



*Supporting landholders
with native vegetation*

Treasures of Panboola

Panboola is a diverse wetland system which is being rehabilitated with the help of volunteers for nature conservation. Since 2002 thousands of trees, shrubs and ground-covers have been planted with the aim of providing food, shelter and corridors for native fauna. As Steve Sass reports, these efforts are revealing rich treasures.

A Community Biodiversity Survey at Panboola in March and April 2011 has discovered the presence of nine mammal species, six reptile species and 12 bat species; many detected at Panboola for the first time. Funded by the NSW Environmental Trust, coordinated by Envirokey and with the help of community volunteers, the study targeted reptiles, bats and mammals as no previous studies of these fauna had been completed at Panboola.

To conduct the surveys, traditional trapping methods were used along with 'high-tech' options such as Anabat Echolocation Call recorders and Motion-activated infrared cameras.

Of particular interest, given the past land use of Panboola as a racecourse and farmland, the study detected the presence of two native antechinus species. These are generally found in diverse forested areas rather than cleared



Agile Antechinus

landscapes. The Agile Antechinus (*Antechinus agilis*) was recorded within the diverse tree plantings of the Waterbird Sanctuary, while the Dusky Antechinus (*Antechinus swainsonii*) was found within the saltmarsh area and along the Pambula River. Their presence is a testament to the richness of the habitat created at Panboola over the last nine years.

For bats, the freshwater wetlands within Tips Billabong and the Waterbird Sanctuary were highly diverse with the majority of bat activity occurring here. This was most likely due to the presence of freshwater which bats regularly use for drinking during feeding activity.

Five of the 12 species of bat we recorded at Panboola are listed as threatened under the schedules of the NSW *Threatened Species Conservation Act 1995* or the Commonwealth *Environment Protection and Biodiversity Conservation Act 1999*.

For more info about Panboola and how to get involved visit <http://thebegavalley.org.au/panboola.html>

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CMN Event

Weeds in Wet Areas

Fri 5 Aug 2011, 9.30am - 3pm
Springvale, near Bega

Improve your knowledge of weeds along creeks, rivers and drainage lines and why they are there.

Learn basic bush regeneration techniques for managing weeds common to wet areas, including scrape and paint, frill and fill, stem injection, splatter gun, cut and paint, leaf wiping and spot spraying as well as a range of non chemical methods of control.

Have your questions answered by experienced practitioners in the field of weed identification and control and riverbank management.

Morning tea and lunch provided.

Bookings to FSCCMN

Contact the FSCCMN

Alison Rodway
PO Box 118 Bega NSW 2550
(02) 6491 8224 (w)
0457 542 440 (m)
info@fsccmn.com.au
www.fsccmn.com.au



Coordinator's column

With crisp frosty mornings, warm sunny days and winter rains topping up soil moisture, this must be as close as it gets to paradise! It promises an active growing season and for those who feel inspired to plant, our feature on site preparation will help you start planning for your autumn 2012 projects.

The photos of *Marsdenia rostrata* (Common Milkvine) on this page were taken at Aragunnu. You know it's there when you see its delicate seeds floating down from pods suspended in the rainforest understorey, where it twines up to ten metres and piles up fluffy bundles on the forest floor. I like the way it bleeds milky sap when you break off a leaf.

If you have a favourite plant, send me a photo and a few lines about why you like it and I'll share it with the CMN in future newsletters.

Ali



What is the CMN?

The Far South Coast Conservation Management Network (CMN) supports private landholders in the Bega Valley Shire to recover and manage native vegetation on their properties.

The CMN aims to inspire and motivate landholders, increase knowledge about native vegetation management and develop the skills to do this work. The coordinator produces quarterly seasonal newsletters, organises workshops and field days, manages a website and keeps landholders up to date with relevant events and information via a mailing list.

The CMN is funded and supported by the Southern Rivers Catchment Management Authority and Bega Valley Shire Council.



Wallagoot Landcare Group

Wallagoot Lake and Bournda Lagoon in Bournda National Park are the main focus of Wallagoot Landcare Group. This includes upstream areas that affect the health of these two beautiful estuaries.

Some of us got together as a group in 2007 when *Caulerpa taxifolia* was discovered in Wallagoot Lake. *Caulerpa taxifolia* is a highly invasive marine algae. The group, called Wallagoot Caulerpa Response Group aimed to eradicate it. We've had great success keeping *Caulerpa* at low levels so we decided to go on and form the Wallagoot Landcare Group.

