



Supporting landholders with native vegetation

Frog Night Fever

Leaping about in boggy places in the dark is clearly a popular pursuit in the Bega Valley. Fifty five folks sporting head torches and gumboots joined local expert Steve Sass to find out what all the croaking was about.

Recent flood events have rejuvenated the floodplains of the Bega Valley resulting in an explosion in frog breeding. This brings a smile to the face of Steve Sass, local herpetologist and leader of three frog field nights held recently at 'Panboola' and Bermagui wetlands. "It is heartening to hear them all calling after the previous long dry periods" said Steve.

Demand for the frog nights was so high that a third night was organised so people didn't miss out. One child who attended was overheard saying "I thought this would be boring, but it's really FUN".

Another participant said "I now understand why having only a small



Striped Marsh Frog

Photo: Russ McGowan

"It is starting to get cooler now and the frogs are going quiet. As winter approaches, many species of frog find a retreat to begin their winter torpor. We should hear them again around the middle of spring".

Steve has started his PhD on frogs in the Bega Valley, looking at their habitat and distribution. He is now in search of sites for frog surveys over the next two years. If you are interested in offering a site on your property then email Steve at frogs@envirokey.com.au.

For frog photos, calls and information go to http://frogs.org.au/frogs/ofNSW/The_South_Coast

Contents

Frog Night Fever	1
Coordinator's column	2
Flood impacts	3
Seedbank	3
From seeds to trees	4
Seed propagation workshop	5
Swamps	6
Staffords at Frogs Hollow swamp	7



Steve Sass with Common Eastern Froglet

Photo: Russ McGowan

number of participants was so important – we could actually talk one-on-one with Steve and learn more".

Steve's recent survey of Panboola revealed a total of eleven different species. "Over the three evenings we saw or heard five of these species including a single Bleating Tree Frog (*Litoria dentata*) which was in residence at both of the Panboola nights" said Steve.



Eastern Common Froglet at 'Panboola'

Photo: Wayne Bateman

Coordinator's column



Pittosporum revolutum



Dodonaea triquetra

Contact the FSCCMN

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



What a dramatic start to Autumn with floods carving out significant changes to many landscapes across the Shire. Stories are coming in of people taking stock of damage to fencing and planting projects, cleaning up debris, replanting, anticipating new outbreaks of weeds, mourning the loss of favourite swimming holes and enjoying newly created sandy beaches.



Correa baeuerlenii



Correa reflexa

In the spirit of recent weather events, this edition is full of stories about wet places and creatures that thrive in them - wetlands, swamps, rivers and frogs. If you would like to share any of your stories (like Chris Allen has on the facing page) please call or email me.

The cooler weather is perfect for walks and there are plenty of beautiful flowers in our coastal forests at the moment. If you're finding you can't see the forest for the weeds then take an inspiration break in some of the remarkable Parks in our area. It's certainly worked for me! The photos on this page were taken in Mimosa Rocks National Park this week.



Persoonia linearis

Photos: A Rodway

What is the CMN?

The Far South Coast Conservation Management Network (CMN) supports landholders in the Bega Valley Shire to manage native vegetation on their property and caters to all land holders and vegetation types.

The CMN is funded and supported in various ways by the Southern Rivers Catchment Management Authority, National Parks and Wildlife Service and Bega Valley Shire Council.

These agencies are working with landholders to protect native vegetation on private as well as public land.

The CMN's role is to provide motivation, knowledge and skills support to landholders to ensure ongoing management and care is worthwhile for the landholder and the environment.



Floods a tough test for plantings

Recent floods in the Bega Valley Shire have tested the effectiveness of many river and wetland rehabilitation projects at stabilising banks and minimising soil loss.

One of these projects is the mass planting at the top end of the Bega River Anabranche, a wetland close to the old Bega Racecourse. When the Bega Eco-Neighbourhood Developers (BEND) started managing the site in 2004, they were advised to plant the steep and highly erodible banks densely with local native species. The existing African lovegrass and kikuyu were not doing the job of holding the banks in place. Deep rooted trees, shrubs and tussock grasses and rushes were recommended to halt further loss of land through erosion. This project complemented significant revegetation works downstream by Bega Valley Shire Council's Vegetation Recovery Officer Jock Waugh.

Since then, around 9,000 plants have been put in with the help of local community groups, schools, Landcare and BEND members themselves. The predominant species which have thrived on the site are *Casuarina cunninghamiana* (River she-oak), *Euc. baueriana* (Bluebox), *Euc. tereticornis* (Redgum), *Acacia floribunda* (Sally wattle), *Acacia melanoxylon* (Blackwood), *Acacia Mearnsii* (Black wattle) and *Lomandra longifolia* (Spiny mat rush).



BEND community working bee replants bank after floods

The floods in Bega on 22 March were the greatest test of the success of these plantings so far. Flooding of the Bega and Brogo Rivers meant the Anabranche at BEND was metres under swiftly flowing water and became part of the Bega River as it swept across the river flats and racecourse towards Tarraganda Bridge and beyond, carrying significant amounts of debris.

Chris Allen has overseen the project on behalf of



Chris Allen on the southern side of the Bega River Anabranche where dense plantings protected banks

BEND from the beginning. In the aftermath of the floods Chris reflected on the success of the plantings. "On the southern side of the anabranche the dense plantings have succeeded in creating a wall of vegetation that has protected the banks from the main force of the flood. The result was even better where we had Lomandras. They clearly did a great job of holding soil in place and trapping sediment. We've had minimal soil loss on that side."

