



supporting landholders with native vegetation

conservation management network

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Vegetation Flux *By Jackie Miles*

We often assume that vegetation is static, and that what we see around us now is the way it has always been.

Vegetation communities are in a more or less continual state of flux and a community might take any of a number of forms depending on the forces that have operated recently. There is no one "right" type of vegetation for particular areas, but rather a range of possible vegetation states that have the potential to develop on that site.

Droughts are an agent of change that we've seen in action over recent years. The most obvious effect of the drought which started in 2002-03 on local forests was to remove the suppressing effect that a tree canopy has on its understorey by killing some of the less drought-hardy tree species, as well as many shrubs. This produced a dramatic increase in the vigour of the groundcover when we got some good rain in autumn 2003. This phase passed in a year or so as short-lived herbaceous plants died off and the flush of nutrients released by dead trees was taken up by the vegetation again. A second phase of recovery involving shrub and tree regeneration has been underway for the past year or two.

Many Australian plants thrive after disturbance which creates bare soil such as fire, drought or logging.

Eucalypts have tiny seeds and weak seedlings which have trouble growing up through grass or litter, but will appear in large numbers after drought or a fire bares the ground. Shrubs such as the dogwoods (*Cassinia* and *Ozothamnus* species) that are a common understorey component in the Bega Valley produce a flush of new seedlings after disturbance, which grow fast and die after 5-30 years. Some more long-lived species can recruit new seedlings into the population at any time, and these tend to build up gradually in the absence of substantial disturbance. Examples of plants with this type of life strategy are blackthorn (*Bursaria spinosa*) and pittosporum. Black wattle has a mixture of both approaches: large numbers can appear after fire or clearing, but a steady trickle of seedlings will appear without disturbance.

Some things we can do little about such as drought but our management activities can help to nudge the vegetation in one direction or another. We can stimulate massive shrub or tree regeneration by certain sorts of disturbance, and thin it out again by other sorts. Knowing the reproductive strategies of species can help land managers decide what actions are most likely to produce the type of vegetation they would prefer out of the range of possibilities in their area. Bulldozing a stand of a plant that thrives on disturbance, for example, would not be very productive. More articles on this theme will follow in later newsletters.



A section of bushland during drought in 2003 (left) and the exact same spot in recovery taken in 2007

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Coordinators Column

A very warm welcome to the first newsletter for the Far South Coast Conservation Management Network (CMN). The aim of the CMN is to support those who have native vegetation on their property to maintain and build on the plant diversity in our area.

We are Dan and Vickie Williamson and our background is in environmental education. In 2005 we moved from Sydney to start a family in the Bega Valley. We've been contracted by the Southern Rivers Catchment Management Authority to establish and facilitate this network – a job we're really excited to take on. It's been a pleasure over the last few months to meet many of you in person, by email and over the phone.

We'd love to hear any ideas for activities and information that would help you or if you have experience to share with others. If you know of others who would benefit from being part of the CMN please put them in contact with us.

Right now the network is in its infancy and like a newborn, will bring satisfaction to those who watch it develop. We recognise many of you have different reasons for managing native vegetation. The CMN will try to support the outcomes you want, with skills, information and connection to sensible advice.

The CMN will provide information in a number of ways including property visits, informative walks and workshops. Check our events column on page seven to see if any of these interest you. You can find out more updated information on our website www.fsccmn.com.au.

This newsletter will be our main 'hard copy' contact. If you'd like your newsletter emailed, please let us know on info@fsccmn.com.au.

We hope to see you soon

Dan and Vick.

What is the FSCCMN

The Far South Coast Conservation Management Network supports landholders with native vegetation on their property. Native vegetation might range from a native grass paddock that you still graze to acres of uncleared bush. The CMN caters to all types of vegetation and all types of land holders.

The network will provide information and activities to help landholders decide the best way to manage their vegetation to get the outcomes they want. This includes:

- Field Days
- Workshops
- Web site at www.fsccmn.com.au
- A discussion group for email users
- A bi-monthly newsletter
- Display and trial sites



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



A Walk in the Grass - April 2007

This was the network's first community event held at a private property in Kameruka. The attraction was a walk through a small remnant of an endangered vegetation community called Candelo Dry Grass Forest.

The valley's very own expert botanist Jackie Miles led the walk. Jackie's specialty is native plants and she helped the landholders identify many of the indicator species that make up this vegetation type.

Candelo and Bega Dry Grass Forest are predominantly grassland with widely spaced eucalypts and some shrubs. Before European settlement this was how many of our rolling hills and coastal river valleys looked – which must have been very appealing to graziers.

groundcover and generally feature red gums and rough-barked apple gums.