The Wallagoot Landcare Group gets involved in water quality monitoring, biodiversity surveys, youth Landcare camps, *Caulerpa taxifolia* monitoring and control and seagrass health monitoring. We also help the local community and schools get involved in Landcare projects.

Our newest project is called "Two Gems on the Sapphire Coast". We got funding for this from the Australian Government's Caring for our Country and Southern Rivers Catchment Management Authority. This project means schools and community members can join in some fun and interesting educational activities that help look after Wallagoot Lake and Bournda Lagoon. We'll be producing a series of E News letters to keep people up to date with the latest developments and information from the project.

If you'd like to get involved with any of the activities of the Wallagoot Landcare Group please contact Bournda Environmental Education Centre on 02 6494 5009.



Luke Brown, Doug Record & Ed Wildsoet of Wallagoot Landcare Group



Photo: Dr Louise Morin CSIRO

Diseased *Agonis flexuosa* (willow myrtle)

Myrtle Rust

Myrtle Rust is a fungus native to South America which affects plants belonging to the *Myrtaceae* family including Australian natives like bottle brush, tea tree, lilly-pilly and eucalyptus. It was identified on the Central Coast of NSW in April 2010 and has since spread to all NSW coastal areas, apart from the Bega Valley and Eurobodalla Shires.

Myrtle Rust produces masses of powdery bright yellow or orange-yellow spores on infected plant parts. Leaves may become buckled or twisted and plants may die as a result of infection.

Areas containing significant plant communities such as those with threatened species and many nurseries are vulnerable to the negative effects of the rust.

The rust can be spread by different means including wind, movement of infected plants and by spores falling onto people engaged in activities where rust occurs. Myrtle Rust is not harmful to people.

What can I do?

- Learn how to recognise the fungus and report any suspected detection to the Exotic Plant Pest Hotline 1800 084881.
- Never move suspected contaminated or infested material unless directed by an officer of the NSW Government.
- Always practise good hygiene when working with native plants and general nursery stock – clean equipment like containers and secateurs after use.
- For more information, visit www.industry.nsw.gov.au/info/myrtlerust

Planning to Plant?

Do the wetter conditions we've been experiencing make you want to get out and plant trees? Planning ahead and giving yourself plenty of time to prepare your site will make your job easier and increase the health, survival and growth rates of your plants. Choosing the right site, good site preparation, species selection, timing of planting for soil moisture and maintenance are the keys to a successful larger scale planting project (around 200 plants or more).



Local land holder completing a riparian planting project

1. Planning

Choosing the best site for planting

This will depend on the purpose of your planting project – is it for biodiversity, shelter, erosion control or a combination of these? A simple property plan may help identify the best sites.

On farms consider revegetating land that is not suitable for growing crops or pasture due to rocks, slope, poor soil type, structure or depth. Seek advice or avoid planting into naturally treeless areas where native grasslands are in good condition as these could be endangered plant communities and can be degraded quickly by disturbance. The Southern Rivers Catchment Management Authority (SRCMA), 02 6491 8200, can provide advice on looking after these communities.

Select the site well in advance to allow for weed control and soil cultivation (a general rule of thumb is to select your site at least six months before planting).

Site size is important. Choose a site that won't overextend your resources. These include time, water and finances.

Choosing your plants

Which vegetation community is likely to have existed on your site? You could start by identifying remnant plants on your property, talking to neighbours, looking at similar sites in better condition in your area or seeking advice from the SRCMA. Plants from the local vegetation community are more likely to thrive and grow, may require less follow-up maintenance and provide habitat and food for local native animals.

Once you have your species list, try to obtain plants grown from local provenance seed as these will be genetically adapted to the environmental conditions of the area. You can choose to propagate the seeds yourself, have the seeds you collected or obtained from the Seedbank propagated for you or obtain good quality planting stock from nurseries specialising in growing local native species. To guarantee supply, place your order at least six months prior to planting.

Contact Karen Walker at the Far South Coast Landcare Seedbank on 02 6491 8224 to obtain local provenance seed and information on the use of local provenance plants.

2. Site Preparation

Good site preparation will improve your success in establishing vegetation and assist in good plant growth during the first few seasons. It should be carried out at least six months prior to planting (around the time you are ordering plants or seed). The method of preparation will depend on your individual site, but the following activities are common to most sites.

