regular event. A total of 44 people responded to our survey (thanks- that's really appreciated!). Here is a sample of responses. (We also got a range of suggestions for improvement for next time—and we are listening!)

What did you like about the seminar?

- 'Good range of interesting, inspiring speakers.'
- 'Chance to catchup with bush regen friends and colleagues and meet new ones.'
- 'A real sense of community and pride in the industry.'
- 'The opportunity to hear some inspiring speakers and to network with other like-minded people and hear what they have been up to.'
- 'Networking with the participants and enjoying the mix of contractors, councils/agency staff and bushcare volunteers all together with a common focus and interest in bush regeneration.'
- There were a few mentions of the overall positive spirit on the day.
- The lunch got many mentions.
- 'Pat yourselves on the back. Hit lots of good notes.'

What should AABR do next?

The most common response was to make the seminar an annual or regular event and organise more field trips and workshops.

Others suggestions were:

- 'Develop a Business Plan. Have a clear vision of what AABR will (and will not) do; fee structure and associated costs of delivering whatever is considered AABR's priorities; communication needs; how to best support contractors and establish some sort of regular program of events.'
- 'Interested to see how AABR embraces the vision of incorporating the full diversity of ecological restoration.'
- 'Represent the workers of the industry stronger, there are so many people still being exploited.'
- 'More influence over bigger land managers eg RMS, Rail, lobby for more bush regen management of public land.'
- 'Take steps to integrate new members who have joined under the new structure.'
- 'Promote itself, publish/on web site useful case studies and solutions to common problems and latest research findings.'
- 'Facebook member group page.'
- 'Work out how to balance needs of bushcare volunteers and professionals in the association.'
- 'Congratulations on an excellent revitalisation of AABR. Every effort to make this profession more professional and wide ranging and inclusive is welcome, thank you.'
- 'AABR is heading in the right direction. It is a professional group it should be treated as such.'
- 'Put the talks on the website. In newsletter.'

Publishing the proceedings? It looks unlikely. AABR has limited resources to produce them and most speakers have not yet indicated they want to be involved. However we may publish some talks in future newsletters.

Northeast NSW/Southeast QLD sub-committee to host AABR's next 'renewal' event

The event, **in Murwillumbah in February**, will focus on a talk by plant geneticist Dr Maurizio Rossetto. Many regenerators from the region will remember Maurizio from his period working in the Lismore area, particularly on rainforest plants. Now Acting Deputy Executive Director, Science and Conservation Royal Botanic Gardens, Maurizio will speak on the 'Restore and Renew' project. A collaboration between the Botanic Gardens and the Australian Network for Plant Conservation, Restore & Renew aims to develop a website where practitioners can access genetic, environmental and ecological information for 200-300 species important to restoration across NSW (see page 13).

At this event, the regional committee will be reinforcing the message about AABR's broader scope and its expanding membership. It will also be calling for interested people to bring forward their energy and ideas to strengthen network connections between restorationists, and advocate on issues of regional importance. (

Particular current issues in northern NSW, for example, include the imposition of \$3000 fees for TAFE CLM courses, and the banning of herbicide use in Byron Shire.

Enquiries about the February event or about bringing your energy to the sub-committee can be directed to Rhonda James 0409244294 goorambil2@bigpond.com

AABR seminar 2014!

The 2013 seminar was a huge effort and a big learning curve, but we were pleased with how it went, and—after all the positive feedback—are inspired to have another go next year, probably in November.

We would like to hear from you if can help with any aspect of organisation, have a project you want to speak about, or would like a table at the expo section. It's not too soon to put your hand up to join our enthusiastic team.

Contact Jane Gye secretary@aabr.org.au



Edna Hunt Sanctuary —from lawn to bush

AABR field day November 2013

Frank Gasparre

Every now and then when the world's problems seem overwhelming, I visit regeneration site that brings back lots of positive memories and experiences.

My favourite soul replenisher is the lovely Edna Hunt Sanctuary in Epping, a small 3.5-hectare Blue Gum High Forest reserve, just a short stroll from Epping Station.

Here's why I love it:

- it exists because of the generosity of a generous and forward thinking individual who donated the land for public use as a wildlife sanctuary—an example to us all
- it was written off by many as unimportant and non-viable—and I am happy to declare this to be untrue
- it is proof positive that trad and ehrharta CAN be controlled easily
- the community had an important and varied role in the progress that has been made
- a passionate and dedicated professional, John Neff, started the restoration process, with Parramatta City Council .then continuing for more than 20 years as they have seen the benefits
- much of the progress has been a win-win situation, with an expanded natural area leading to reduced mowing, and big cost savings for the land manager.

