



# AABR NEWS

Australian Association of Bush Regenerators

*working with natural processes*

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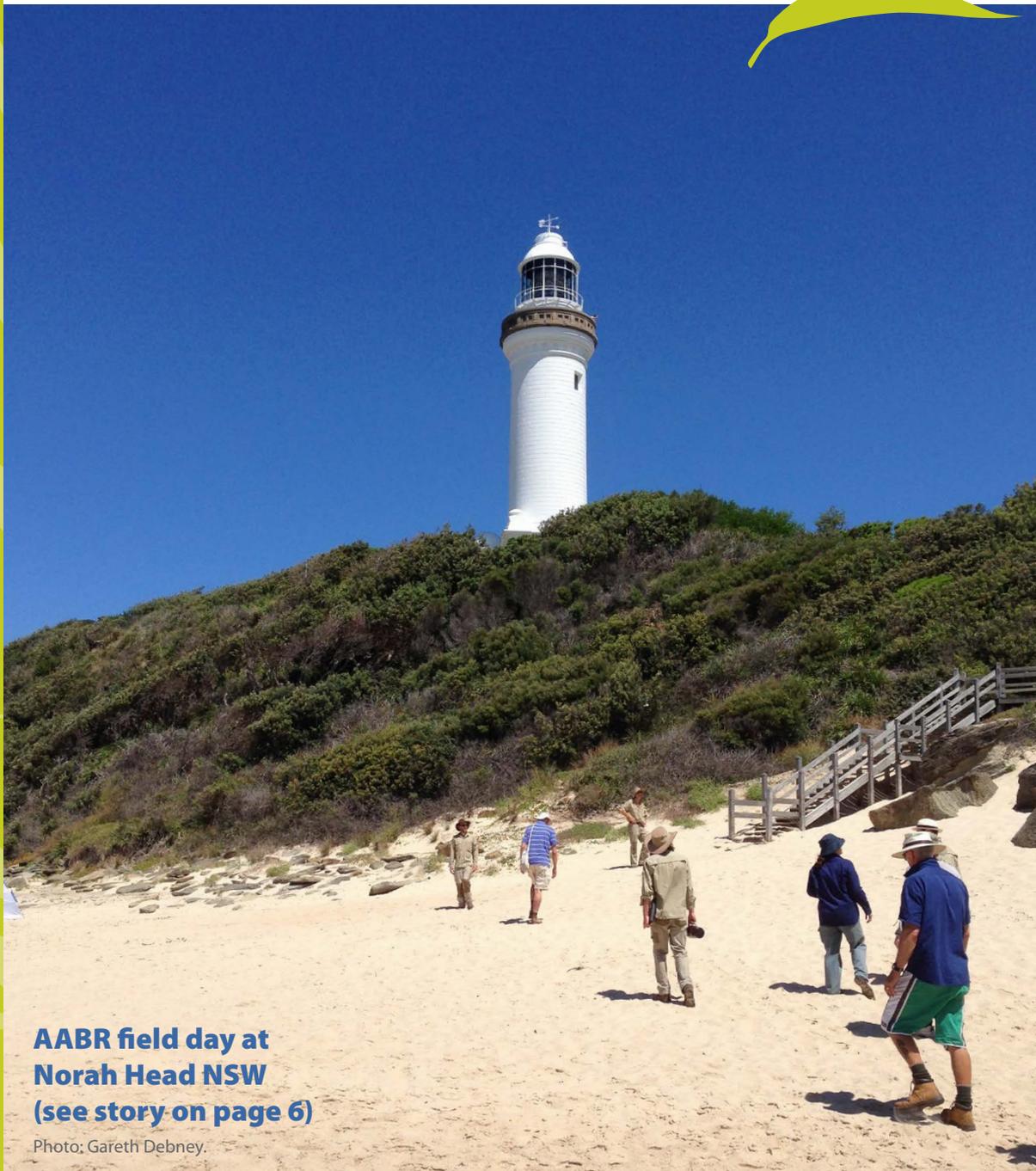
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**AABR field day at  
Norah Head NSW  
(see story on page 6)**

Photo: Gareth Debney.



# President's Perspective

Hi all,

**There has been substantial progress with AABR business since last meeting, as can be seen from the various articles in this issue; and further points below. But as we become more active, we need to call on more volunteers to help share the load. (The help of anyone with a couple of hours to spare a month would really be appreciated.)**

**Free student membership.** Did you know that AABR is now offering membership, without charge, for any TAFE or uni student interested in AABR? (As there is less than 6 months left in this financial year, this free membership will go to end June 2015). We are spreading the word through the formal channels, but need help from teachers, students and anyone who knows of a student, to spread the word so that this opportunity can be taken up.

**Seminar proceedings.** While we are not publishing a proceedings of the October 2013 seminar (many have enquired!) we have the consent of about half the speakers to publish videos of their talks on the website, plus PDFs and notes used in the talk in some cases. This is being progressively edited by Virginia Bear and will be uploaded on the website as each video is edited.

**Business Plan.** AABR is updating its business plan, to guide our hoped-for expansion. This is particularly important so that we can increase our income stream to more effectively represent the industry and natural ecosystems, and provide the sort of services bush regenerators and other ecological restorationists want of

their organisation. Anyone interested in this initiative—either to suggest ways to increase our revenue or ways to spend it! please contact Paul Ibbertson [loribb@primus.com.au](mailto:loribb@primus.com.au).

**Do employers understand the difference between membership and accreditation?** We have noticed that some tender documents have called for 'AABR membership' rather than AABR 'accreditation'. AABR did notify all state agencies and councils about the change, but not corporations. AABR will now contact those we know employ bush regenerators but we ask all accredited regenerators to please ensure you use the right language to describe accreditation and help us to spread the word. AABR is in the process of developing a Statement of Accreditation which will be validated by AABR and can be used by accredited bush regenerators to attach to tenders.

**Online payments** For a good while now, AABR has aspired to set up an online system to make it easier for people to join and to renew memberships. However, the options explored so far seem too costly, and would only be economical with many more members than we currently have. While membership increase is an aspiration, it is a bit of a chicken and egg situation as having an easier method of paying would certainly make it easier to expand membership. If anyone out there is familiar with an online membership system, we would love to hear about it... please contact Jane Gye [secretary@aabr.org.au](mailto:secretary@aabr.org.au).

**Website—keeping it up to date.** We could be making better use of our new website by updating it more often and expanding the range of information. Various committee members have been learning how to manage the site and share the load, but time constraints for our volunteers continue to be a problem. Anyone out there interested in helping, please contact [secretary@aabr.org.au](mailto:secretary@aabr.org.au). We can arrange some basic training if needed.

Tein McDonald  
**President AABR**

## AABR's Coffs Harbour assessors

Three new local assessors are in the process of being inducted in the Coffs Harbour area.

On February 22-23, long-time assessors Rhonda James and Tein McDonald conducted a training workshop for Lynne Rees, Kris Kely and Justin Couper who have now signed up for voluntary work conducting assessments for non-standard pathway Bush Regenerator Accreditation applications to AABR.



