



supporting landholders with native vegetation conservation management network

Issue 6 May/June 08

Collecting Firewood

It's that time of year again when wood smoke fills the evening air and chainsaws can be heard from one end of the valley to the other. Everyone is scrambling for firewood! It's not cheap so we often source it ourselves.

Collecting firewood without understanding the nature of ecology and sustainable practice has an effect on our native woodlands, and a variety of threatened species. Dead standing and fallen timber provides crucial habitat for numerous species of animals, plants and fungi. It is now recognised that the removal of this wood for firewood is contributing to a significant loss of wildlife, particularly in the woodlands of south-eastern Australia. In fact removal of dead wood and dead trees is now listed as a 'key threatening process' on Schedule 3 of the Threatened Species Conservation Act 1995.

Dead trees and fallen timber are vital habitat for a diverse range of fauna. Firewood harvesters target dead trees (often with hollows) and fallen timber as these are immediately able to burn well and produce less smoke. However, not only does standing and fallen dead wood provide habitat for fauna, it also plays an essential role in maintaining forest and woodland nutrient cycles. In fact, the deadwood component is just as important as the living overstorey, leaf litter and soil components for the maintenance of ecological processes that sustain biodiversity.

Through no fault of their own, many firewood users and suppliers are unaware of the ecological consequences of firewood collection. It is often mistakenly seen as just 'cleaning up' the forest or keeping the farm tidy. There is a general perception that deadwood is a resource in unlimited supply that can be harvested without any environmental consequences.

Photo, right: Fallen timber, prime firewood but also prime habitat. (photo: Steve Sass)

Tips for buying firewood from a merchant.

- * Ask your wood merchant where they get their wood from. Do they take habitat into consideration? Are they aware of the 'Voluntary Code of Practice for Firewood Merchants'?
- * Where possible, avoid purchasing redbox, yellowbox, whitebox, ironbark and mallee. These species are already under extensive pressure from agricultural clearing (particularly in SE Australia). Continual harvesting of them for firewood is not sustainable.

Tips for collecting firewood yourself.

- * If collecting firewood yourself, purchase a permit and gather the wood from state forests where firewood gathering can be managed sustainably.
- * Avoid collecting or purchasing wood with hollows.
- * Recycle - use old fence posts and off cuts from mills.
- * Keep an eye out for trees that have been cut down by the council or your neighbours (obstructing powerlines, renovations etc).
- * Only burn well seasoned, dry wood to reduce the wood smoke emissions.
- * Use correct burning techniques. This will reduce the amount of firewood that you consume. Contact your local wood heater retailer for correct burning procedures.
- * Better still, consider growing your own!



CONTENTS

Collecting Firewood	1
Coordinators Column	2
Free Book Offer	2
FSCCMN Events	3
Native Plant Propagation	
Grassy Ecosystems Walk	
Management Advice	4
Lizards and Logs - Protecting and creating reptile habitat	
Native Plant ID	6
Terrestrial Orchids	
Events & Resources	7
CMN Conference	
Coastal Weeds Walks	

Contact the FSCCMN

Dan and Vickie Williamson
PO Box 816
Bega NSW 2550
(02) 6492 5558
info@fsccmn.com.au
www.fsccmn.com.au

Coordinators Column

How to keep warm in colder months is a conundrum, especially if you watch your ecological footprint. If your choice is a wood fire, what's the best way to gather firewood? We hope our cover story helps CMN members to collect firewood in the most responsible way. Sometimes understanding the impact of necessary human activities is a bit confronting. But with good information we can make choices that have the least impact.

Steven Sass is a local ecologist and has written for us in this issue about reptiles. By understanding their place in the biodiversity on your property you can better protect their habitat. Steven gives useful tips on how to collect firewood with reptile habitat in mind.

We're fortunate to also have a contribution from CMN members Denise and Graeme Krake. The Krakes have a property in Brogo and have written for us on native terrestrial orchids. There is so much to share about this miniature delight we'll run further articles from Denise and Graeme in future issues.