Tall blue gums among a mix of mown and regenerating areas. The site was looking very dry, after many months of low rainfall, and days of unseasonal heat. Vast bushfires were still burning out of control to the north and west of Sydney, and although the worst was over, there was still smoky haze about. All photos in this article: Virginia Bear.

Some of the key elements that make this site work

Have a plan with clear objective, and keep the plan flexible

The regeneration program grew from an understanding of the differing levels of resilience within the site.

A history of grazing, and later mowing altered the surface vegetation slightly, then urban runoff and changes to fire regime allowed mesic woody weeds to get established in the drainage line. Most of this site has moderate to good resilience, but it was written off because of weeds. The mere presence of weeds should not be used as a surrogate for the level of site resilience. Take a closer look!

Without changes to soil structure, profile or drainage most areas that retain natural vegetation can be very effectively regenerated. The native species remain well adapted to the site and able to survive and sometimes thrive. All they need is a very careful and targeted hand from us.

Even the moderately disturbed parts of Edna Hunt along the watercourses are coming back well because the work program has acknowledged the constraints of the site and the level of disturbance. The staging of woody weed removal has been based on a good understanding of what is needed to manage the next stage of site response. Each primary stage has had a follow-up program in place before the initial primary is started.

Heavy primary in an area with a moist understory and high rainfall will inevitably lead to an explosion of trad and ehrharta and other similar herbaceous weeds. This is no great surprise but why does it so often catch people out? Don't start things that will not be followed through. Ongoing trad and ehrharta control programs have consolidated each regeneration stage.

Key Lesson—don't open up more than you are able to maintain, and have a well thought out maintenance plan in place to progress the site forward.



Engage the community and keep them informed

The community have been the key to restoring EH. In the initial stages an aging volunteer bushcare group with fading membership transitioned to become a lobby group that sought and received grant funding. This funding helped achieve positive changes on the ground. The success helped show council the benefits, and more in-house resources then became available. The group continued to support council by seeking funding, and has now morphed back to being a hands-on group again.

When a 'no-mow' area was introduced into Edna Hunt Reserve, the initial reaction of the local community was negative. It turned out that the simple installation of some small natural regeneration area signs, no more than 10 by 15 centimeters, helped explain the program to the local walkers. When their mown loop walking track was kept, they actually became big supporters of the regeneration program.

You will notice in the photos the gradual expansion of the regeneration area using carefully located fallen branches. Slow and steady. A benefit of this patient approach is that you can consolidate the good areas without being overwhelmed with maintenance needs, as well as allowing time for park users to adjust to the changes.



Target your effort

Avoid spending all of your time/money/effort on the task you like to do, or have a personal obsession about. Use your resources to attack the problem with the highest return for effort. For example, in the initial no mow period, sida and fireweed was the main problem. Available time was spent targeting these weeds, while little was done about trad, which will spread more slowly. Now that these agricultural weeds are down to less than 5% of the original levels, the trad, kikuyu and ehrharta has been pushed back on a regular basis. These weeds have also now been reduced to less than 10% of original coverage.

Key Lesson—don't waste your time pulling out nuisance herbaceous weeds like plantain, when there is a full blown seeding tsunami of bidens and ehrharta about to happen.

Changing a weedy area from privet to trad is not much improvement unless it is a transition stage to something better.



Weeds as habitat

Parramatta Council bushland staff have made a deliberate decision not to clear some areas of privet. Bower birds and other fauna have been noted using some of the denser weed patches, and this is a sensible concession to retain those animals on site. The, extremely weedy, rail corridor that adjoins Edna Hunt serves as a connection to the many other isolated bushland remnants in the area. A testimony to its values are the brush turkeys that use these corridors as highways between isolated remnants. Have a long term strategy to get rid of the weeds, but don't lose sight of the short term.



What is a 'no-mow' area?

Many natural areas have been mown for years for a variety of reasons—ranging from a lack of understanding of how to control weeds through to the culture of mowing that many Australian land managers have.

Where soils remain intact, the composition of the ground layer can continue to include a range of native species. If the long term needs of the space allow it, these mown areas can sometimes be regenerated. This strategy can be successfully applied across large areas of Sydney, particularly on the Cumberland Plain.

At Edna Hunt, the lovely blue gums provided a majestic European park setting with mown green grass and scattered tall trees. John Neff, a former council contractor noticed that a large percentage of the ground cover in the mown areas remained native. His suggestion, take off the mowers and see what happens. At the time council was accused of trying to take work off their mowing staff, being lazy, trying to shirk responsibilities etc. When it came to the crunch, the mowers didn't want to zip in and out between the trees, some areas were dangerous to mow, and the values of the bushland were becoming increasingly obvious, so the trial of taking the mowers off went ahead.