Preparing the soil

"Deep Ripping" or "Ripping and Mounding" are the two main ways to prepare your site for planting depending on your local soil conditions and the machinery and budget you have available. Rip lines are generally 3 -4 metres apart.

Ripping dry soil with a single tyne ripper (down to 45-60cm) breaks up the sub-surface soils and is essential for improving water and root penetration and good tree growth. It also creates a looser soil surface making it easier to plant. This should be



Riplines on a planting site in Bemboka

done as long before planting as possible to allow time for the soil to settle so as not to leave air pockets and when the subsoil is moderately dry (if it is too dry, the ripper won't penetrate) so it is shattered rather than sliced through. If possible, ripping the planting lines again before planting can increase the benefits described above.

Ripping is sometimes combined with cultivation, mounding or both to create a fine tilth in the surface soil. This makes planting easier and encourages good root development. Mounds create a large volume of soft soil which encourages rapid early growth. Ripping and mounding are carried out in one pass with a large plough drawn by a bulldozer. For small plantings a set of opposed discs drawn by a tractor can create a soft surface. Call the SRCMA for advice about options appropriate for your site. For example, ripping on some sites may increase the risk of erosion.

Weed control

Weeds compete for soil moisture and nutrients and can cause death of the seedling, or at least reduce the growth and health of the new plantings. Good weed control can minimise the need for ongoing watering.

Weed control needs to happen at a number of stages in your planting project. Firstly, if there are live weeds on the site you may find ripping or cultivation easier if you spray with a knockdown herbicide along the planting lines in a 1m -1.5m wide strip at least two weeks prior to the first ripping and when the weeds are actively growing. This also stops weeds from being buried deep in the soil.

Ripping / cultivation will encourage fresh germination of weeds along planting lines, and these need to be controlled either by spraying them again or using alternative weed control methods. You may need to do this more than once but if you choose to spray, this should happen at least three weeks before planting. The aim is to plant into bare soil which has few weed seeds. To minimise the use of herbicides you may wish to avoid spraying rip lines and instead

spot spray planting circles of 1m diameter along the rip line approximately 3m apart. If you want to avoid herbicide use all together, you will need to scalp the soil surface to remove plant material at each planting site. Weeds will then need to be manually controlled during and after the planting process.

For further information contact the SRCMA on 02 64918200 or district agronomist Hayden Kingston on 02 6491 7800. For herbicide rates, legislative restrictions and safety visit www.pestgenie.com.au

Fencing out stock

Stock should be kept off sites that have been prepared for planting to avoid soil compaction and new weed seeds being introduced. If the site is adjacent to stock and grazing lands, protect it by fencing prior to spraying planting lines.



Pest control

Pests such as rabbits can cause a huge amount of damage to planted sites in a matter of days. Controlling them prior to planting is essential. Also inspect the planted site regularly for any new damage. Methods of control include ripping rabbit warrens, baiting and the use of tree guards. Contact the South East Livestock Health and Pest Authority on 02 6492 1283 for further control advice.

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Soil Moisture

If possible, delay planting until after decent rainfall (preferably, at least 50mm in the month prior to planting). Generally, autumn planting is considered safest in the Bega Valley, although, if moisture is sufficient, planting can occur anytime from March to October.

3. Planting

Prior to planting, decide whether you want to use weed mats and tree guards which will help with weed control and provide seedlings with shelter from wind and pest animals. Ensure plants have been acclimatised to the site ('hardened off'). Don't give them too much protection prior to planting if they are to be planted on an exposed site. Ensure seedlings are well watered the day before planting. On the day, have water on hand to keep plants moist and plant into moist soil. Ensure the whole root ball is well buried and the seedling is upright. Firm soil down well around seedlings with your hands or feet to remove air pockets. Plant

according to your planting design. This includes the distance between rows, distance between trees within the rows and placement of particular species over the planting site. It will vary according to the purpose of your planting project and conditions of your site.

4. Maintenance

Your work is not done yet! To ensure you make the most out of your investment, you need to maintain the site.

If conditions are dry after planting, check soil moisture and water plants if necessary.

Monitor for weeds during the spring and autumn following planting and control with herbicide by spot spraying, either around tree guards or using a guard on your spray nozzle to protect plants from spray drift. Alternatively, remove weeds by hand.

Routinely inspect for pest damage or stock entry to the planting site. Control pests and repair fencing where necessary.

Enjoy the benefits of all your great work!