If you'd like to share something with others in the CMN newsletter, let us know. There is a \$40 book voucher as a reward for your efforts.

A couple of our recent events are reviewed in this issue. We do this not just for shameless self promotion but to extend the information for those who couldn't attend. Both the propagation workshop and grassland walk were so popular they had waiting lists. We've put useful information from both these events on the CMN website for you to find out more.

Unfortunately we had to cancel the planned Treevia afternoon in April. Seems you're a busy lot and we didn't get enough responses. If you're keen to learn about native vegetation, meet neighbours and other locals and have a giggle, let us know we may run it again.

Dan and Vick

Free Book Offer for Your Ideas

The Far South Coast Conservation Management Network supports landholders with native vegetation on their property and caters to all types of vegetation and all types of land holders. The CMN is about you so we'd like to hear how the network can best support you to manage your vegetation.

Have you got something to share? Are you working on a vegetation management project at home that is really successful and you could share your learnings with other members?

Anyone to contribute an article in either of the next two editions (7 or 8) will receive a \$40 book voucher for Candelo Books. Contact us to discuss your ideas.

The FSCCMN is funded by the Southern Rivers Catchment Management Authority.



Native Plant Propagation November 07

The second in our 'Grow Your Own' series, our native plant propagation workshop was one of our best yet. It was attended by 16 people and presented by Karen Walker, horticulture lecturer at Illawarra TAFE - Bega campus. Heidi Ashburner from Riverside Nursery (where the workshop was held) gave a nursery tour and talked about the stages of plant propagation in the nursery.

Karen's teaching skills combined with her involvement with Greening Australia for many years, resulted in a great job at departing the most important information in a very digestible way. Attendees came out with a good understanding of the principles of the propagation process, in particular handling and treating the seed and the care needed when transplanting seedlings from tray to pot etc.

Karen stressed that it was important to make the decision early to plant your seed in a communal tray (to replant later into larger pots) or to plant seed direct into the pot you wish it to grow in until the stage of planting in the ground. The difference being that both methods have very different handling and management requirements. More explanation is outlined in the workshop notes which can be downloaded from our website. (www.fsccmn.com.au)

Some of the topics covered included seed selection, researching the seed handling requirements, containers and media selection, hygiene, seed sowing, germination, fertilisers and health and safety. A few 'technical' terms that participants picked up include, J rooting, pricking out, damping off, and hardening off.

As always participants were treated to delicious snacks for morning tea, a healthy hearty lunch (sushi and gourmet wraps and sandwiches), and of course proper coffee was on offer throughout the day!

The workshop was so popular, bookings exceeded capacity so we are planning another workshop in spring. If you are interested let us know and we will put you on our invite list.



Heidi (far left) showing examples of healthy tube stock.

Grassy Ecosystems April 08

Over 30 people gathered in Brogo for a field day on management of native grassy woodlands.

The CMN organised the day because of the growing interest in recognising and managing native grassy woodlands. Often grassy woodlands go unrecognised as native vegetation because they don't fit the usual picture of 'bush' and tend to look like an unkept semi-cleared paddock. As a result many of us don't realise we have native vegetation on our property.

We teamed up with Canberra based group 'Friends of Grasslands' (FoG) who came down to get first hand experience of more coastal grassy ecosystems. Their knowledge of grassland management and ID skills were great to have along. Anyone interested in FoG can visit their web site www.fog.org.au



Starting at Brogo we looked at how fire had been used to halt wattle regeneration from overcoming a native grassy paddock and discussed other threats such as blady grass and bracken (strangely enough both of which are native to the area). We then moved on to Springvale (just out of Bega) where we focussed more on ID of grassy species.

Info about managing native grassy woodlands can be found on our web site with a full review of this walk. www.fsccmn.com.au

Lizards and logs - Protecting and creating reptile habitat

Words and photography By Steven Sass , Senior Ecologist - NGHenvironmental

With our rich diversity of reptiles under threat, Steven Sass helps us to understand the benefits of cold blooded critters. By understanding habitat requirements and using wood and thermal surfaces to create more habitat, you can support reptiles and a healthy biodiversity.