The initial result was spectacular. Native grasses, ground covers and even suckering eucalypts came back with a vengeance. Then

the weeds came. Sida, fire weed, ehrharta etc. A sea of them. Once these were controlled the site has continued to progress.

Future challenges include maintaining the diversity of the ground layer in the absence of fire, grazing and other disturbance such as burrowing animals and maintaining the diversity of species in general in a small isolated fragment. But at the very least the reserve will be a fantastic asset for future generations.



Thanks to Parramatta City Council for allowing access for the walk and for their ongoing commitment to urban Bushland.

Frank Gasparre currently works with Hills Bushcare, a contract Bush Regeneration company and native provenance plant grower in the Sydney Region. He has worked at several Sydney councils and state agencies and his background includes a stint as Head Teacher at Ryde TAFE.

AABR News regional editors wanted

Could the AABR news be improved with some more interesting content from your area?

Help make AABR more relevant by contributing stories

We are seeking regional editors to look out for local content, and encouraging others in their network to send content.

We already have a few newsletter committee members in Sydney, and Lynn Rees is a regional editor from Dorrigo NSW. But the rest of the nation is up for grabs!

Lynn explains why she took on this role:

'I have been a member of AABR for close to 20 years. I highly value my membership and love the newsletter. It was the one subscription I never gave up when dollars were tight. In this time I never once contributed to AABR, largely because I never thought I had anything of value to add to this great organisation and newsletter.

During the past two years I have been active in contributing mostly to the newsletter and in the promotion of tick safety. I have really enjoyed coming up with the occasional story, helping out with editing and other jobs as they have been asked of me. So I feel

that I am now giving back to the organisation to help keep it strong and grow and relevant to regional areas.

I am also working at trying to encourage other regional members to contribute, we do great stuff out in the country. Often bush regeneration issues, and the approaches we take in the country can be very different to the issues faced by our city members. This became very evident when I moved from Sydney to Port Macquarie in 1997. I remember being blown away by kilometre after kilometre of monocultures of bitou bush and lantana and wondering where do I start and how do I attack these massive issues and how to find the \$\$\$ to start. This was very different from the work I had been doing in Sydney—often working in small patches of remnant bush land highly degraded by sometimes 100 different weed species with multiple causes for the degradation.

It made me realise that we all have a story to tell, even if we think it is boring or not high profile enough or that we are not professional or smart enough.

The story that gave me great pleasure recently was the hilarious take that Sue Bower took in AABR News 113, Weeds of Doom...how would you feel if asparagus invaded your habitat? I actually keep this edition on my desk to give me a regular laugh.'

Contact Virginia newslwetter@aabr.org.au 0408 468 442 to find out more .

Monitoring and evaluation with citizen science and technology

Tim Baker

A growing phenomenon throughout the world is public participation in scientific research (PPSR), whereby volunteers and scientists come together to help solve real world questions.

Throughout history the majority of science has been undertaken by non-professionals (Miller-Rushing, 2012).

The use of PPSR will better promote and quantitatively demonstrate the positive outcomes bush regenerators are achieving, and help more people learn about nature and biodiversity along the way.

The current methods used to monitor the performance of restoration works are at times highly qualitative, and often undervalued by land managers who see few short term tangible benefits in monitoring.

Are we learning enough about changes in vegetation structure, richness and abundance, and impacts on sedentary and migratory fauna? Intuitively, we all see the positive changes at sites we've worked—which in itself is incredibly rewarding. However it's difficult to objectively examine the changes over time, with a high level of accuracy and precision.

In order to know where you're going, you first need to know where you are in order to orientate yourself. You need a baseline for comparing how things have changed at some later point. The challenge then becomes on how best to collect and analyse data in the most time and cost efficient manner.

Undertaking detailed professional flora and/or fauna surveys can be both very time consuming and expensive—arguably the resources could be better spent restoring degraded vegetation. This then leads to potentially greater use of PPSR in our industry.

The benefits of citizen participation are that large amounts of widely distributed data can be collected. This can help us to map species ranges and abundance and shifts with climate change, help identify and locate invasive species, monitor changes in condition over time and also to investigate social values of natural areas. The added bonus is that it can be a great educational tool raising awareness and knowledge of biodiversity. Volunteers can be involved in all stages of the scientific process whether it be helping to develop and formulate hypotheses, data collection and analysis, report writing and dissemination of information through social networks.

The drawbacks with citizen science are that the data collected often need screening and cleaning. In addition, engaging and supporting participants can often be timely and costly (West 2012).

