



supporting landholders with native vegetation conservation management network

Issue II March/April 09

The Great Spurge Purge

An ambitious project funded by the NSW and Australian governments aims to bring sea spurge under control along the entire southeast NSW coast from Cape Howe (on the NSW/VIC border) to Kiama, the furthest point north it has yet reached.



The great spurge purge started on Monday 16 March on Murrumbidgee Beach with a team from Merrimans Land Council headed up by Stuart Cameron, co-ordinator for the Bega Valley Shire Coast. From there they will work gradually north to Wallaga Lake when Stuart will then work further south in the Bega Valley Shire with crews from Bega and Eden Aboriginal Land Councils.

Some beaches (eg Cuttagee, Baragoot, Beares, Tathra, Pambula, Tura, Aslings) have been 'adopted' by local residents who maintain them via regular patrols. But others are still 'orphans' so once the work crews have cleared them we hope local residents will be able to take them on for the long term. Once a beach is under control maintenance is not an onerous task but patrols should be regular (at minimum 4 monthly) as sea spurge seeds from as far away as Victoria will continue to strand along our coast and potentially establish new colonies.

This project provides the resources to achieve a major reduction in all existing infestations. However there is no prospect of total sea spurge eradication within an 18 month project as some seeds will continue to be

Sea spurge *Euphorbia paralias* is a small leafy shrub originally from Europe and now found throughout southeastern Australia. Sea spurge colonises sandy beaches and may spread inland across dune systems. Sea spurge grows to approximately 70 centimetres in height, and has multiple stems covered in small, closely packed leaves. The plant has an overall blue/green colour, and the small flowers (which appear anytime from September to May) are green, inconspicuous and are situated at the end of the stems.

Up to 5,000 saltwater-tolerant seeds are produced each year from a single Sea Spurge plant. Seeds are buoyant and up to 50 % of seeds may be viable for as long as 2 years in salt water. This allows the plant to spread its seeds on ocean currents to new coastlines. Sea spurge first establishes at the back of the beach. Here the plants can develop dense populations in un-vegetated sands or invade adjacent dune vegetation. Massive infestations of tens of thousands of sea spurge plants can develop very quickly.

PUBLIC HEALTH WARNING!

Broken stems and leaves ooze a toxic, milky latex that burns exposed skin and may cause damage to eyes. Always wear rubber or plasticcoated gloves and protective clothing when handling.

washed ashore from infestations along the southern coast of Australia and seeds already present on beaches will germinate for some years to come.

Accordingly it is essential that more volunteers be recruited to take on the ongoing patrol of all our beaches, thoroughly inspecting and weeding every 4 months or so. Once a beach has been brought to a manageable level of infestation this is not a difficult task. Please ask anyone who is interested in 'adopting a patch' to contact the co-ordinator, Stuart Cameron, on 6493 3123. Beaches particularly in need of a hand or two are those in the Merimbula and Bermagui-Wallaga Lake areas.

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Coordinators Column

Well that's it for summer. I'm one of those thankful sorts who likes to see the back of summer and the lagging hot dry conditions. Autumn is a great time for planting if there is moisture in the soil. A few farmers have said to me that April will bring rain, so if you have plants waiting to go in, April could be your time. May or any later is too late, best hanging off until spring then.

I must admit that this newsletter has more project updates than actual useful practical info, but it is good to continually see what is going on around our valley. We are in such a unique landscape, much drier than anywhere north of here and significantly warmer than anywhere south. The vegetation in the valley is tribute to this with some very distinctive and wonderful communities. I think the CMN will have to organise a few more 'bush' walks to explore the region. Who's keen? Who would like to lead a walk on their property? Contact us if you are keen, we'll make it worth your while!

I've come to a conclusion that correct grammar and language is important, but sometimes it should be dumped. I am going to use the term 'veg' a lot more in place of 'native vegetation'. Using 'native vegetation' is too repetitive and getting to sound like a boring disconnected scientist. I'd prefer to be a mad scientist! They are much more interesting!

On page six is an interesting snippet to get you thinking about the health and resilience of your veg. It is only brief, but a starting point. For next issue I'll try and find a veg health indicator tool that you can use on your property. I think it's really important to understand if you veg is thriving or in decline. It completely shapes your management priorities.

Until next time, enjoy the cooler change.