SPAs - Why have one?

by Karen Walker



No, not the bubbling variety... S.P.A. also stands for Seed Production Area, otherwise known as a "seed orchard".

Most seed collection of native species is from wild populations (from natural areas). When a plant species starts to decline in health or numbers, or is just very sparsely represented within a geographic area, it becomes difficult to sustainably harvest seed¹. Seed quality may also decline as well, with an increasingly confined genetic pool.

In an effort to redress these sorts of issues, the idea of purpose planting an area of chosen species particularly for seed harvest arose. The basic principles are the same for all SPA's throughout the state but the species grown are quite variable dependent on the area and the final desired outcome. For the south coast the aim is to focus on species which are becoming increasingly more difficult to locate, have very small fragmented natural populations, and/or are difficult to harvest seed.

The actual layout of a SPA is a bit like garden design

in that it can be formal or loosely informal. When cleared paddocks have been used most SPA's have been planted in rows (like crops) for ease of machinery access but there is potential for an informal approach where plants are intermingled amongst other existing vegetation.

SPA's may not necessarily even be in-ground; some small herbs/forbs have been grown successfully in foam boxes, others look like a strawberry plantation with mounds covered in weed mat.

Far South Coast Landcare Association has been successful in gaining funding for two 'pilot' SPA's to be established. Initial response to this project has been very positive, and progress to date is at site selection stage with planting planned for autumn 2012. Stock for the project will be grown from seed previously collected from a number of different sites, in an effort to increase the genetic diversity.

If you would like to read more about SPA's see http://www.greeningaustralia.org.au/uploads/General_pdfs/ACT_SPA_brochure.pdf or if you would like a general discussion about what is happening locally, please call Karen Walker on 02 6491 8224.

¹ Seed collectors follow ethical principles formed around "Florabank" guidelines. See more on their website, www.florabank.org.au (SPA information & collecting guidelines)



Fireweed Field Days

by Alison Rodway

Throughout April a series of field days on Fireweed control were held in four locations around the Bega Valley Shire including Cobargo, Kameruka, Wyndham and Tanja.

The aim of the field days was to talk about changes in fireweed management strategies. These include use of herbicides, livestock and pasture management and integrated management techniques.

Four local landholders spoke of their management programs, one at each of the field days. Other speakers were from Bega Valley Shire Council, Southern Rivers Catchment Management Authority and the Department of Industry and Investment.

Locals shared the successes and failures of their control efforts with discussions ranging from the use of sheep and goats, which herbicides to use and the benefits of good, healthy groundcover.

One of the most significant pieces of information discussed at the field day was that Council's Management Plan for Fireweed was changed earlier this year. After community consultation Council adopted the preferred community option which is:

Retain fireweed as a class 4 Noxious Weed with management actions of ongoing community education and awareness, and note in the

Management Plan that council will not be instigating legal action against any landowner regarding the control of Fireweed.

In making its decision Council took into account feedback from landholders that the requirements to control Fireweed were too onerous, too expensive and not producing the desired results. Previously landholders were required to control fireweed and prevent it from seeding by chemical, mechanical, physical, cultural means or a combination of these methods and failure to comply could result in legal action.

Ann Herbert said "landholders seemed to accept that they can't beat Fireweed but they do have a choice of management methods to suit the enterprise they are running".

For information about control methods for Fireweed:

- Talk to BVSC Weeds Officers on 6499 2222.
- Talk to district agronomist Hayden Kingston on 6491 7800.
- Talk to neighbours about how they manage fireweed and coordinate approaches.
- Download the Fireweed factsheet "Managing Weeds on the Far South Coast of NSW" from the S R C M A website at <http://www.southern.cma.nsw.gov.au/>

Good books for planning revegetation projects:

One of the very best publications to describe the principles behind designing revegetation for wildlife at both the patch and the landscape scale is *Revegetation and wildlife: A guide to enhancing revegetation habitats for wildlife conservation in rural environments*, by A Bennett and S Kimber. You can download it at <http://www.environment.gov.au/land/publications/pubs/revegwild.pdf>

Also, Geoff Barret's *Birds on farms: ecological management for agricultural sustainability*, a publication from Birds Australia, provides some very clear guidance on the requirements of birds in rural landscapes, including ideas for revegetation. Go to their website <http://www.birdsaustralia.com.au/our-projects/birds-on-farms.html> for 10 simple guidelines for attracting birds back to farms.