Predominantly citizens are involved in crowd sourcing projects where they collect data that are further analysed by researchers and managers. They can have specific functions such as capturing phenology data, such as flowering times

or appearance of seasonal insects, recording and geotagging diseased trees, and identifying and geotagging invasive flora and fauna species, or more general functions such as helping amateurs identify species using field guides or intuitive Bayesian keys. There are three main models of citizen participation; contributory, collaborative and co-created.

Interesting apps

There are some good examples of programs and applications that have been developed in the United Kingdom and USA. This includes the Ashtag program. This program was developed in response to the sudden appearance (in late 2012) and rapid spread of ash dieback in the UK (caused by the fungus *Chalara fraxinea*).

Ashtag actively engages the public to tag ash trees *Fraxinus spp.*—by attaching actual metal tags, as well as sending a geotag to a database that creates a live map of all tagged trees. Participants are encouraged to add photos and regular health updates for their trees, giving scientists detailed, almost real-time, data. The following websites provide some good examples:

www.usanpn.org/

www.ashtag.org/

www.ourweboflife.org.uk/

planttracker.naturelocator.org/#

www.ispotnature.org/

leafsnap.com/

apps.bugwood.org/ivegot1.html

For anyone interested in developing a wildlife recording tool this website may be of interest: www.indicia.org.uk/

Catlin Seaview Survey

Advances in technology will also provide opportunities for more cost effective and improved data gathering. A project of particular interest is the Catlin Seaview Survey catlinseaviewsurvey.com/about. The project commenced on the Great Barrier Reef in 2012 with the aim 'to scientifically record the world's coral reefs and reveal them to all in high-resolution, 360-degree panoramic vision'. It uses an omnidirectional stereoscopic camera system, (same as Google use for street view), to take GPS located panoramic images of reef systems for further digital analysis.

References

Miller-Rushing, A 2012 *Public participation in scientific research: How we got here and where we go now*. Presentation at PPSR Conference 2012. Available from: www.slideshare.net/CitizenScienceCentral/miller-rushing-plenary-ppsr2012 [Accessed 18 Nov 2013]

West, S (013 *Digital Conservation: Biodiversity Monitoring and Citizen Science*. Presentation.

Stockholm Environment Institute, Environment Department University of York. Available from: www.europarc-ai.org/wp-content/uploads/2013/03/Recording-and-apps-in-CS_SarahWest.pdf [Accessed 18 Nov 2013]

Tim Baker, Director, Bush-It Pty Ltd is currently undertaking postgraduate studies in Risk Management and volunteering at the local wildlife centre in England (www.southampton.gov.uk/s-leisure/parksgreenspaces/thehawthorns/)

AABR's tick management review now available

It seemed like a fairly straight forward job to organise the tick management information from AABR news 112 and 113 into a stand-alone document. Lynn Rees and I decided to do this in June 2012. We've just finished!

Lynn explains her motivation for creating the review, 'Firstly there was no other comprehensive information all in one place to meet our industry's needs and the key reason for doing all of this tick protection stuff is that I am a passionate bush regenerator and want to be able to keep doing it safely and want all my colleagues to keep safe too.

Imagine what would happen if we all stopped bush regenerating because of a few tick bites!

I have been really humbled by my volunteers who said, after learning about my Lyme disease diagnosis, that they would keep doing it if I was. So keeping us all safe from ticks became my focus and obligation.'

Thanks to everyone who assisted in the production, sent in their tips, suggested improvements, or told us they appreciate the review. We have received a large amount of positive feedback, reassuring us that it was a worthwhile exercise. Many people have asked to link to it or reproduce parts or spread it around. Feedback confirms that there isn't any alternative comprehensive information source (I'm still surprised by this!).

We have added a few more tick management products since the original newsletter articles, and it's even expanded slightly since the seminar, where the first edition was available, to include more info on insect repellents (check the expert review on insect repellents on page six of the tick management review).

Find it on www.aabr.org.au under [learn/publications](#)

Virginia Bear

Tick management speakers needed in Sydney

I am increasingly being asked to give talks in Sydney on ticks and tick borne diseases etc. As I live in Dorrigo I can't pop down regularly.

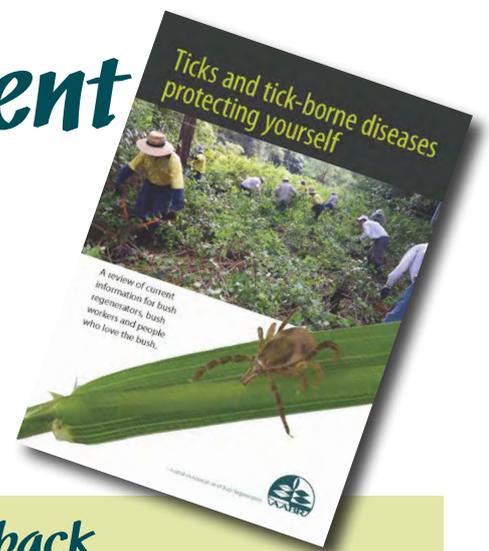
Is anyone willing to step up and help spread the word about best practice tick protection?