Australia has one of the most diverse and successful reptile faunas of any continent, with more than 800 species found in every habitat type from snow covered peaks to deserts. Even more unique is that the majority of our reptiles are endemic to Australia, being found nowhere else in the world.

However, this diverse range of species has come under considerable threat over the past 200 years, as the effects of fragmented and degraded habitat take their toll.

Reptile Benefits

To farmers and land managers, reptiles are an interesting component of the 'big biodiversity picture'. Reptiles consume huge amounts of insects, and of course, rats and mice; all potential pests around the farm. They themselves provide a food to higher-end predators such as birds of prey, kingfishers and birds such as cuckoo-shrikes

Photo: Jacky Dragon (Amphibolourous muricatus) a Bega valley local



Reptile Habitat

Having a low-dispersal capability, often less than 40 metres, can be detrimental if you are a small lizard living in an isolated fragment of remnant vegetation. Without an effective 'corridor' of suitable habitat to move across, a loss of genetic diversity is likely.

While it is beneficial to biodiversity in general to connect fragments with native trees, much of the reptile fauna of the NSW Far South Coast lives at ground level. For these species a 'soft matrix' is equally, or even more important. You may have heard the term 'matrix' in natural resource management or you may only know it from a movie of the same name! Matrix is a term used to describe the land surrounding

areas of native vegetation. So a 'soft matrix' refers to this land, but with a 'softened' effect on its harshness, to improve habitat.

Reptiles are rarely known to move across a matrix of cleared, agricultural land. Unless of course you are a big goanna or snake that has few predators. But for small skinks, they rarely venture across these areas for fear of predation, general lack of habitat or the limits of their small home range. For reptiles, fallen timber, native grasses, and other ground-level microhabitat features can create connectivity between fragments of remnant vegetation. By creating a soft matrix between remnants you will allow reptiles to hide from predators, forage for insects and even breed. While I don't suggest that you collect a whole bunch of fallen timber or bush rock from native vegetation, you can do this by using artificial structures to provide foraging, breeding, refuge and thermal habitat.

What about grazing?

Habitat disturbance can have a disastrous impact on reptile fauna. Heavily grazed native vegetation will remove ground cover and reduce the number of insect inhabitants, removing food and shelter for reptiles. This results in a reduced carrying capacity that limits the number of reptiles that can survive. Severe declines in reptiles have been observed in native vegetation after periods of prolonged grazing.



Photo above: over grazed paddock on right clearly showing lack of ground layer habitat.

It is inevitable that landholders will need to graze their remnant native vegetation, particularly in times of prolonged drought. Fencing to exclude stock from fragments of native vegetation will be beneficial to minimize disturbance and allow native species to regenerate. However, there is some argument that 'crash' grazing may benefit reptiles, as it reduces the amount of grasses and forbs (broad-leafed herbs) quickly which then increases solar radiation reaching ground level, great for a basking lizard. While the crash graze is heavy, it is short, therefore minimizing disturbance to a few days or a week, rather than a whole breeding season for a reptile community.

Reptile Facts

1. They have low-dispersal capability (often less than 40 metres).
2. They occupy small home ranges.
3. They're very susceptible to habitat disturbance.

These three factors can severely impact which reptile fauna inhabit your property, but they can also be used to your advantage when creating additional areas of habitat. In other words, **consider reptile behaviour when planning habitat.**

What can you do?

Reptiles have taken to a number of artificial microhabitat features such as old fence posts and railway sleepers spread around as fallen timber, while concrete roof tiles and piles of bricks provide similar thermal qualities as rocky outcrops. Old sheets of corrugated iron laid on the ground are also enjoyed by most reptile species.