## Welcome to new AABR Members

Tony Coyle  
Sarah Warner  
Barry Lees  
Tess Malady  
Daniel Cole  
Helen Denning  
Nicholas Yu  
William Ireland  
Hawkesbury City Council (Martin Gauci)  
Noosa and District Landcare (Phillip Moran)  
Company Membership: Dragonfly Environmental

# AABR planning to develop a reconstruction accreditation

AABR has recently commenced discussion about establishing a 'reconstruction' accreditation system.

This is a way to broaden our service to the restoration industry, to maintain the momentum of change in AABR, and to encourage more people to be involved.

To ensure the system will be meaningful in the industry, we are planning a highly consultative development process. While AABR has a number of members who are highly experienced in this work, we are also seeking to involve specialists who are not as yet members, and we are keen to establish links with other NGOs.

If any individual or organisation would like to be involved, or has some feedback on the proposal we would be interested to hear from you. Please contact [president@aabr.org.au](mailto:president@aabr.org.au)



Photo: EnviTE Environment Maree Thompson.

## AABR's proposed reconstruction accreditation program

AABR has successfully operated an accreditation program for 27 years for persons practising as a 'bush regenerator' (i.e. assisting the natural regeneration of damaged plant communities). Since broadening our constitution in 2013, AABR is now taking steps towards adding a second accreditation: for an 'ecological reconstruction' practitioner (i.e. rebuilding plant communities from scratch).

### Like bush regenerator accreditation, reconstruction accreditation would:

- require skills and knowledge in site assessment and treatment prescription – as well as operational skills
- be developed and operated by a sub-committee made up of people with proven ability and experience in the specialisation
- be based on evidence of specific competencies (and underpinning knowledge) gained through:
  - o Standard: an approved 'Conservation and Land Management' operator's course + substantial field experience over time or

- o Non-standard: another process (including substantial field experience) with evidence of the competencies provided through an on-site assessment.

For reconstruction accreditation we believe that the key is to be assured that the applicant is thinking in terms of reinstating the functional ecosystem rather than landscaping (i.e. aiming for biotic components and plant-animal interactions necessary for pollination, dispersal, nutrient cycling etc—and establishing the abiotic conditions necessary for recruitment).

### The key competencies for AABR's regeneration certification can be summarised as an ability to:

- understand that natural regeneration can be a superior approach (where regeneration is possible) which needs to be tried before reconstruction
- recognise when a site has natural regeneration potential and when other approaches are needed (requiring detailed knowledge of native plants and their recovery modes)
- trigger natural regeneration in the specific community (e.g. ecological disturbances)
- deal with obstacles to regeneration (e.g. exotics – including detailed control techniques)
- supplement natural regeneration capacity with introductions of missing species.

### The key competencies for AABR's proposed reconstruction certification may be summarised as an ability to:

- recognise when a site has natural regeneration potential and when reconstruction or partial reconstruction is needed (including migratory potential from adjacent areas)
- Identify need to mitigate (or adapt the ecosystem to) changed environmental conditions
- identify the reference community (including informed need for adaptation to climate change)
- identify appropriate planting/seeding list, taking into account successional models
- understand and perform sourcing of plant material (including appropriate genetic sourcing)
- prepare the substrate so that it is not only suitable for initial plant establishment but also for recruitment of future generations of plants
- undertake successful soil stabilization
- carry out revegetation methods (planting, direct seeding, soil transfer etc)
- protect and maintain revegetation until it is successfully established
- monitor vegetation establishment and reinstatement of ecological processes
- establish habitat features (e.g. debris/log/rock piles, hollows, perches, hides etc).

# Other industry news

## National standards for ecological restoration proposed

SERA (Society for Ecological Restoration Australasia) [www.seraustralasia.com/](http://www.seraustralasia.com/) has developed a proposal for 'National Principles and Standards for Ecological Restoration and Rehabilitation' in collaboration with its Australian NGO affiliates, including AABR.

If the proposal is approved by the SERA Board, funding will be sought to engage a contractor who will work in partnership with a range of environmental NGOs (including AABR) to develop appropriate standards.

This is an extremely important move, especially with considerable government funding being made available for emission reduction schemes (many of which involve vegetation).

## New book of restoration terms?

Do you know your fabrication from your type conversion? If you are confused you are not alone! Getting a handle on terms in this new and evolving field can be tricky.

A proposal is in the pipeline for a book on terms pertaining to the planning, design, implementation and aftercare of ecological restoration projects.

The proposed authors are John Stanley, James Aronson, Andre Clewell, Tein McDonald and John Rieger. Island Press is the proposed publisher. This project is in the very early stage and may not get approved... but it is encouraging that an AABR member has been invited to participate.

In the interim, have a look at AABR's [Guiding Principles for Ecological Restoration and Rehabilitation](#) and if there is something else you would like to see explained, let us know! [newsletter@aabr.org.au](mailto:newsletter@aabr.org.au)

## Outdoor Design Source Network

AABR has joined Outdoor Design Source, and the directory now has dedicated chapter on bush regeneration.

From [www.outdoordesign.com.au](http://www.outdoordesign.com.au) "Outdoor Design Source is Australia's most comprehensive annual directory servicing the external works industry. Featuring 600 pages of landscaping and external works products and services, and over 10,000 company listings and 1500 product images, Outdoor Design Source is the leading industry directory, covering all stages of an external works project. The print directory is enhanced by a comprehensive website ([www.outdoordesign.com.au](http://www.outdoordesign.com.au)), a weekly e-newsletter and an active presence on various social media platforms including Facebook, Twitter and LinkedIn."

As an endorsing association, all AABR members are entitled to a free copy of the Outdoor Design Source directory when it publishes in May. To receive your copy, email [ods@universalmagazines.com.au](mailto:ods@universalmagazines.com.au) with your full name, postal address and say that you are an AABR member.

If you would like a free listing for your business in Outdoor Design Source, you can register your company [here](#)

For the free weekly E-News featuring news, product releases and inspiring projects from around the world. Sign up [here](#).

## NSW weed management review—do on-ground practices matter?

Jane Gye

In November, AABR prepared a submission to the Natural Resources Commission on the initial issues paper for the NSW Weed Management Review.

The NRC's draft report has just been released for public consultation (see [engage.haveyoursay.nsw.gov.au/weed-management](http://engage.haveyoursay.nsw.gov.au/weed-management)).

However, in my view, the draft report is very disappointing in that it virtually ignores the issue of on-ground practice and skills. As we all know, this is critical to long-term, sustainable outcomes when dealing with weeds in many situations.

Initially I was told that this was because on-ground practice was outside the terms of reference. Management in this review appears not to include what happens on the ground,

Nevertheless I was told that we (AABR members) should re-state the importance of this issue if we want them to consider amending the document. We need to convince them that weed management on the ground is a fundamental issue in tackling weeds.

It seems more support is needed to ensure this review process delivers.