When I run these talks I do it for free and as a member of LymeLinks, my support group up here, and as a fundraiser for the Karl McManus Foundation. Maybe someone could add it to their business and charge a fee?

I could give full training, and have lots of resources, PowerPoint's etc.

If you are interested in joining me to help spread the word about ticks and tick borne diseases, please contact me: willowrees@skymesh.com.au

Lynn Rees



Some feedback

'Many thanks for the most comprehensive guide ever on tick control for people that I have ever read - so good to have all the info in one place!'

'This is a great guide you have created and I am printing it off and giving to people who I think should have it, thank you.'

'A much needed guide that will no doubt help all regenerators out there. Excellent, well done!'

'I'm very impressed. You have done a great job here and the information you have sourced is fantastic. I have had various problems from multiple tick bites and at one stage it was diagnosed that I had liver problems from dealing with the amount of toxin I was getting. Wish I had this info back then. Any way thanks for getting it out there, all the effort and time you have put in and I'm sure it will help and save many.'

'I'm writing to thank you for compiling this information about ticks and raising the profile of threats from their bites.'

Reducing ticks in home gardens—seeking information and ideas

Due to the success of the *Ticks and Tick Borne Diseases—Protecting Yourself* we are now asking for help with ideas on how to reduce ticks from suburban gardens. We are keen to counter any 'blame the bandicoot' and 'stop fox baiting' type over-reactions.

We are taking an integrated pest management approach with this next info booklet. We want to know what you know works or may work—everything from which birds and animals eat ticks (yes, we know about guinea fowls!) to changing the micro climate of a garden, tick unfriendly plants, barrier fencing, to what nasty chemicals will work. We want to give people as many options as possible just as we did in the *Protecting Yourself* review.

We want to make it specific to Australian needs and conditions and as comprehensive as possible. If anyone would like to write a specific section of the booklet let us know.

We would also like to hear about your concerns about writing such a booklet and how we could mitigate any possible negative fallout.

We look forward to your hearing from you. Please contact us via membership@aabr.org.au

Lynn Rees and Louise Brodie

Natural insect repellents recently added to the tick review

Natural repellents have been used for thousands of years. Make sure you choose one that has been registered by the Australian Pesticides and Veterinary Medicines Authority (APVMA). Several readers have recommended YaMate® and Mosi-guard® as effective tick repellents.

Ya Mate

Ya mate is an Australian owned and manufactured product registered with the APVMA for the control of biting insects. It contains: organic citronella and six other essential oils and two plant extracts.

From YaMate www.loveoilco.com/showpage.asp?pageno=8 'YaMate organic personal insect repellent will always protect you from mosquitoes and other biting insects including sandflies, midges, stable flies, leeches, ticks, ants, fleas, mites and nits! It is safe to use on children and babies.'



Mosi-guard

Mosi-guard is produced in Australia by Aussiegard Natural Products Pty Ltd. It is AVPMA approved, and approved for children.

From www.mosiguard.com.au 'It is nature's most effective way of protecting yourself from biting insects such as mosquitoes, sandflies, ticks and midges. Mosi-guard also protects against leeches. The active ingredient of Mosi-guard is Citriodiol®, a naturally occurring extract of lemon eucalyptus oil.'



Restore and Renew NSW

The Australian Network for Plant Conservation (ANPC) is collating a list of 200-300 plant species considered most useful in restoration projects across NSW, on behalf of the Royal Botanic Gardens & Domain Trust RBG&DT.

This is a wonderful opportunity for regenerators to have input into research that can answer some of our questions about which species might need the most assistance under climate change.

The results from this initial project will be used to guide the development of a broader RBG&DT project: Restore and Renew NSW. The vision is a website where practitioners can access genetic, environmental and ecological information (including seed storage and germination requirements) for the 200-300 species selected.

More information on the vision for the Restore & Renew NSW project, including how to become involved, can be found at: anpc.asn.au/projects/RestoreNSW.html.

The initial stage of this project is an online survey targeted at anyone involved in native vegetation restoration projects in NSW, including: restoration practitioners, bush regenerators, community volunteers, growers, seed collectors, regulators, licensors and researchers.

ANPC invites anyone involved in native vegetation restoration in NSW to participate in this survey: www.surveymonkey.com/s/ANPC2013. Further information on the content and objectives of the survey is provided in the survey introduction.

Survey respondents will go in a draw to win a one year individual or community group membership to the ANPC, valued at up to \$105.