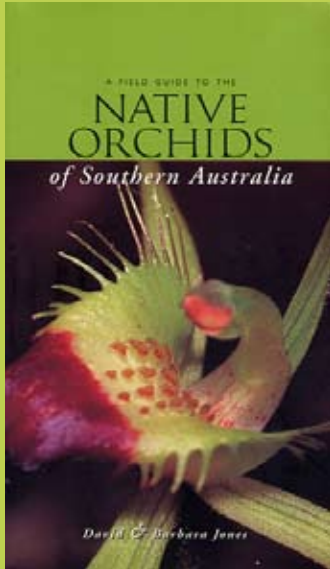
While these artificial substrates provide great microhabitat features, the ultimate aim of a soft matrix should be to include native plants where possible, such as native grasses and forbs. Weediness reduces the quality of any habitat for most reptiles by creating shady, damp situations that are often homogenous and therefore limit reptile abundance. All of these actions can also be applied within existing fragments of native vegetation.

Firewood collection also has a negative impact on reptile communities. It would be good practice to limit your firewood collecting to certain areas of your property, with the aim of selecting several locations where you do not collect any firewood.

How to create lizard habitat?

- * Create connectivity between fragments of vegetation with fallen timber and grasses
- * Old fence posts and railway sleepers can be a substitute for fallen timber
- * Roof tiles and piles of bricks provide similar thermal qualities as rocky outcrops
- * Old sheets of corrugated iron laid on the ground are enjoyed by most reptile species
- * Limit firewood collecting to certain areas of your property
- * Aim to select several locations where you do not collect any firewood
- * Use fencing to exclude stock from fragments of native vegetation

Our unique blend of living organisms can make a speedy positive response to onground works. By using artificial habitat to encourage a higher level of connectivity across farms and catchments, and restoring 'soft matrices' between fragments of native vegetation we benefit reptile movement, dispersal and genetic exchange. Without such actions, a decline in reptile richness across agricultural areas is expected and could result in the local extinction of some species.



Field Guide to the Native Orchids of Southern Australia.

David and Barbara Jones, Bloomings Books Pty Ltd 2000.

To help you get started identifying orchids on your own property, this book is one of your best shots. Describing 268 species with a description for each orchid, detailing its distribution, flowering period and habitat.



Caladenia carnea,
'Pink Fingers'

Prasophyllum wilkinsoniorum,
common name
not specified



Diuris sulphurea,
'Tiger Orchid'

An Introduction to Australian Terrestrial Orchids

Denise & Graeme Krake - krake@hotmail.net.au

Denise and Graeme have been members of the Australian Native Orchid Society for 8 years. Their involvement is in rare orchid conservation, monitoring of sites, orchid searches and cultivation. They have been members of the CMN since it began and here share some of their knowledge of native terrestrial orchids.

A complex variety of terrestrial orchids occur throughout our bush environs. The huge variety of these orchids is expressed in all shapes, sizes and colour. They are found in a diverse range of habitats, from alpine regions to semi-desert and coastal woodlands. Associated soil types also vary from sphagnum bogs to clay, rocky and sandy loams. Flower pollination may be initiated by specific insect pollinators or they may simply self-pollinate – clever little devils!

Of the 700 species extending across southern temperate Australia the major groups include Spider Orchids (*Caladenia*), Leek Orchids (*Prasophyllum*), Donkey Orchids (*Diuris*), Greenhoods (*Pterostylis*), Sun Orchids (*Thelymitra*) and a wide variety of other genera.

Not all orchids will flower or even emerge each year due to a complex range of environmental factors. Most species initiate growth from a summer dormant underground tuberous structure and are conditioned by the need for moisture and a drop in temperature during Autumn. For example, *Pterostylis* species sprout in April and position the unexpanded rosette bud at the soil surface until the arrival of seasonal rainfall. The growth of the plant is rapid with the leaf or leaves fully expanded within the first month of emergence. It is thought that at this time the major nutrient loading occurs via the mycorrhizal fungi (in the soil or leaf litter), which infects the root structure or stem of the plant.

Dormancy in most species of terrestrial orchids occurs in response to a combination of soil drying and rising temperatures in late spring and summer. If the nutrient level or rainfall is insufficient, orchids will remain dormant and not re-emerge until conditions are suitable to promote growth. Sometimes this period can extend for several years. Long seasons of drought can cause the tubers to dehydrate and disappear completely. Fire can also play an important role in the flowering habits of some species.