DAN

Contact the FSCCMN

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

Ask an Expert

New column for CMN newsletter

WELL..... You must all be well informed about veg management because no one sent in any questions to 'Ask an Expert'.

'Ask an Expert' is a place for you to ask questions about vegetation management and we'll publish an answer from the most appropriate 'expert' in the valley. Your name doesn't have to be published and there's no such thing as a silly question, so get onto it.

Send us your questions now for the next issue. Details above.

The Far South Coast Conservation Management Network supports landholders with native vegetation on their property and caters to all land holders and vegetation types.

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



Wetland Restoration Specialist In Bega for one day only

Our last newsletter featured an article about riparian management and also introduced you to the Wetlands Carers Network (WCN). Susan Rhind, coordinator of the WCN, has been working hard to put together a comprehensive workshop on wetland restoration and management to deliver to the whole of the south coast. The CMN has worked with Susan to develop the workshop in particular to make sure the Bega Valley gets a workshop. Three others are being held in Bodalla, Braidwood and Woonona. For more info on those, contact Susan on 4228 9246 or srhind@conservationvolunteers.com.au.

Firstly, of most interest is the presenter that Susan has drawn to the coast. Alison Elvin, a landscape and freshwater ecologist who specialises in sustainable landscape restoration with a particular bent on restoring farm dams for ecological outcomes. Alison has an extensive background as a consultant and as a teacher. She has a passionate interest in sustainable agriculture, producing certified organic beef and lamb from her farms near Yass and Cootamundra. Alison is also co-director of a natural resource management consultancy, *Natural Capital*. (www.naturalcapital.com.au)



Are you sure you don't have a wetland?

A wetland is any area of land that can be inundated with water, either temporarily or permanently. Wetlands may not always be wet. Every wetland is different, but in all cases, the plants and animals have adapted to – or are even dependent on – the wet conditions for at least part of their life cycle.

Wetland soils can act as a storage jar for fish and invertebrate eggs and plant seeds and when flooded, nutrients are released from the dry soil promoting a sudden burst of insect and plant growth. Wetlands encompass a wide range of habitats – including permanent and intermittent fresh and saline lakes and marshes and swamps, permanent, seasonal or irregular rivers and streams, boggy areas in paddocks, freshwater springs, upland swamps, clay pans and freshwater swamp forests. Wetlands can be fresh, brackish or saline.



Wetland Restoration Workshop

Presented by Alison Elvin
Landscape and freshwater ecologist

Saturday 2nd May
9am – 4pm
Bega Cheese Training Rooms
RSVP essential, limited places
Contact Dan Williamson
for details or to book a spot
6492 5558 info@fscm.com.au

What the workshop will cover

The workshop is especially designed for landholders and groups who want to know how to conserve and manage their wetlands. For this workshop, wetlands might be a swamp, a dam, a creek or an estuary. If your feet get wet, it's a wetland! Half of the day will be held indoors followed by a visit to a nearby field site to discuss some the ideas covered in the morning. Information discussed during the day will include:

- * What is a wetland?
- * How do wetlands function?
- * How to assess wetland health
- * Where to start in wetland restoration?
- * Rehabilitation & restoration techniques
- * What are your options for restoration?

Simple changes, huge benefits

Before. Crop land showing signs that it was once a wetland. More of a hindrance than productive land!

After. With careful thought and a plan for the future, this landholder has recovered an asset and fixed a recurring production problem.

Potoroos in Tanja/Wapengo

In issue 1 of the CMN newsletter we reviewed a project that was set up to establish Long-nosed Potoroo numbers in the far south coast. Initial findings were not positive but recently a population has been confirmed in the Tanja and Wapengo area. Efforts are now bounding forward to ensure their survival.

The Long-nosed Potoroo is a threatened species listed with the NSW and Commonwealth governments. Its habitat is generally restricted to coastal heaths and forests east of the Great Dividing Range.

Surveys in 2007/2008 suggests that Long-nosed Potoroo populations on the south coast have declined in recent years and is in critical need of conservation management if they are to persist in the long term in our region.