An important consideration in any restoration project is where to source seed and other plant material to be planted on selected

sites. Similarly, evaluating how to store and germinate seed can have a profound impact on long-term success. Despite the importance of these decisions, obtaining the necessary information can be challenging. The Restore and Renew NSW project aims to overcome this challenge.

The survey officially closed 29 November, although late submissions are being accepted until the end of December.

Sydney workshop report

ANPC and AABR hosted a workshop about the Restore and Renew Project at the Royal Botanic Gardens on 12 November.

Tricia Hogbin from ANPC reports it went well. 'We had around 30 participants and it was definitely worth our while ... we had a good mix of AABR and ANPC members.

Feedback was positive. In particular there was interest in the citizen science collection teams we are planning to establish next year to help with collection of material for genetic analysis.'

Murwillimbah workshop planned for February *all welcome!*

AABR North Coast will be hosting an information session about the Restore and Renew project. Date to be confirmed.

The guest speaker will Dr Maurizio Rossetto, Acting Deputy Executive Director, Science and Conservation Royal Botanic Gardens.

Inquiries: Rhonda James 0409244294 goorambil2@bigpond.com



Australian Network for Plant Conservation Inc

www.anpc.asn.au

02 6250 9509

**Join before the end of 2013
and receive a bonus edition of
Australasian Plant Conservation!**

The Australian Network for Plant Conservation Inc (ANPC) is a national non-profit organisation which aims to promote and improve plant conservation. We support collaboration and the exchange of information, knowledge and skills by linking plant conservationists from a wide range of backgrounds and skills.

Join the ANPC and

- » keep in touch with the latest developments in plant conservation
- » receive ANPC's quarterly bulletin *Australasian Plant Conservation*
- » contribute articles for publication in the bulletin
- » receive discounted registration to ANPC workshops, conferences and forums
- » be part of Australia's only national plant conservation network
- » help us save Australia's unique native plants.

The national network that links people, research and action in plant conservation



Goats wage war on woody weeds

From *Merimbula News* April 3, 2013

Volunteers at Panboola Wetlands have waged war on weeds and been assisted by council in their efforts to eradicate dense infestations but now the wetlands is getting help from a completely different source – goats.

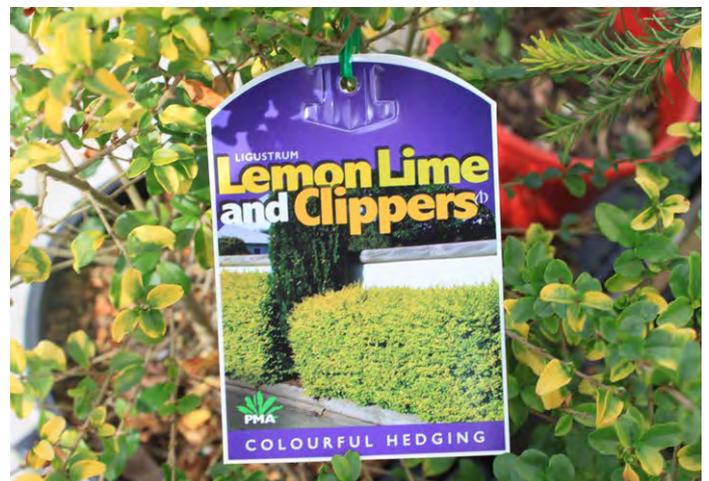
Bega Valley Shire's weeds and vegetation manager, Ann Herbert, said: 'In recent weeks council vegetation officers have overseen a different weed control program, using goats to control blackberry, privet, honeysuckle and other woody weeds on an area of Crown Land within the wetlands.

'The goats have stripped the area of small trees, shrubs, low hanging branches and enjoyed lopped tree branches. The area was effectively cleared for officers to get in and cut the bigger trees, many of which have been ring-barked by the goats. Branches and fallen trees have been stockpiled for disposal,' said Ms Herbert.

Further weed control will continue in the next twelve months with indigenous trees and shrubs to be planted in autumn 2014.

'It is proving a very successful project and a great example of how community and council can work together,' said Ms Herbert.

For more information on weed management using goats contact council on 6499 2222



***Ligustrum undulatum*, the OK privet?**

Chris Brogan sent us this pic of a privet variety called *Ligustrum* 'lemon lime and clippers' for sale in a Bunnings store in Sydney. He wrote to Bunnings, and they explained it was *Ligustrum undulatum*, which is not declared noxious anywhere in Australia.

The ABC's Gardening Australia website reports receiving many complaints when they mentioned this plant on the show in 1995. They explain 'The privet commonly grown as a hedge in many Melbourne gardens is *Ligustrum undulatum*. This usually doesn't produce seed, it's not invasive, and so it's not classified as a weed.'