Those who came were able to bring along cuttings of unknown plants from their own property for Jackie to identify. Most were pleasantly surprised when their suspected weed turned out in fact to be a native!

The network will run more walks like this soon. If you'd like to know more check our web site or contact Dan and Vickie (see page 2 for contact details).

To get a better idea of what type of vegetation you may have, find yourself a copy of Jackie's report 'Recognition and Management of Endangered Ecological Communities in the South East Corner of N.S.W.'. Contact us and we can send you a copy or it can be downloaded from the Eurobodalla



Jackie Miles (right) showing flower and seed heads of a Rough-Barked Apple *Angophora floribunda*

The purpose of this walk was to give people a chance to see the array of different native grasses and herbs in this vegetation type. Bega and Candelo Dry Grass Forest have a high diversity of native grasses and herbs in the

Shire Council web site along with fact sheets on each endangered ecological community in this region.

www.esc.nsw.gov.au/Environment/ThreatenedSpecies/index.html

CMN Success

A quick chat in the main street of Bega ended in about 270 trees being planted at Julie and David Waters Numbugga property – which is exactly what the CMN has been established to support.

Julie mentioned to Vickie (CMN facilitator) that she wanted to improve the bank of a creek which borders her property. Vickie contacted Len Gazzard, the Riparian Incentives Project Officer with the Southern Rivers CMA and shortly afterwards we all met for a lunchtime chat and walk at Julie and David's.

Fortunately Len had trees available that were suitable for the location as well as time in his schedule to organise the planting. As well as re-vegetation and tree guards along the creek bank, Len and Julie planted trees in pasture that was once Bega Dry Grass Forest, an endangered ecological community. In planning the tree locations, Len arranged the spacing to account for the need to continue slashing and baling grass in this area.

It can take a little time to arrange planting but in this case we were lucky to get a quick result for Julie and David.



Julie Waters and Len Gazzard with a 'gro-cone' tree guard on one of the newly planted trees

This page is about helping landholders understand the plants that make up their vegetation. Each edition will profile a weed or native that occurs in the Far South Coast. The CMN aims to help landholders see the weeds 'picture' on their property and help develop a strategy for controlling weeds and maintaining the native stronghold.

Blackberry *Rubus fruticosus*

Blackberry is one of the biggest weed threats to South Eastern Australia's native vegetation. It grows in almost any environment but thrives in moist gullies and river banks. It tolerates sun, shade, frost, drought and can re-sprout after fire. It is one of the 20 Weeds of National Significance and a Class 4 noxious weed in the Bega Valley Shire under the NSW Noxious Weeds Act. This means it must be controlled whether on agricultural land or in native vegetation areas.

Blackberry control in an agricultural system is fairly straight forward, but in sensitive native vegetation it's not that simple. Every situation is different so below are some examples of how to approach blackberry control in native vegetation. Plan your attack over a few years in conjunction with a strategy to increase the numbers and diversity of your native vegetation to help combat any weed regrowth.

Issues

Blackberry takes over huge amounts of habitat, but on the other hand also creates it. Removing masses of blackberry in one go can displace many native animals using it for protection, food and nesting. You may need to plant similar native plants first before you attack the blackberry and continue to plant as you take it out. Low growing spiky shrubs such as black thorn, hakeas and tree violets are examples that grow around the Bega Valley

Similar Native Species

There are several species of 'native raspberry' which could be mistaken for blackberry. The most common, small-leaved bramble, (*Rubus parvifolius*) is a smaller trailing plant with smaller pink flowers and tasty but very small bright red fruits. Native raspberry (*Rubus rosifolius*) is upright in habit, with narrow leaflets, large white flowers and large red berries, which are disappointingly dry and gritty. Molucca bramble (*Rubus moluccanus var trilobus*) is a large shrub or climber with brown coloured hairs on the underside. Flowers are pale pink or white and fruits red. See page seven for south east weed and native plant identification web sites.

Control Methods

* *Spraying* with a woody weed specific herbicide is the simplest method of blackberry control. Be careful to take note of the native plants growing close to your blackberry and check to see which spray, if any, will not affect them.

* *Slashing* can keep blackberry from forming tall clumps but doesn't get rid of the plant. Brush-cutting the plant right back to the ground will eventually wear down its root energy supply but will take years of this action. This is best if you are avoiding chemical use.

* *Goats* provide good control of large infestations but they need good fencing and are rough on native vegetation. Good as a first step for larger areas.