**So it would help if bush regeneration people could make a submission on the draft (via the webpage) by April 6.**

Things NRC needs to take on board (that you could include in your submission) are:

- the importance of suitably trained practitioners and adequately informed decision-makers
- importance of long-term approach
- importance of BR principles and ability to assess a site's potential to regenerate or not
- that native groundcovers can be fundamental to breaking the spray cycle
- that good ID skills are required etc
- economic benefits of effective weed management.

If you can add examples, that will help.

### Public consultation meetings are being held in March

19 March South Grafton Ex-Servicemen's Club Wharf St 9-12

20 March Armidale City Bowling Club Dumaresq St 9-12

21 March Dubbo RSL Resort Brisbane/Wingewarra St 9-12

25 March Cowra Services Club at 11-2

26 March Rydges Parramatta 1pm to 4pm

27 March Wagga Wagga Commercial Club Gurwood St, 12-3

28 March Nowra Golf Club Fairway Drive, 12-3

Please RSVP at [weeds.review@dpi.nsw.gov.au](mailto:weeds.review@dpi.nsw.gov.au)

# Bush regen holidays



## Lord Howe Island Weed Challenge –volunteers wanted 2014-15

The Lord Howe Island Weed Eradication Program is moving into its 10th Year. The Lord Howe Island Board is seeking expressions of Interest from fit and experienced bush regenerators to volunteer on the program.

Currently up to six positions are vacant to the 30th June 2014. Additional positions will be available for 2014/15. Individuals or groups of up to four people can apply (pending accommodation availability).

A minimum of three weeks is required working five days per week in return for accommodation, basic food allowance, return airfares (Sydney, Port Macquarie or Brisbane) and a great opportunity to experience LHI off the beaten track!

This program covers 'all terrain' and persons must be capable to work in exposed situations, on steep ground and often in dense shrubland. Weed populations are on a downward trend and the challenge is find the target weeds before they mature—to progress their eradication.

### How To Apply

Please respond to the criteria below and email to [administration@lhib.nsw.gov.au](mailto:administration@lhib.nsw.gov.au)

Shortlisted applicants and their referees will be contacted and interviewed by phone. A readiness for physical work form will need to be completed.

### LHI Volunteer Weed Program EOI criteria

1. experience or formal training in bush regeneration or equivalent
2. experience working on volunteer programs (describe your motivation for applying)
3. sound plant recognition skills with ability to identify target weeds at all life stages including bitou, bridal creeper, cherry guava, climbing asparagus, ground asparagus, cotoneaster and ochona etc
4. ability to apply a range of weed control techniques including the use of herbicide (e.g. cut and paint)
5. self motivated with a high level of bush fitness, experience in working off the beaten track on steep terrain and in dense bushland—must be willing to work in wet weather
6. ability to work as part of a team and with minimal supervision—capacity to live in shared, bunk style accommodation
7. please provide two referees.

For further information please contact [sue.bower@lhib.nsw.gov.au](mailto:sue.bower@lhib.nsw.gov.au) or 02 65632066 ext 26.

This important island conservation project is funded by the NSW Environmental Trust and the The Lord Howe Island Board.

## South West Rocks Dune Care volunteer dates for 2014

Here are the dates for the volunteer week accommodation, provided at Arakoon House, and our regular SWRDC workdays.

We did have a very productive year last year. Our volunteer follow-up work managed to keep up with the rather extensive primary work undertaken by our contractors. In total we managed to do over 3000 volunteer hours, which was a great achievement. So a huge thanks from us to everyone who participated in hands on work, cooking, organizing and other support services. Without all this work and support we could not be in the fortunate position of meeting, or exceeding our targets.

For more contact details information and updates please see our website: [www.swrdc.com.au](http://www.swrdc.com.au)

Regards  
Alan Hill

27 April	Regular Sunday weeding 9.00 to 1.00
26 April to 3 May	Visiting volunteer week
25 May	Regular Sunday weeding 9.00 to 1.00
24-31 May	Visiting volunteer week
22 June	Regular Sunday weeding 9.00 to 1.00
21-28 June	Visiting volunteer week
27 July	Regular Sunday weeding 9.00 to 1.00
26 July to 2 August	Visiting volunteer week
24 August	Regular Sunday weeding 9.00 to 1.00
23-30 August	Visiting volunteer week
28 September	Regular Sunday weeding 9.00 to 1.00
4-11 October	Visiting volunteer week
26 October	Regular Sunday weeding 9.00 to 1.00
23 November	Regular Sunday weeding 9.00 to 1.00



View from the lighthouse before, showing plentiful yellow flowering bitou (April 2011), and after bitou removal (July 2013).

# AABR field day at Norah Head

**Gareth Debney, North Sydney Council**

It was an absolutely stunning summers day in January when thirty or so people gathered at Norah Head for a site tour and in-depth look at its habitats, Aboriginal heritage and ecological rehabilitation program.

Led by Scott Meier (BARRC), ecologist Robert Payne, and Cate Inwood of the Norah Head Coastcare group, the eclectic mix of bush regenerators and bushland enthusiasts were in for a fascinating outing in this idyllic coastal remnant.



Viewing the project area from the top of Norah Head Lighthouse.



Gathering for morning tea.

Arriving to a very civilised offer of tea and coffee, we eased in to the days proceedings with introductions and an acknowledgement of the areas traditional owners, the Darkinjung people. We then heard from local representatives of the Aboriginal community and learnt just how significant Norah Head was, and still is, to its original owners. A highlight of this talk was the dreamtime story of Norah Head's creation, in which a giant goanna pulled itself on to the foreshore, gouging the rock with its claws and leaving behind the distinctive marks that characterise the rock platform.

Following the introductory talk, we were invited to view the reserve and gain an appreciation for the rehabilitation project from the top of the Norah Head Lighthouse—not really an offer that needed too much deliberation!

As you can see from the photos, the 360 degree view was amazing. More poignant however was the before and after photos that Scott and his team handed round, in which the contrast between a bitou-dominated headland of 2010 and the regenerating heath of today couldn't have been more stark.

Bitou bush was treated with a combination of hand removal in good bush, and splatter gun foliar spray of dense infestations. Follow-up included foliar spray of seedlings prior to native regeneration, and hand weeding in sensitive areas.

What struck me was just how rapid the rate of regeneration seemed to have been following initial treatment of bitou (and other weeds). No doubt regular and intense follow-up weeding played a significant role in process however the diversity of germinating endemic species and relatively speedy establishment of native cover was nevertheless impressive. The Coastcare vols and BARRC team have certainly achieved a lot in a very short time!

There were a number of interesting discussion points during the tour, particularly in relation to site impacts (both past and present). For example, highly erosive soils on parts of the headland dictated a different approach to weed control in which

protection of the soil surface was paramount—to the point of virtually quarantining some locations for fear of them crumbling in to the ocean.



The old quarry site. All photos in this article: Scott Meier.

Similarly, the highly disturbed old quarry site in which the topsoil had been largely lost years ago was slowly regenerating with the help of BARRC's innovative hessian terraces which trapped runoff in natural depressions, allowing sediments to build up and seed-drop (from brushmatting) to germinate and establish islands of habitat.