Recently, the Long-nosed Potoroo was officially recorded in the Tanja area around Middle Lagoon and Gillards Beach. The Southern Rivers Catchment Management Authority (SRCMA), the Livestock Health and Pest Authority (LPHA) and the Department of Environment and Climate Change (DECC) are jointly developing a long term predator control program for the Tanja/Wapengo area to ensure all efforts are made for the survival of the species. This will also help



protect threatened shorebirds during the breeding season from predation by foxes.

Funded by SRCMA, the DECC will shortly begin an extensive survey of the Tanja/Wapengo area to determine where suitable Potoroo habitat is and if the animal still occurs there. Hair tunnels and Infra red cameras will be used in an attempt to locate any remaining populations.

The Threatened Shorebird Recovery Program, local National Parks fox control programs and NSW Fox Abatement Plan funding has contributed to fox and dog control in the Tanja area for many years. The Long-nosed Potoroo project in Tanja/Wapengo plans to take this up a notch. The aim is to involve more private landholders and expand the summer control to all year round. Recent reviews are showing that 'pulse' control efforts do not adequately lower local fox populations. Foxes quickly breed up and recolonise controlled areas from neighbouring areas. Less intensive but more widespread and regular control is proving better for protection of biodiversity, livestock and pets in the long run.

The results of the control program will be monitored through sand plot monitoring. This is a standard technique developed by the CSIRO and used Australia wide. It simply uses sand strips placed across bush tracks at regular intervals to record the overnight activity of feral predators.



Above: Bandicoot digging.

Below: Potoroo digging



How to tell if Potoroo's live near you.

Diggings: Both the images to the left and the illustration to the right show the difference between a potoroo and bandicoot digging. The top image and illustration is that of a bandicoot, with its more defined conical shaped hole. The potoroo's forage diggings are less defined and more cup like.

Tracks: If a good track print is left, a potoroo's will differ from that of a bandicoot mainly in their front foot track. Potoroo's will display all five toes, a bandicoot track will only display three toes.

Potoroo features

Long-nosed Potoroos are mainly nocturnal, hiding by day in dense vegetation. They look like a small Kangaroo crossed with a bush rat. They are often mistaken for Long-nosed Bandicoots due to their similar size and colour however a distinguishing feature of the Potoroo is that it hops like a kangaroo with both of its fore claws tucked into its chest. They are usually solitary but may be seen in pairs during breeding or when mothers are with young.

Their habitat consists of dense understorey with occasional open areas, often with grass-trees, sedges, ferns, heath or low shrubs of melaleucas. A sandy loam soil is also a common feature.

The fruit-bodies of hypogeous (underground-fruited) fungi are a large component of their diet (up to 85%). They also eat roots, tubers, insects and their larvae and other soft-bodied animals in the soil.

They dig small cup-shaped holes in the ground as they forage for their food. The shape of the hole can sometimes distinguish them from the conical-shaped ones dug by bandicoots.



Illustrated by Neville W. Cayley

Can you help?

If you live in the Tanja/Wapengo area (or anywhere on the far south coast) and suspect that you may have Long-nosed Potoroo on your property, DECC would love to hear about it and involve you in this very important project.

Volunteers for the hair tunnel survey are always more than welcome as many hands make light work. Hair tunnel surveying is a lot of fun, unobtrusive to the animals and receiving the results in the end is very rewarding.

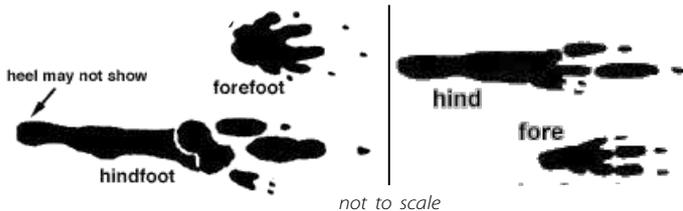
Landholders may be interested in using infra-red cameras on their properties may be rewarded with images of the locals they know and some they may not. This survey method is very rewarding as results can be collected on a daily basis.

What else?