It sure looks like the dreaded small-leaved privet *L. sinense*, but even if safer, more detailed labelling is probably needed—it might prevent bush regenerators having panic attacks.

Emissions Reduction Fund: can we help it on to the right track?

A new source of funds for ecological restoration should be something to celebrate but, unless some important changes are made, the Federal Government's new Emissions Reduction Fund looks a lot like a trojan horse.

This initiative is designed to 'provide incentives for abatement activities across the Australian economy and work in conjunction with the Carbon Farming Initiative. The Fund will have an initial allocation of \$300 million, \$500 million and \$750 million over the forward estimates period.'

Terms of Reference were open for comment between 16 October and 18 November. They contain strong incentives for tree planting with little regard for natural regeneration, or plant selection.

Both AABR and The Society for Ecological Restoration Australasia (SERA) made submissions.

AABR pointed out that the proposed model would favour 'Reforestation and Afforestation methodology (which doesn't require natives to be used) over methodologies that do require the use of locally native species. This is because Reforestation and Afforestation methodology is a lower cost option—as the cost of monoculture planting can be as low as \$2K / ha while the lowest diverse native plantings can come in at \$8K / ha.

In addition projects using the Reforestation and Afforestation methodology are not required to be consistent with regional plans (unlike other methodologies).'

AABR made the following suggestions:

1. The generic guidelines for the CFI should include an overarching statement of encouragement for projects to include native species suited to the site conditions, not only for biodiversity co-benefits but also to ensure higher success rates for carbon storage due to:
 - the effect of hydrology and drainage on the growth and survival of individual species
 - locally native species in farming landscapes tending to be more resilient to fire, a factor likely to increase with climate change (compared to fire-sensitive wet sclerophyll native or exotic species often planted in monocultures).
2. The terms of reference for the Emissions Reduction Fund, specifically the Carbon Farming Initiative, should include measures to complement reverse auction methods to ensure that the higher cost of biodiversity co-benefits are covered through:
 - Grants schemes that alleviate the cost of environmental plantings, human induced regeneration etc. (The Caring for Country program could be supplemented by the ERF and streamlined so that both programs are working in the same direction).
 - A system of 'banding' that should be applied in the options for reverse auction so that the projects with co-benefits could be separated out and purchased at a higher price for a co-benefit outcome.
3. An accounting index should be developed (employing existing research based on state of the art biodiversity accounting

already in train) and specified in the regulations - to reflect degree of biodiversity benefit and so allow proponents to obtain a market premium based on their input.

4. The role of regional bodies in approving plans for CFI abatement projects should be strengthened (this could also assist with streamlining the application process for property holders).
5. The Reforestation and Afforestation methodology should be adjusted to require its CFI abatement projects to be consistent with regional biodiversity plans.

SERA explained that 'The use of woody vegetation for the purpose of emissions reductions poses both an opportunity and a risk for Australian ecosystems. The opportunity is that the carbon cycle is the first ecosystem with market based drivers to fund the restoration of cleared lands. The risk is the business model associated with producing carbon credits could tend toward monoculture systems for cost and other reasons. SER seeks to inform the design of an Emission Reduction Fund, to support the restoration of Australia's native ecosystems.'

The SERA submission concluded with a request for 'your measured consideration in the development of an Emission Reduction Fund, where the restoration of native plant communities features in a prominent level within the development of your bio-sequestration portfolio. We suggest your consideration in focusing these works in a limited number of high conservation value landscapes, where the quantity of carbon sequestered, and cost of establishment, provide an only slightly lower marginal return on investment for emissions reduction projects. One way in which this could be done is through the seven landscape corridor initiatives currently developed across the Australian continent.'

A Green Paper setting out preferred options for design of the Fund, will be released in December. Hopefully this advice will help steer it on to the right track.

Ecological Management & Restoration



Publishing 3 issues a year, *Ecological Management & Restoration* aims to bridge the gap between the ecologist's perspective and field manager's experience. Publishing peer-reviewed articles, technical reports, news items, reviews and letters on the science and practice of ecosystem restoration and management, this innovative journal combines a highly readable style with scientifically credible material

- * **AABR members eligible for a discounted subscription to EMR (AUD\$66 for 2014 – exc. GST)**
- * **Online access to all issues back to Volume 1, Issue 1**
- * **Project Summaries also available to AABR members for free!**

wileyonlinelibrary.com/journal/emr

What's happening

Friday 17 January

Norah Head Restoration Project See page 1

February

Northeast NSW/Southeast QLD sub-committee to host AABR's next 'renewal' event See page 6

11-14 February

Island Arks Symposium III & Workshops

- island translocations
- island restoration and reassembling island ecosystems
- indigenous island communities and indigenous conservation management
- island people and communities: entrepreneurship, economic development, conservation capabilities
- island conservation and protection—includes terrestrial and marine protected areas
- emerging threats to island conservation and communities
- new innovations and technologies for island research and management.