In all, our visit to Norah Head was a thoroughly enjoyable and energising learning experience. Thanks to Scott, Cate, Robert, Tracey, Sharon, the BARRC crew, Wyong Council and the Norah Head Reserve Trust for facilitating a great event and providing such a welcoming atmosphere. We wish you all the best with this amazing project.

### Show off your site?

Please contact AABR Secretary Jane Gye if you have an idea for a field day. We are always looking for new sites, and help with organising is welcome too.

## Restore and Renew draws a crowd at Murwillumbah



On February 15 AABR hosted a talk by National Herbarium plant geneticist, Dr Maurizio Rossetto, about the exciting 'Restore and Renew' project being run by the Botanic Gardens Trust and Australian Network for Plant Conservation. Over 60 people attended.

As most will know, the project promises to identify the genetic characteristics of 200 NSW species used in restoration plantings, along with their germination and habitat characteristics.

Maurizio explained that the project has three phases:

1. to decide, in collaboration with industry, which 200 plants to study
2. to take samples of those plants from representative parts of their known geographic range
3. to analyse the material and synthesise results.

The vision of this project is to gain empirical data, using similar methodology across the State, to answer some of the vexed

questions practitioners and researchers have—including about whether the plant species we use in restoration have single extensive populations (in which case you could collect propagules from a wide area) or have small and genetically different populations (in which case you would collect within that more limited population's area). The data will then be used in conjunction with climate change models to help predict potential future ranges of the populations.

**There are many ways in which AABR members can help bring this project to fruition**—the most important being to volunteer to help collect vegetative material for genetic analysis.

The Murwillumbah event sparked offers of help from over 25 people willing to collect material according to strict guidelines—and AABR will do what it can to use our networks to help the project find collectors in all their key areas across the state. Watch this space!

Thanks goes to Rhonda James for organising the event, with assistance from other members of the Northeast NSW/Southeast QLD subcommittee.

A short video about the project is available [here](#).

# Learning and sharing on the international stage

My Experience at the Society for Ecological Restoration World Conference on Ecological Restoration 2013, Madison, US

Mritunjay Singh

I recently attended my first international conference, SER 2013 where I presented a talk and poster.

I have been a bush regenerator for approximately four years in the Sydney region, and there is still much more I need to learn. But by the grace of God, the support of work colleagues, and the inspiration of many bush regenerators I was able to travel to the US in October and take part in this exciting event.

Before attending the conference I was nervous and was only thinking about how I would do the presentation. As soon as I spent one day there, I realised that just thinking about my presentation was very selfish as this was a opportunity to hear, learn, and share the world's knowledge with one another. My nervousness was gone just like that when I learnt more from people and shared my tiny bit of knowledge, which turned the four days of conference into a mentors festival.

I think everyone should experience the world conference sometime in their life. To help us see a bigger picture and expand our mind—and hopefully achieve more in the field of conservation.

This is the first time I have shared my work experience at this level, and likewise for many other delegates. Mentors from different countries, cultures and restoration specialties have not only opened my mind, but also inspired me even more to think about any restoration or conservation project on the world level.

Every morning SER 2013 opened in the biggest auditorium where two to three speakers spoke for two hours on international restoration issues, in front of more than 500 delegates. A delegate from UN said during his talk, 'We need to understand human behaviour to make any conservation/restoration project a success'. I got so keen at the end and couldn't stop myself posing a question in front of everyone, 'I work in Sydney where government and people value our mother nature, however, in developing countries any conservation project becomes very difficult without the local support, where a poor farmer would only think to farm to feed himself/ his family and do not care about any restoration/conservation programs. And I have witnessed those situations many times in a developing country'.

(I was a farmer for two years in the central region in India. Farmers with small blocks of land are as not in a favour of conservation, instead trying to grow as much crops per season as they can.)

The response was to approach bureaucrats and politicians to generate local jobs. Council people should run education programs where the information aligns with cultural values and monetary benefits in the long term.

## Some memorable points for me were:

- Our Australian phragmites is one of the biggest problems in America, where fire is used as a control measure along with spraying with round up in wetter areas.
- In North America, crown fires burn mainly the canopy of pine vegetation and required about 30 years of frequency/interval. Pine forests contain some of the most volatile fuels in the sub-boreal forest region and occur across some of the most densely populated areas, raising concerns about catastrophic fire at the wildland-urban interface. Guidance for thinning operations were developed by modelling pitch pine *Pinus rigida* canopy fuels and crown fire hazard in urbanizing pine forest, and estimated crown fire potential under simulated harvest scenarios
- People use aerial photography and GIS to determine the type of aquatic weeds, using the reflection patterns of the different plants. This may not be perfect but close enough is good enough when the council/parks do not have enough funds.
- Software called 'Climax' can predict the next 100 to 200 years of suitable climate and location for particular species.
- A Canadian presentation dealt with urban water runoff management. Initially the landscape contractors and councils landscaped the soil to a convex profile, followed by plantings. But the water never stayed on the ground. Now they have changed their practice by /preparing a concave soil bed. This helps to store the water, filter the water deep into the soil bed and store nutrients to benefit nutrient loving native plants.

These experiences definitely open one's mind to think not just not think of conservation efforts in one's country but also conservation efforts for an entire world.

Many of us like going for holidays to overseas destinations. How about if we find where any world conferences on conservation or restoration are taking place and build our travel plans around that? Then treating ourselves by going around that country or neighbouring countries after the conference. I think this is a good way to explore yourself by sharing knowledge at the international level and exploring the country at the same time! There is so much to learn and share out there...

The book of abstracts from the conference can be downloaded from [www.ser2013.org/](http://www.ser2013.org/)

**About myself** I have almost three years of work experience managing agriculture, and started conservation programs for reptiles and primates, through education, among the villagers in India.

I came to Australia about five years ago to study for a master's degree in wildlife conservation. I started working with Bush-it in 2010. I believe I need to learn more about flora before I move further with fauna.

# Training in panda habitat restoration



Inspecting a Japanese Larch plantation above Prayer Wheel Village, Wolong Nature Reserve, earmarked for clearing and replacement by the pre-existing native plant community. L to R: Andy Clewell (Trainer), Zhang Shu Ping (village landholder), Wan FuGui ( Panda Mountain liaison officer), Tein McDonald and Marc Brody (Panda Mountain Founder).

AABR President, Tein McDonald joined forces with Andre Clewell to deliver two training workshops to a small group of Chinese natural area managers and students in Chengdu, Sichuan province, China.

The training is the vision of Marc Brody of the NGO Panda Mountain, and supplements the design of field trials to restore potential panda habitats in areas currently dominated by Japanese larch (larch was a species extensively planted during a major tree planting drive to counter deforestation).

The need for restoration of panda habitat has become evident since the success of China's captive breeding project and the incremental reduction in native habitats due to dramatic economic growth in China. The vision of Panda Mountain is for this project to act as a positive demonstration to encourage other efforts to restore habitats in China.