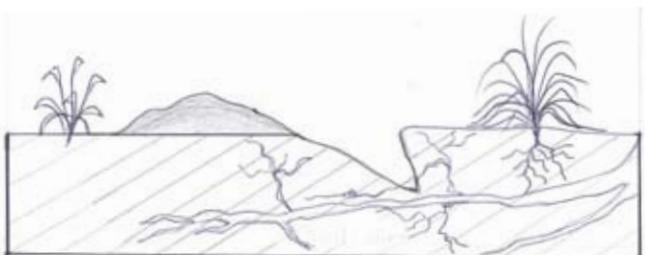
Survival of Long-nosed Potoroo on the south coast may now be dependant upon community and government agencies. Community members can do their part by following these recommendations:

- Desex domestic cats and dogs and prevent them from roaming into areas of habitat.
- Participate in fox, feral dog and cat control programs.
- Where fire control is necessary apply mosaic pattern hazard reduction burns to ensure the same areas are not burned continuously.
- Protect and maintain Potoroo habitat, especially dense understorey.
- Provide vegetation linkages across the broader landscape.

If you would like more information or would like to be involved in this project in anyway please contact Melissa Mass at NPWS on 4476 0819 or 0415 333 750.

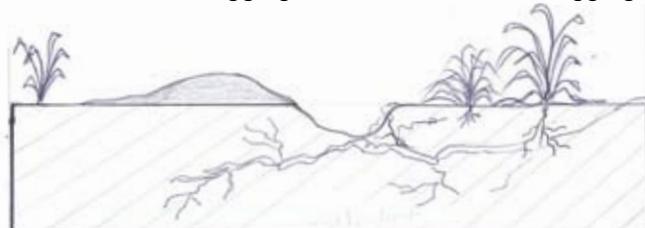


Above: Long-nosed Potoroo footprint patterns (left) and Bandicoot (right) clearly showing differences in toe prints on front foot tracks.



Above: Bandicoot digging.

Below: Potoroo digging



How Healthy is your Veg?

Having a grasp on the health of your native vegetation (which I'll now just refer to as 'veg') is a vital component in developing a plan for managing it into the future. Here are a few tips to get you thinking about how your veg is doing and how you might structure your management priorities.

The characteristics of healthy native vegetation vary with the different vegetation types. Veg is often considered to be in good condition if there is a diversity of tree and shrub species, habitat provided by old trees and logs, and a rich ground layer. In grasslands and wetlands, where there are no trees, these components will not be present but the veg may still be in excellent condition. Similarly, you may wish to maintain the grassiness of your understorey and reduce the number of shrubs. Their absence does not mean that the veg is in poor condition. Rather, its condition is the result of the management option you have chosen. Nevertheless, healthy veg generally has a number of characteristics that are described below.

Made up of layers

A thin layer of mosses and lichens on the ground is considered to be an important component of healthy veg, particularly in grassy ecosystems like that in the Bega Valley. This layer, known as the microbiotic crust, appears as a fine speckling of white, brown and green on the soil surface.

A litter layer helps protect the soil from rain and wind, and provides important habitat for invertebrates, spiders and reptiles. This layer is made up of twigs, sticks and leaves. In treeless grassy vegetation there is still usually a thick litter layer of dead grasses. Bacteria and fungi are important components of the litter layer as they break down the litter and release nutrients. Larger branches, limbs and logs are other important components of the litter layer because they provide habitat for a range of species.

An understorey of native shrubs is an important component of many veg types. This layer can be in poor condition if it is heavily grazed, particularly by cattle or horses. It may also be in poor condition in veg that has been burned so frequently that the shrubs have been eliminated because they were unable to flower and set seed between fires. Similarly this can work in reverse for some plant species that need fire to set seed. A shrub layer is less prominent in grassy vegetation although some low shrubs are still present. Shrubs are important as a nectar and food source for many insects and some birds. Prickly shrubs help protect some species, such

as wrens, from predators. They are also important structural components for web-building spiders, particularly in heavily-grazed areas.

The tree canopy in most south east coastal veg communities consists of an upper layer of a dominant eucalypt and a few co-dominant eucalypts. A lower layer of small trees is often also present.

Range of habitat

Healthy veg provides a range of habitat for small mammals, birds and invertebrates. If big enough it can also provide permanent habitat for larger animals. Types of habitat found in remnant veg include: large old trees, tree hollows for nesting, veg of different fire ages, areas of dense and sparse vegetation, riparian vegetation, logs and branches on the ground, twigs and leaves, rocky areas and wetlands.

Regenerates itself

Healthy veg regenerates itself spontaneously. Your veg is likely to be in good condition if the ground layer, the understorey of shrubs and small trees, and the tree canopy are being replaced by young seedlings and saplings. This is particularly important in long-lived vegetation.