Future articles will examine in more detail topics such as: the characteristics that determine generic differences; orchids you can expect to find in various habitats; and strategies to help these little delights of our native flora to maintain their diverse existence.

Orchid photos supplied by Jackie Miles and Max Campbell.



Pterostylis parviflora,
Greenhood

Upcoming CMN Events

In the coming months we have a few events planned that will be scheduled and run depending on numbers. If you are interested in any of the options below, email or call us now to let us know. We can then inform you of expected dates and any further details.

Tree Planting Methods and Techniques Field Day

- Part 3 and final in our 'Grow Your Own' series of workshops
- Explores the many different approaches and methods for revegetating your property
- Do you rip first, spray, use tree guards or not, what spacing to use, depth to plant, maintaining your planting, weed management etc etc. There is surprisingly a lot to know!

Bush Regeneration Techniques Workshop and Field Day

- A proposed half day theory workshop followed by a half day practical in the field
- Bush regeneration is theory packed with many aspects to its approach and techniques. Once you have the basics it makes planning a bush regeneration project much easier

Local Link Eden Region and/or Cobargo-Bermagui Region

- Local Links are a series of gatherings held in different localities around the Valley with the aim of networking amongst locals and sharing native vegetation management skills and knowledge.
- We've run Local Link gatherings in Brogo, Kalaru and Candelo but have not touched base with the southern or northern parts of the far south coast.
- Check out our web site to see what Local Links are all about
- If you're keen to have one in your area contact us and we'll go from there
- Did we mention that we provide great food and good coffee!

CMN Conference

Across Australia the concept of CMN's supporting private landholders is growing as a recognised and effective way to manage biodiversity.

In 2006 CMN facilitators from around Australia got together for the first time to create a national focus for CMN coordination. The gathering was called the 'Conservation Management Network National Node' (CMN NN). This was the first national conference.

Some time this year, possibly even as early as June, the second CMN NN conference will be held in Canberra. The Far South Coast CMN coordinators Dan and Vickie will be attending and are keen to bring a few CMN members also.

If you are interested in becoming involved in CMN planning and contributing to regional biodiversity improvements, there couldn't be a better chance. Subsidies for attending will most likely be available and it can't be guaranteed that the CMN NN conference will be as close as Canberra in the future.

So talk to Dan or Vickie if you're interested and we'll keep you informed of dates as they become available.

Coastal Weed Walks

24th & 25th May

If you're a keen gardener but aren't so sure which garden plants can become weeds then these walks are for you.

To help familiarise Far South Coast residents with invasive weed species, particularly those that can escape from our gardens a series of guided walks has been organised. They will focus on sites that are severely weed affected. The walks will be guided by Stuart Cameron, a local botanist and form part of the ongoing Coastal Weeds Project.

A large proportion, some 80% of coastal environmental weeds, originated as garden plants. Stuart will demonstrate how our choice of garden plants and our efforts (or lack of effort) to contain them can have massive impacts extending far beyond our own properties. The walks will help gardeners recognise the potential impact of garden plants on the landscape and identify those characteristics in a garden plant which make it a potential environmental threat.

You are also invited to take along any samples of plants you want identified or to discuss if it's a potential weed threat. NOTE: Please bring your weed samples enclosed in plastic bags

The first of these guided walks has already been held in the Bermagui - Wallaga Lake area. The next are scheduled for the weekend of 24-25 May.

Pambula Beach, Saturday 24 May at 9.45am for 10am start, meeting at upper carpark, Lions Park.

Merimbula Boardwalk, Saturday 24 May at 2pm, meeting at eastern end of the Boardwalk.

Eden, Sunday 25 May at 10am, meeting at the Lookout Point parking area.

The walks will be rescheduled if weather is unsuitable. Please wear suitable footwear and clothing. For further information contact Stuart Cameron on 6493 3123.