The two week visit in March 2014 involved assessing sites within the reserve with local (ethnically Tibetan) people to find feasible options for transforming the Larch plantations to native vegetation, providing employment to local people. It also involved delivery (with Dr Andre Clewell from Florida, USA) of four training modules introducing ecological restoration concepts, principles and some basic standards to interested Sichuan natural area managers. Numerous meetings were held with local government departments, universities and research institutions, to progress plans for an ecological restoration network in the province.



Tein McDonald and Andre Clewell visiting the Chinese Academy of Sciences' Laboratory for Ecological Restoration and Biodiversity Conservation where strong support was given to working with Panda Mountain to progress collaboration on ecological restoration projects.

# Tick allergies, and other updates

Lynn Rees

The Australasian Society of Clinical Immunology and Allergy (ASCIA) recommend the immediate killing of a tick if you are allergic to them.

There are a number of allergies and conditions associated with tick bites in Australia. These include:

- local skin reactions
- tick bite hypersensitivity
- mammalian red meat allergy - Alpha Gal
- tick-induced anaphylaxis
- tick paralysis.

**Local skin reactions.** According to the Tick Induced Allergies Research and Awareness organisation (TIARA) large local reactions "are the least dangerous" of all the allergies. These reactions can typically commence within 4-12 hours of a tick bite and slowly increase in size for 2-3 days. The itch can be very intense. These reactions can last up to 2 weeks.

However, large local reactions can also be indicative of possible tick borne disease transmission. The Australian Government currently does not support this view. Dr Peter Mayne, a key Australian specialist in the treatment of tick borne diseases, isolated *Borrelia spirochetes* from the large rashes in some patients. See here for further information: [www.dovepress.com/articles.php?article\\_id=10306](http://www.dovepress.com/articles.php?article_id=10306)

TIARA recommends "rest, elevation of the affected area above the level of the heart to help reduce swelling and pain, antihistamines while swelling persists."

**Tick bite hypersensitivity.** Ever wondered why you feel an immediate sting when bitten by a tick? It's likely that due to the high number of bites received over time you are now hypersensitive and a reaction is felt almost immediately.

**Mammalian red meat allergy - Alpha Gal.** Delayed reaction three to six hours after eating red meat products, including gelatine. Avoid all red meat products.

**Tick induced anaphylaxis.** Caused by proteins in tick saliva, can be life threatening. Seek urgent medical attention.

**Tick paralysis.** Rare in humans though can affect children

For detailed information on tick induced allergies, check out these websites: [www.allergy.org.au/patients/insect-allergy-bites-and-stings/tick-allergy](http://www.allergy.org.au/patients/insect-allergy-bites-and-stings/tick-allergy)

[www.tiara.org.au](http://www.tiara.org.au)

## Living with tick allergies

If you are allergic to tick bites, avoid getting bitten and take extra protection measures. Some people may even have to move house to avoid all tick bites. Consider wearing a Medi Alert bracelet and let your work mates know of your condition and what they should do if you have an allergic reaction.

ASCIA recommend that if you are allergic to ticks carry your emergency medications at all times.

## ASCIA recommends the following:

- "If you know you are allergic to ticks and you are having an allergic reaction to a tick bite, follow your ASCIA Action Plan, including the use of an adrenaline autoinjector (EpiPen® or Anapen®) if symptoms of anaphylaxis occur.
- If you find a tick, do NOT forcibly remove the tick, but rather kill the tick first by using a product to rapidly freeze the tick to prevent it from injecting more allergen-containing saliva.
- In a tick allergic person, the tick should be killed and removed in a safe place (e.g. an emergency department of a hospital) until it is established that the process of killing the tick and removing it can be safely performed by the tick allergy sufferer. Once this is established, ticks may be killed and removed without necessarily attending an emergency department, depending upon the individual circumstances and after consultation with your medical specialist. Some tick allergic individuals are so highly allergic that medical support should always be sought. Your medical specialist will advise you as to which approach will be safest for you.
- If suffering your first allergic reaction to a tick, seek urgent medical attention. The tick can then be removed under medical supervision where facilities are available to treat the allergic reaction.
- Ether-containing aerosol sprays are currently recommended for killing the tick. Aerostart® and other similar products have been used extensively to kill ticks in allergic patients. It should be noted that these products are not registered for use in humans and contain benzene, but there is long term experience with these products which have been shown to be very effective in treating those with serious tick allergies.
- **The use of other ether-containing sprays such as Wart-Off Freeze® (and similar e.g. Elastoplast Cold Spray®) has also been effective.** These products will continue to be studied and advice updated as experience increases.
- If available, liquid nitrogen applied by a doctor should also (in theory) be effective."

### Wart-Off Freeze

[www.wartoff.com.au/products.html](http://www.wartoff.com.au/products.html)

[www.wartoff.com.au/](http://www.wartoff.com.au/)

Warning: Wart-Off Freeze spray and other propellant freezing products contain methyl ether, which is a known human carcinogen. Its use should be carefully considered and in consultation with a medical professional. [www.cancer.org/cancer/cancercauses/othercarcinogens/](http://www.cancer.org/cancer/cancercauses/othercarcinogens/)



Thanks again to those people sending us information about ticks and how to treat their bites. Keep sending them in and don't assume that we know everything. We have included this information in the recently published *Ticks and Tick Borne Diseases – protecting yourself* review. Make sure you download it from the web to ensure you have the most up to date information.

We are still working on the *Living with ticks –reducing ticks in your gardens* guide so also keep sending in your ideas too.

# Flame weeding gives endangered wetlands a chance

Christopher Brogan

The Bankstown Bushland Society received a \$56,000.00 Environmental Trust grant in the 2012 round to carry out bush regeneration works in two areas of remnant bushland on opposite sides of Milperra Road near Sydney's Bankstown Airport.

These remnants are part of the Milperra Wetlands Complex, listed as an Endangered Ecological Community under the NSW *Threatened Species Conservation Act* (1995).

The objective of this project is to raise community awareness of the significance of natural areas, and protect them from development such as road widening. Earth Repair Ecology Pty Ltd have been contracted to carry out this work.

Works to date have included extensive primary control for woody weeds, including small and broad leaf privet, green cestrum and lantana. Cut material has been piled in situ as fauna habitat.

To prevent cleared areas from being colonised by annual and perennial weeds such as cobbler's peg, paddys lucerne, wandering jew and ehrlharta, high volume herbicide spraying was carried out in the more disturbed areas along the road batter.

**A flame weeder was used in more resilient areas to control regenerating weed seedlings, particularly paddys lucerne and cobbler's peg.**

Native grasses and herbs are particularly susceptible to herbicide drift and need to be protected when spraying to control adjacent weeds. This often requires "spray preparation" or the removal by hand of weeds from the immediate vicinity of natives. Using a flame weeder minimises the amount of preparation required as native species better adapted to regenerating after fire and are less likely to be killed if accidentally burnt. (though native seedlings are more vulnerable, so some caution is required).