Surrounding landscape

The nature of the surrounding landscape will affect the health of a remnant of veg. If veg is surrounded by cropping land, pasture or an urban landscape it is more likely to suffer from weed invasion, feral animals, nutrient issues and other problems.

Veg that has a compact shape is more likely to be healthier than veg that is long and thin with a high edge to area ratio. Long thin strips of veg are more prone to weed invasion, disturbance, accidental chemical drift, and the effects of wind. However, such strips can remain in good condition with appropriate management.

The health of remnant veg may be enhanced if it is linked to or is close to other remnants, particularly if it is small. Small patches of veg close to each other provide an opportunity to establish vegetation corridors through strategic planting. These can also act as shelterbelts.

Joint efforts

There is huge potential for landowners to work together to jointly manage their veg. Most of you with remnant veg will have neighbours with some also. Those around you will have different skills, knowledge and other connections that can help you better understand and manage native veg. A good first step is to get together for a wander around each others property and chat about what techniques you are using and issues you are facing.

Wyndham/Towamba Local Link

- * *What is important to you in managing native vegetation?*
- * *How can the CMN best support you to manage native vegetation?*
- * *What are your challenges to vegetation health?*

If you live in the Wyndham and Towamba area and can answer some of these questions, we'll exchange a gourmet feast for your answers.

The CMN is primarily a support avenue to assist landholders to better understand the native vegetation on their property. If you have native vegetation, which could be the typical picture of 'bush', a paddock of native grass or even a rocky, scrubby, weedy gully, it can be an asset to your property. Our aim is to help you work with it so it doesn't work against you.

The Wyndham and Towamba area is a unique region. Those who live there I'm sure don't need to be told why, but we do. The CMN covers the whole of the Bega Valley, an even more diverse cultural and ecological landscape, and we don't for a minute assume that everyone in the valley faces the same land management and native vegetation issues. This is why, since the CMN started almost three years ago, we've been holding a series of events called 'Local Links'. So far Local Links have been held in Brogo, Candelo and Kalaru and the next one is coming to Wyndham and Towamba.

What's in a Local Link for you?

- Your chance to make the most out of the CMN, a dedicated service for landholders in the Bega Valley.
- A great social opportunity to meet like minded 'neighbours' in your area
- Find others you can work with in achieving similar goals
- A free spread of locally prepared food

If you live in the Wyndham or Towamba area, come along and meet us and see how we can support you. To read a review of previous Local Links head to our web site, click on 'events', 'past events' and 'Local Links'. www.fsccmn.com.au

For more details or to RSVP contact either:

Derek Lewis on 6494 2194 or fdlewis@bigpond.com

Dan Williamson, CMN facilitator, on 6492 5558 or info@fsccmn.com.au

Wyndham/Towamba Local Link

Sunday 17th May
12pm till 3pm

Wyndham Riverside Reserve
West St, Wyndham

Bring your neighbours, bring your friends, bring anyone in the Wyndham or Towamba area interested in better management of native vegetation

Below. Landholders attending the Candelo Local Link enjoying lunch supplied by Spicy Mummas. Did we mention a free lunch at Local Links?



Fungi Tales

Thoughts from Dan
CMN facilitator

If you're like me, last issues article about fungi and revegetation got you interested. I find fungi fascinating and the prominence of it in the landscape continues to amaze me.

Fungi plays a vital role in the break down of nutrients in the environment as well know quite well, but that is about all most of us know. They are hardly considered in processes like environmental impact assessments or flora and fauna surveys and there seems to be a vastly inadequate number of fungi on threatened species lists.

This is only my own research, but via the NSW Threatened Species web site (www.threatenedspecies.environment.nsw.gov.au) there are 282 animal species listed as endangered or vulnerable, 619 plant species but only 9 fungi species.

To me this shows a lack of research in comparison to plant and animal species and highlights how little we understand about them.



if you have been inspired, or could easily be, check out the *Australian Fungi Website* hosted by the Australian National Botanic Gardens. www.anbg.gov.au/fungi

Above is a photo i took of *Piptoporus australiensis*, a HUGE bracket fungi. The width of it was well over half the length of my dog, a Kelpie cross!

Sender:
Far South Coast Conservation Management Network
PO Box 816
Bega NSW 2550

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