Where Hobart

Contact islandarks.com.au/island-ark-symposiums/island-arks-symposium-iii/

Friday 14 March

Woollahra Council's long term restoration sites See front page

Friday 4 April

Sydney Weeds Professional Forum 2014

Where NSW Teachers Federation Conference Centre in Surry Hills.

Sydney Weeds Committees Inc. is hosting a one day technical forum for weed management professionals and operational staff working across the Sydney and Blue Mountains region.

This one-day forum is about:

- building capacity of the weed management workforce in the region
- sharing new technical information, knowledge, strategies and experiences
- network and meeting new contacts in the industry.

For local, state and federal government land managers, private companies, contractors/consultants, reserve trusts, non-government organisations and groups, and academics who are involved with weed management.

Contact info@sydneyweeds.org.au

26-29 May

16th Australasian Vertebrate Pest Conference

Where Brisbane

The conference program will consist of presentations on control initiatives, innovations in research, management and policy and the latest research outcomes. The conference will focus on management of vertebrate pest animals across the landscape

Contact www.avpc.net.au/

Sunday 2 February 2013

World Wetlands Day 2014 'Wetlands and agriculture'

Other AABR events planned for 2014

Site tour of the new PlantBank facility at Australian Botanic Garden Mt Annan

Plant ID workshops Grasses / Eucalypts

Weekend field trip to Canberra
Visit some restoration sites where the Friends of Grasslands volunteers have had regular working bees over the last few years and some outstanding success.

Fauna habitat tips for ecological restoration practitioners .

AABR seminar 2014

Discount advertising for accredited practitioners

As you know AABR recently launched its new website. We are happy to report that the response to the site has been overwhelmingly positive. We hope that you are happy with the changes also.

The new website aims to support AABR members. One way we do this is through the advertising options we offer exclusively to our accredited practitioners.

As part of the launch of the new AABR website, we are offering the following special one time offer:

If you are a first time advertiser, you will receive a 50% discount on any advertising option when you sign up in 2013!

Visit www.aabr.org.au/do/business-directory/advertise-your-business/ fill out the form and send it to us and we will take care of the rest.

Thank you for supporting AABR. Your contribution is appreciated.

Regards

Mitra Gusheh

webmaster advertise@aabr.org.au



President

Tein McDonald
president@aabr.org.au

Treasurer

Paul Ibbetson

Membership Officer

Louise Brodie
membership@aabr.org.au

Secretary

Jane Gye
secretary@aabr.org.au

Website advertising

Mitra Gusheh
advertise@aabr.org.au

Committee members

Heather Stolle, Elisabeth Dark, Spencer Shaw, Kate Low, Scott Meier, Neridah Davies

Northeast NSW/ Southeast QLD subcommittee

Mike Delaney 02 6621 9588
miked@envite.org.au

Australian Association of Bush Regenerators

The Australian Association of Bush Regenerators Inc (AABR) was incorporated in NSW in 1986, and has several hundred members from all over Australia. AABR is pronounced 'arbor'.

Our aim is to promote the study and practice of ecological restoration, and encourage effective management of natural areas.

All interested people and organisations are welcome to join. AABR members include bush regeneration professionals, volunteers, natural area managers, landowners, policy makers, contractors, consultants, nursery people, local, state and commonwealth government officers—and lots of people who just love the bush and want to see it conserved.

AABR also offers accreditation for experienced practitioners.

AABR News is usually published in March, June, September and December.

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www.aabr.org.au

enquiries@aabr.org.au

ABN: 33 053 528 029 ARBN: 059 120 802

Membership fees

Individuals	\$25
Organisations (<i>does not confer membership to individuals in that organisation</i>)	
• Business (less than 5 staff)	\$100
• Business (more than 5-20 staff)	\$250
• Business (More than 20 staff)	\$400
Government	\$50
Not for profit	\$25 (<i>or \$0 if newsletter exchange arranged</i>)
Students	free offer to 30 June 2015

Benefits of Membership:

- discount admission to all AABR events
- four newsletters per year
- increased job opportunities
- discount subscription to the journal Ecological Management & Restoration
- opportunities to network with others involved in natural area restoration
- helping AABR to be a strong and effective force to promote natural area restoration, and support the industry.

Newsletter contributions and comments are welcome

Contact Virginia Bear newsletter@aabr.org.au 0408 468 442

Opinions expressed in this newsletter are not necessarily those of AABR