Be aware of the risk of starting bush fires, and only use a flame weeder when accompanied by a second team member equipped

with a back pack sprayer filled with water. Do not use a flame weeder in hot, dry or windy conditions.

Works will also include extensive high volume spraying for alligator weed.



Cut woody material was piled and retained on site as fauna habitat — photo taken immediately adjacent to Milperra Road



Spraying glyphosate on the batter of Milperra Road to control cobbler's peg, wandering jew and Rhodes grass using a 600-litre capacity QuikSpray unit

## What is happening on your site?

Any successes or failures, or interesting strategies that you are using? Drop us a line [newsletter@aabr.org.au](mailto:newsletter@aabr.org.au)

## Subsidised TAFE courses on NSW North Coast

The introduction of commercial fees has certainly hampered potential to run Conservation and Land Management courses in the NSW North Coast region, but successful applications by Coffs Harbour, Wollongbar and Kingscliff TAFEs to the Department's Strategic Skills Program (SSP) means that one Cert III CLM course is likely to run this year in each of those campuses. (There will be 15 funded places at both Wollongbar and Kingscliff, in Cert III NAR. So anyone already working in the industry or

seeking work in the industry needs to email the head teacher, [paul.moosberger@det.nsw.edu.au](mailto:paul.moosberger@det.nsw.edu.au) to try and secure a place.) Competition for those limited subsidised places is already very high and there is a waiting list. Nonetheless—and particularly for 2015 when all training will be at a commercial fee—expressions of interest for the courses should be made to your local TAFEs to boost awareness of the level of interest in the courses from industry and the need for further subsidy.

# Green Army—can we get it right?

The Federal Government recently invited comments on the proposed Green Army Programme.

The Green Army could be a boost to our industry, and our environment, and a great opportunity for participants. But we know from past experience that such programs often fail to live up to their potential, and can even create their own problems. We are keen to help steer this in the right direction, so we prepared this submission.

## About AABR

*The Australian Association of Bush Regenerators was established in 1986, out of concern for the continuing survival and integrity of bushland and its dependent fauna. Our aim is to promote the study and practice of ecological restoration, and foster and encourage effective management of natural areas by qualified people, based on sound ecological principles.*

*AABR is a national organization and is the largest association of people concerned with ecological restoration in Australia. More than 90% of the 350+ members are accredited in the field of practical ecological restoration. Many have considerable experience coordinating and participating in large scale environmental & heritage restoration programs such as Greencorps, working in conjunction with local, state and federal government authorities.*

## Strategic Objective 1: Environmental Conservation

Support the delivery of environment and heritage conservation outcomes at the local, regional and national level.

The Green Army Programme Draft lists various environmental and heritage projects under “Types of Green Army Projects” (Line 311). AABR recommends that the Australian Government approval of project process should weight heavily proposals that are within the capacity of inexperienced workers and do not compromise the very integrity of the natural or heritage systems they purport to protect.

**Project appraisal should consider the initial works, the follow-up and the on going maintenance. Complex restoration sites can take 20 years or longer to bring to stability, where significant resources are no longer required for their upkeep.**

As such, proposals from the project sponsor that suggest large scale and high visual impact works that do not provide for the ongoing follow-up, should be considered outside the scope of the Green Army programme.

Many of the example restoration landforms referred to within the draft statement (Line 316 “sand dunes, mangroves, creek banks, foreshores & beaches”) are sensitive, rare & protected by state & federal legislation such as the NSW *Threatened Species Conservation Act 1995*. Projects should be consistent with accepted restoration principles as outlined in publications such as; *Bush Regeneration, A Practical Guide to Contract Management*, NSW Government, 2003, and *Recovering Bushland on the Cumberland Plain, Best Practice Guideline for the Management & Restoration of Bushland*, DEC (NSW), 2005.

Planting and revegetation programs for native vegetation restoration purposes should not only consider the nature of the indigenous vegetation community but also utilize locally sourced ‘provenance’ seed and container plants. Failure to observe basic soil hygiene and revegetation principles can deliver adverse environmental outcomes that are costly to repair.

## Strategic Objective 4: Experience, Skills and Training

Provide participants with opportunities to undertake training recognised under the Australian Qualifications Framework in a range of areas which increase their skills and qualifications.

Given that objective 4 seeks to deliver “Experience, Skills and Training” it is presumed that at least some of the participants will wish to pursue additional work experience & employment within the small but well-established restoration industry. It would follow that the Federal Government should further invest within this established industry, as soon as possible, in order to accommodate a significant portion of the Green Army participants that wish to further their experience in that field.

**Providing on-ground supervision for 15,000 participants will require more than 1,600 suitably qualified & experienced supervisors. These will presumably be drawn from, in part, the small pool of existing supervisors currently engaged.**

Failure to invest significantly in the established restoration industry will place pressure on existing business as, presumably, some qualified & experienced supervisors leave current employment to fill the Green Army supervisor positions.

This will place pressure on small business to retrain new supervisors within a poorly remunerated public good industry that delivers the great majority of its services to the three tiers of Australian government.

## 1.2 Key Administrative Components

Could we suggest that the green armies be assigned (in part at least) to projects already in progress?

There are many small contractors that are highly experienced in delivering successful restoration outcomes, and with adequate support would be excellent for supervising and training personnel on projects they are undertaking. Most council-run Bushcare programs could use extra help with the right supervision. The Programme should actively engage with these companies and organisations which have the experience and organisational frameworks in place.

## Summary

AABR supports the intent of the Green Army Programme to combine environmental work with training and employment of young Australian people—but warns that well-intentioned but ill-advised environmental works can at best fail to assist and at worst, create further damage to terrestrial and aquatic ecosystems.

AABR does not support the use of Green Armies working within bushland or areas on which native vegetation is to be re-established unless the following recommendations are covered in the guidelines and protocols:

1. Set firm guidelines and protocols to ensure that:

(a) any works in or near bushland:

- are linked to a host organisation/landholder capable of maintaining the site in the long term
- are based on an 'assisted regeneration' model not a 'weed control' model
- do not involve mulching and planting within a zone with natural regeneration potential
- are guided by a 'regeneration potential' site analysis and action plan developed by a person with CLM Cert 4 or above and at least three years field experience in natural area restoration
- are supervised by an experienced bush regenerator with at least CLM Cert 3
- involve comprehensive (not selective) weed control, with follow up continued for a number of years until weed reduces

to negligible levels and natives dominate the site.

(b) any native vegetation replanting or direct seeding works are:

- linked to a host organisation/landholder capable of maintaining the site in the long term
  - carried out on an ecological restoration model and not a 'tree planting' model
  - carried out outside (not within) the natural regeneration zone surrounding bushland
  - based on a plan developed by a person with CLM Cert 3 or above and at least 3 years' field experience in natural area restoration
  - supervised by an experienced restoration practitioner with at least CLM Cert 3
  - modeled on a local reference or benchmark community
  - based on propagules sourced from appropriately diverse, regional genetic sources
  - fully documented in terms of species planted and their genetic sources.
2. Include in the program sufficient funding to pay for the training of sufficient supervisors.