* *A small flame torch* can be used to burn it back. This method is underutilised and is the possible topic of some trials with CMN members. If you are interested, please contact us.

* *Smothering* with cardboard is very effective. Needs thick overlapping layers and at least 12-18 months.

* *Digging* out the roots of small plants is effective but any roots left behind will re-sprout.

Two native species often confused with blackberry.
Small-leaved bramble (left) and native raspberry (right).
Photos: Jackie Miles



The Long-nosed Potoroo in Gulaga

A threatened species recovery project to help conserve the long-nosed potoroo has been initiated in the Gulaga area. Due to clearing of habitat, potoroos have become more vulnerable to predation from foxes, dogs and cats.

Local Aboriginal people believe potoroos were once an important part of maintaining the ecological abundance in the forests of Gulaga Mountain. The Aboriginal women were responsible for making sure the potoroos could survive by their gardening techniques and practices of food gathering.

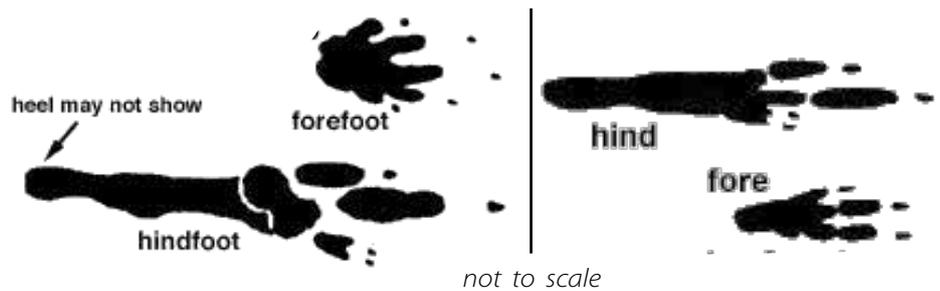
Long-nosed potoroos have a diverse diet, eating underground fungi, roots, tubers and insects that live in the soil. Their feeding activities are an important contributor to forest health as they spread the spores of many species of fungi. These fungi latch onto roots underground and assist nutrient uptake in plants.

Where do they live

Potoroos live in dense understorey in coastal forests and heaths. They can also live in wet forests in gullies and sometimes on the drier slopes. A major habitat requirement is thick ground cover and soil that is relatively easy to dig.

What do they look like

- Size of a rabbit
- Fur is grey-brown above and lighter grey below
- Weighs up to 1.3 kg, head and body length about 380mm, tail 200–260 mm
- Usually live alone, mothers and young sometimes found together
- Hides secretively nesting amongst tussock grasses and dense shrubs.
- Mainly active at night



Above: Long-nosed Potoroo and the footprint patterns of Potoroo (left) and Bandicoot (right) clearly showing differences in toe prints on front foot tracks.

Difference between Potoroos and Bandicoots

- The potoroo has a longer fatter tail
- The potoroo has shorter front legs
- The potoroo has a shorter snout
- The potoroo moves in bounds, the bandicoot runs
- Both hind feet tracks are similar but front feet track of potoroo shows all five toes bandicoot only shows three

How to tell a potoroo digging

Long-nosed potoroos dig little holes in the leaf litter and soil to find their food. These holes usually have a gentle curved shape. Holes made by bandicoots are similar but usually deeper and cone-shaped.

If you can place the back of your palm comfortably in the hole then this is usually a good indication that the hole has been dug by a Potoroo.

Can you help?

Chris Allen from the National Parks & Wildlife Service and Lynne Thomas are interested in any information or sightings you may have of long-nosed potoroos. Contact them on 6495 5008 or chris.Allen@environment.nsw.gov.au.

Wapengo CPR

By **Helen Davies** - Coast and Marine Catchment Officer, Southern Rivers CMA

For those fortunate enough to know Wapengo it's not easy to forget the near pristine lake and natural surrounds. For those who work on the lake, such as the Wapengo oyster growers, the natural surrounds are essential for helping to maintain their livelihood through good water quality.

All activities in the Wapengo catchment potentially affect the quality of Wapengo Lake water and with this understanding the Wapengo oyster growers approached Southern Rivers Catchment Management Authority (SRCMA) for assistance with catchment protection. Out of this began the Wapengo Catchment Protection and Rehabilitation project (CPR).

The CPR project began with a catchment assessment by a SRCMA officer which involved looking at processes within the catchment that potentially affect water quality. These include bank and gully erosion, sediment sources such as unsealed roads, unrestricted livestock access to waterways, and lack of riparian vegetation.