All CLM courses in Australia are soon to be charging commercial rates which is likely to drive a downturn in availability of appropriately qualified supervisors unless the program provides funding for appropriate training.

Thanks to Scott Meier, Tein McDonald and Jane Gye for their work on this very important submission.



ABC news reported last November that "Native grass specialist Dr Ian Chivers, from Native Seeds Pty Ltd, has selected strains of a commonly found grass in Southern Australia, alpine rice, or *Microlaena stiphoides*.

The dual purpose grass cover and grain crop has been selectively bred and trialled with the help of the Rural Industries Research and Development Corporation.

Grain from the perennial grass is high in protein and gluten free. Dr Chivers says it can be mixed with other grains and baked into breads and muffins.

Dr Chivers, Adjunct Fellow at Southern Cross University, says despite only having five percent of the world's landmass, Australia has around a quarter of the world's grass genera.

He is keen to see Australia capitalise on this genetic potential."

[www.abc.net.au/news/2013-11-19/alpine-rice-ian-chivers-native-grass-grain/5099182](http://www.abc.net.au/news/2013-11-19/alpine-rice-ian-chivers-native-grass-grain/5099182)

Thanks to Gerda Cohen for letting us know.

## Kunzea ambigua is now available as an essential oil

According to Australian Botanical Products, Kunzea oil is "listed with the Australian Therapeutic Goods Administration for the following approved therapeutic claims: for the temporary relief of the pain of arthritis and rheumatism; relief of the symptoms of influenza; relief of muscular aches and pains; helps relieve nervous tension, stress and mild anxiety".

Anecdotal evidence suggests it may have additional medicinal uses. Australian Botanical Products say "Kunzea oil has been tested for its effectiveness against a number of disease-causing bacteria. Kunzea is particularly effective against *Staphylococcus aureus*, including the MRSA variety (multiple antibiotic resistant), in a tested concentration as low as 0.16%."

[www.abp.com.au/news/kunzea-ambigua](http://www.abp.com.au/news/kunzea-ambigua)

### And what exactly is a tick bush?

The common name for *Kunzea ambigua* is tick bush. The promoters of kunzea oil say this is because ticks avoid it, and native animals visit patches of kunzea to get relief from ticks. This is probably news to many of us who assumed tick bush meant that ticks were supposed to like kunzea. If anyone has any information about the origin of the name could you let us know?  
[newsletter@aabr.org.au](mailto:newsletter@aabr.org.au)

Thanks to Janet Fairlie-Cuninghame for this news.

We are looking at ways to expand our activities and encourage more people to help, and have added a "donate of volunteer" page to the website. Thanks to Scott, Lynn and Lynne for sharing your stories.

# Why do people help AABR?

Three of our active members explain why they contribute time and resources.

## Scott Meier, Wotton NSW

### AABR committee member, and bush regeneration contractor

Without healthy natural systems, virtually every human activity is a luxury. I believe this is a common understanding amongst those interested in natural systems. I am grateful to be part of the ecological restoration movement, which is dedicated to the repair, maintenance and study of these natural systems.

As a bush regeneration practitioner, an ecological restoration contractor and AABR committee member, I am interested in the development of this movement, at every level.

The depth and widespread nature of the Australian restoration movement is likely unparalleled. I see the recent AABR seminar as a celebration of this movement—an opportunity to share information, develop new bonds and maintain contact with other Bush regenerators and those interested in theory and practice of ecological restoration. Many of us are isolated in our particular organisations or projects, and the opportunity to come together in a central meeting place allows us to share inspiration. AABR has been able to provide this opportunity.

Since 1986 AABR has provided a focal point for the Australian restoration movement, I believe its role in the advancement of quality restoration practice should not be underestimated.

As an individual practitioner, I view AABR as providing a voice for natural systems and their individual components. I believe these are the ongoing life support systems that support my family and myself. These 'systems', and the plants and animals within, also have an inherent right to co-exist with human populations.

As a bush regeneration contractor, AABR represents an opportunity to showcase some of our successful projects, and is a contact point for those wishing to engage our services or find employment.

As an AABR committee member, I am able to contribute, in some small way, to the development of this restoration movement, which is so desperately needed if we are to survive on this planet.

With ongoing support of its members, AABR will be able to stage seminars and events into the future and continue to act as a hub for bush regeneration.

## Lynn Rees, Dorrigo NSW

### AABR Newsletter regional editor, member of AABR Accreditation subcommittee, Ranger NPWS

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 this year 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.

As a member of the editing team, we are really happy to help you develop a story. Don't worry if you can't spell or string a sentence together; you should see our first drafts! We really want your contributions, photos, ideas, whatever. Just email AABR to get in contact with us.

I really encourage others to volunteer to help keep AABR strong and relevant. New blood in an organisation really does make a difference and also sends a message to the committee that you value the work they do. I have been surprised at how much I have enjoyed the past two years of my volunteering and plan to keep helping. The more of us that volunteer the easier the work load is for the committee. Sound familiar?

## Lynne Springett, Sydney NSW

### Bushcare volunteer

In 1986 I began my life changing journey as a bush regenerator, the same year AABR was formed.

After many years of being on a huge learning curve while working with contractors, I am now retired and work as a volunteer. Having a love for the natural environment and a passion for rehabilitating and conserving bushland for wildlife and future generations I find working with like minded people a privilege and a joy.

I have always found the AABR newsletters informative and an excellent forum for ideas, reports on new proven successes (and failures!), updates on specific sites and 'a voice' for all on any related point of interest. AABR is an essential organisation for the collation and dissemination of information of new techniques, products and equipment. The recent AABR seminar has invigorated all who attended and encouraged new membership, enabling AABR to grow and to support those committed to the restoration and maintenance of our natural environment. I believe its success has been due to hard work over many months by the committee and other volunteers. I am pleased to have been able to help in a voluntary capacity (albeit in a very small way) and would urge others with an interest in habitat conservation to contribute in any way they can. Remember the old saying: many hands make light work!

# Ways to help AABR help the bush and bush regenerators

Are you able to do some more to support the ecological restoration industry and protect our natural environment? That's what AABR is all about! So can you help us by joining, volunteering or making a donation?

## Volunteer with AABR

There is a lot to do and we are always looking for help. E.G:

- helping to organising field days or seminars
- preparing content for the newsletter (contact Virginia Bear [newsletter@aabr.org.au](mailto:newsletter@aabr.org.au) 0408 468 442).
- helping prepare submissions on issues important to the industry
- telling bush regen colleagues about AABR, and encouraging them to join
- joining the AABR committee
- contacting your local sub-committee and offering to help (currently Northeast NSW/Southeast QLD subcommittee Mike Delaney 02 6621 9588 [miked@envite.org.au](mailto:miked@envite.org.au))
- getting together with others in your region to form a local subcommittee
- helping to set up and run our Facebook page
- and many more jobs large and small.

Please contact AABR secretary Jane Gye [secretary@aabr.org.au](mailto:secretary@aabr.org.au) if you would like to talk more about volunteering for AABR

## Make a donation to AABR

We have a policy of keeping our fees low, in order to be as inclusive as possible. But we do have a lot of important work to do, and need to continually raise funds. If you are able to make a donation – even a small one – we will put it to good use to support the industry and protect our natural environment.

You can donate right now via internet banking

- Account name: Australian Association of Bush Regenerators (NSW) Inc.
- BSB: 012266
- Account number: 954295567

Please email the membership secretary, with the amount and Transfer reference so we know why the funds have appeared in our bank account. We would also like to know your name and contact details, so we can send a receipt—unless you would prefer to remain anonymous.

Please get in touch if you would like to discuss any aspect of your donation.

Note: We do not have tax deductible status.

## Become a member of AABR

A large membership base makes us strong and helps us financially—even if you are not able to participate at all, we value your membership.

If you are not already a member, whether an individual or a company, if you care about what we care about, step aboard!

Join here [www.aabr.org.au/about-aabr/joining-aabr/](http://www.aabr.org.au/about-aabr/joining-aabr/)

## Glyphosate linked to gluten intolerance

From *Weeds News* 4793 February 23, 2014. (Free, weekly newsletter of the Weeds Network [weedsnetwork.com/traction](http://weedsnetwork.com/traction))

**Abstract from** Anthony Samsel & Stephanie Seneff (2013). *Glyphosate, pathways to modern diseases II: Celiac sprue and gluten intolerance*. *Interdisciplinary Toxicology*, 6(4), 159–184.

Celiac disease, and, more generally, gluten intolerance, is a growing problem worldwide, but especially in North America and Europe, where an estimated 5% of the population now suffers from it. Symptoms include nausea, diarrhea, skin rashes, macrocytic anemia and depression. It is a multifactorial disease associated with numerous nutritional deficiencies as well as reproductive issues and increased risk to thyroid disease, kidney failure and cancer.

Here, we propose that glyphosate, the active ingredient in the herbicide, Roundup®, is the most important causal factor in this epidemic.

Fish exposed to glyphosate develop digestive problems that are reminiscent of celiac disease. Celiac disease is associated with imbalances in gut bacteria that can be fully explained by the known effects of glyphosate on gut bacteria. Characteristics of celiac disease point to impairment in many cytochrome P450 enzymes, which are involved with detoxifying environmental toxins, activating vitamin D3, catabolizing vitamin A, and maintaining bile acid production and sulfate supplies to the

gut. Glyphosate is known to inhibit cytochrome P450 enzymes. Deficiencies in iron, cobalt, molybdenum, copper and other rare metals associated with celiac disease can be attributed to glyphosate's strong ability to chelate these elements. Deficiencies in tryptophan, tyrosine, methionine and selenomethionine associated with celiac disease match glyphosate's known depletion of these amino acids. Celiac disease patients have an increased risk to non-Hodgkin's lymphoma, which has also been implicated in glyphosate exposure. Reproductive issues associated with celiac disease, such as infertility, miscarriages, and birth defects, can also be explained by glyphosate.

Glyphosate residues in wheat and other crops are likely increasing recently due to the growing practice of crop desiccation just prior to the harvest. We argue that the practice of "ripening" sugar cane with glyphosate may explain the recent surge in kidney failure among agricultural workers in Central America.

We conclude with a plea to governments to reconsider policies regarding the safety of glyphosate residues in foods.

From The Weeds Network Website "The Weed's Network is passionate about a sustainable, viable and creative future in our relationship with weeds. Through a spirit of willing exploration we foster ways to better understand weeds so they become a resource we can manage with environment and future generations in mind. The Weed's Network provides evidence-based information for innovative ways of thinking about, engaging with and managing weeds sustainably."

# What's happening

## 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](mailto:info@sydneyweeds.org.au)

## 7-8 April

Workshop on plant identification for flora of the Hunter Valley

**Where** Hunter Valley Hotel Academy, Kurri Kurri TAFE campus

To introduce participants to the plant communities and flora of the Hunter Valley region, and provide the skills and information required to positively identify a range of common plants.

**Organiser** Australian Network for Plant Conservation

[www.eventbrite.com.au/e/plant-identification-for-flora-of-the-hunter-valley-registration-10364814439](http://www.eventbrite.com.au/e/plant-identification-for-flora-of-the-hunter-valley-registration-10364814439)

## Wednesday 9 April

Seed collection, storage and use for native vegetation restoration

**Organiser** Australian Network for Plant Conservation

**Where** Kurri Kurri, NSW

[www.eventbrite.com.au/e/seed-collection-storage-and-use-for-native-vegetation-restoration-registration-10362014063?aff=eorg](http://www.eventbrite.com.au/e/seed-collection-storage-and-use-for-native-vegetation-restoration-registration-10362014063?aff=eorg)

## 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/](http://www.avpc.net.au/)

## 1-4 September

19th Australasian Weeds Conference

**Where** Hobart

Science, Community and Food Security: the Weed Challenge

[australasianweeds2014.com.au/](http://australasianweeds2014.com.au/)

## October

Grasslands and other grassy ecosystems forum

There will also be one or more day tours to some interesting local sites.

**Where** Canberra

Contact: [sarah.sharp@fog.org.au](mailto:sarah.sharp@fog.org.au)

[www.fog.org.au/index.htm](http://www.fog.org.au/index.htm)

**Organiser** Friends of Grasslands

## September 29-October 3

Ecological Society of Australia 2014 Annual Conference

**Where** Alice Springs

Four day scientific program plus workshops, field trips and community events

[www.esa2014.org.au/](http://www.esa2014.org.au/)

## 12 - 14th November

The 10th Australasian Plant Conservation Conference

**Where** Hobart

**Organiser** Australian Network for Plant Conservation

Will bring together a diverse range of the top botanists, ecologists, land managers, and on-ground plant conservation workers from around Australia and New Zealand, to discuss current scientific research and practical experience in the field of plant conservation, in particular for the many threatened plants and ecological communities now listed around Australia.

Will include a variety of guest speakers, exciting displays and informative field trips. A key focal point event at which plant conservation specialists can exchange ideas and make new contacts. Delegates will include researchers, government officers, the private sector, environmental organisations, community groups, farmers and many more.

[www.anbg.gov.au/anpc/conferences/2014/index.html](http://www.anbg.gov.au/anpc/conferences/2014/index.html)

## Late November early December

AABR Fauna habitat workshop including AABR AGM

**Where** Sydney

## 2014

Eucalypts of the Sydney Region Identification workshop with Van Klaphake



### President

Tein McDonald  
[president@aabr.org.au](mailto:president@aabr.org.au)

### Treasurer

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### Website advertising

Mitra Gusheh  
[advertise@aabr.org.au](mailto: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](mailto: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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[enquiries@aabr.org.au](mailto: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 with newsletter exchange</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](mailto:newsletter@aabr.org.au) 0408 468 442

*Opinions expressed in this newsletter are not necessarily those of AABR*