The assessment identified 11 priority sites around Wapengo Lake and its tributaries. The results were shared with community members and government agencies and from this sprang a partnership between local community group the Wapengo Watershed Association, Wapengo oyster growers, Far South Coast Landcare Association, SRCMA, and Bega Valley Shire Council.

Plenty of action is now starting to happen in the catchment. The Watershed Association organised a highly successful field day to inspect the considerable rehabilitation undertaken



A lower part of Wapengo Creek showing good riparian vegetation structure.

on a property along Wapengo Creek.

The Landcare association, recognising the benefits of a catchment approach to tackle water quality, employed a part-time project officer to help involve the community. As a result of this a working bee has been organised involving local oyster growers and community members to help tackle one of the priority sites – a 400m downstream reach of Wapengo Creek.

This site has been heavily affected by cattle access in the past, including trampling of mangroves. The project will involve fencing followed by plantings. Revegetation on the banks will include species such as woollybutt, red gum, coastal grey box and boobialla. The site will also include a trial planting of 300 potted mangroves in the intertidal zone grown from seeds collected from the site under licence from the NSW National Parks and Wildlife Service.

Targeting of other priority sites has also commenced including the protection of an eroding Aboriginal midden through placement of brush matting combined with plantings of mangroves to prevent further erosion.

A water quality monitoring programme involving sampling by local community members is proposed which will hopefully show the benefits of these projects well into the future.

Wapengo CPR is underway. If you have property in the Wapengo area and would like to know more or become involved contact the Wapengo Watershed Association on 6494 0135.

Tell us about your project

There is so much going on in the Far South Coast and the CMN is about sharing the wealth of knowledge and experience so we are keen to hear your story.

Have you had a success in controlling certain weeds, regeneration or revegetating degraded lands, improving habitat or are you about to embark on a native vegetation project? Why not let us know. Your story might make a good newsletter article!

Contact Dan and Vickie Williamson on 6492 5558 or info@fscmn.com.au

Community Seedbank

High quality seed of local provenances of native plants is available for use in revegetation projects in the south coast region. The seed is held in a seedbank built up and supported over the last few years by the Far South Coast Landcare Association and the Southern Rivers Catchment Management Authority (SRCMA) based in Bega. The seedbank currently holds almost 600 seedlots representing more than 155 species. Plants represented include most of the trees and shrubs that occur in farmland, woodlands and forests in the region as well as a good number of grasses, sedges, herbs and a few vines. A particular focus for the collection is species which occur naturally in vegetation communities that have been heavily modified for farming and grazing since European settlement.

Seed from the seedbank is available to landholders, community groups and the general public to grow plants for revegetation projects anywhere in the region (which basically includes the whole Bega Valley Shire and adjacent tablelands).

You can get in touch with Jock at the SRCMA in Bega - phone 64918221, email jmorse@cma.nsw.gov.au, mobile 0421 106 476, or call in at the office - upstairs above Woolies - from Tuesday to Thursday (best to ring first in case he's in the field). Jock is available to discuss plant matters in the region including revegetation ideas and plans, plant identifications, seed collection and storage. Jock will also provide on-site assessments and discussions in relation to projects that people might have in mind.

Resources for Veg Management

* EEC's

You may often hear Endangered Ecological Community (EEC) as a term to refer to a plant community that is under threat. There are 12 EEC's in the South East Corner of NSW. For information and management go to www.esc.nsw.gov.au/Environment/ThreatenedSpecies/index.html

* Weeds

Regional information and photos of environmental weeds can be sourced at www.esc.nsw.gov.au/weeds and for noxious weeds see www.southeastweeds.org.au/weeds. Photos of a wide range of native plants and weeds of the south coast are at www.thebegavalley.com/plants.html

* Threatened species

If you want to improve or create habitat for a threatened animal or plant species, a very comprehensive website is www.threatenedspecies.environment.nsw.gov.au/tsprofile

* Fire use

The Nature Conservation Council sponsored the 'Hotspots' fire project. Their website has detailed information to help you understand fire management www.nccnsw.org.au (look for Hotspots Fire Project under campaigns)

Upcoming Events

25th August - Fire as a Management Tool

Visit a property where fire has been used to manage vegetation both for native regeneration and weed control.



CMN Local Links

The CMN is organising gatherings of locals to see how you can support one another or how the network can support you. We're looking for suitable locations to hold 'local link' gatherings so if you'd like to host one at your property or want to get one happening in your area please let us know.



Above: Brogo Local Link gathering on 24th June.

Bookings are essential for CMN events, contact us for more info or to book a spot. See our website for regularly updated event information. www.fscmn.com.au