"On the northern side, which took the impact of the floodwaters head-on, we've lost a lot of the young eucalypts and blackwoods which didn't have deeply established roots and which just don't bend like the Casuarinas. Also, this planting wasn't nearly as dense as on the southern side. As a result, the bank has slumped in a few places with the most significant slump being about 25m wide. This area is now exposed, loose soil which is highly vulnerable to further erosion. On the positive side, it has created a perfect planting medium and we'll be making the most of it over the next few weeks."

Chris added that "while the dense plantings have protected banks and shaded out African lovegrass, they have reduced overall groundcover. We know we need the full suite of canopy, understory and groundcover species for good riparian protection so we'll be planting hundreds of Lomandras to fix this situation. We've booked in a Green Jobs Corps group to help with this next stage of the project."

The BEND community responded quickly to replant the main slump with the species that stood up best to the flood impact - Casuarinas, tea trees, Lomandras, Sally wattles and Watergums. Let's hope they get a chance to establish well before the next flood.

From Seeds to Trees

by Pauline Mendes

Pauline Mendes made great use of what she learnt at a CMN Seed Collection workshop three years ago. Looking for a solution to rampant fireweed, she now has a paddock of trees which she grew from local native seed.

I attended a seed collection workshop presented by the CMN and led by Jock Morse at Bemboka, in 2008. I was looking for alternative strategies for managing a 5 acre, south-west facing paddock with significant fireweed infestation, at our property in Tanja. Our long-term aim was to try and reduce the fireweed infestation by providing shade in infested areas.

At the workshop I learnt how to collect and harvest seed from local trees. This knowledge gave me the skills and confidence to select seed pods from a variety of

local species in the Tanja area.

I collected seeds from a range of local trees such as: Coastal Grey Box, Blackbutt, White and Yellow Stringybark, Southern mahogany, Spotted gum, Kurrajong, Ironbark, Apple gum, Silvertop ash and Black she-oaks. I germinated and propagated these seeds, which took several months. When the trees were about 8-10cm in height we planted about 150 trees randomly in the paddock, using plastic tree guards and individual fences of chicken wire.



Neil Curry tending the plantings

My partner Neil assisted the process by carting water and hand watering the trees over dry periods. He also kept the weeds at bay around the base of the trees and handpicked voracious caterpillars off the leaves. The trees required regular monitoring as the fences were often damaged by wallabies and kangaroos jumping into them at night. The rain over the last few months has been a blessing as the trees have had a very welcome growth spurt. Some of them are up to 4 meters in height.

While we are quite a few years away from the intended shade required to reduce fireweed growth, the trees are looking healthy. We are very happy that our labours have helped regenerate the paddock while using species endemic to the local surrounds.



Pauline Mendes celebrating new growth

Rabbit Mapping Website

A new and improved RabbitScan website and mapping tool have recently been released for use by farmers, community groups and anyone with a rabbit

problem. RabbitScan provides a tool to map rabbits, record the damage they cause, and map rabbit control allowing users to create a rabbit management map for their local area. To learn more about RabbitScan, go to www.feralscan.org.au



Seed Propagation Workshop



longifolia and others.

Some of the feedback from the workshop was: "I went home and did a whole lot of propagating from plants on my property"

"I loved all the clear information.."

In early March, Karen Walker led a Native Seed Propagation Workshop for 16 landholders from the Bega Valley and Eurobodalla Shires. Karen is the for the Far South Coast Landcare Seedbank Coordinator.

Held at Riverside Nursery in Bega, the workshop started with a guided tour by Coordinator Heidi Ashburner.

Participants learnt about planting mediums, pre-treating and sowing

seeds, germination requirements, pricking out seedlings, using fertilisers, making cuttings, and some information on planting methods to give seedlings the best chance to thrive in a variable climate.

Everyone went home with five planting tubes sown with a variety of native seeds collected from around the Valley. These seeds were pre-treated by Karen and included *Kurrajong populneus*, *Acacia floribunda*, *Indigofera australis*, *Lomandra longifolia*, *Eucalyptus globoidea*, *Allocasuarina littoralis*, *Dianella*



"I liked hearing what other people are doing."

"Propagating from cuttings was my favourite thing".



For those who missed the workshop, notes provided by Karen can be found on the CMN website www.fscmn.com.au

Contact Karen Walker on 6491 8224 for supplies of local native seed for revegetation projects.

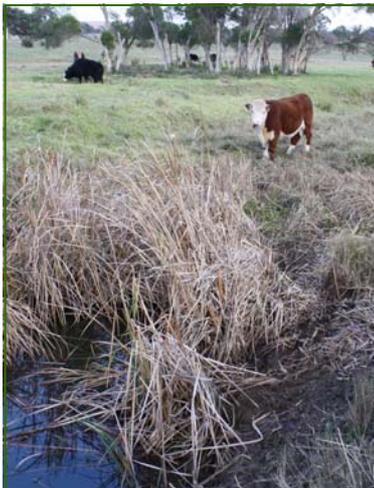
Swamps

Natural Water Storage for Our Rivers



Wetlands or swamps provide a natural source of stored water that can continue to supply water into the river system long after the rain has stopped. Shannon Brennan, Rivercare Officer for the Southern Rivers Catchment Management Authority explains what they are, why they are worth looking after and what to do if they are at risk.

Swamps are gully lines and reaches of streams that have no channels. They have porous sediments so water can move through them sideways. They are also referred to as 'chain-of-ponds', swampy meadows, valley fills or upland wetlands.



Bega Valley floodplain swamp

Soils in swamps have a significant capacity to store and slowly release water into our river systems (like a giant sponge). For example, a swamp of 1 hectare and 3 metres depth would contain 6 megalitres of water (6 million litres). Thus, every swamp makes a difference and every swamp lost means less water available to be

shared.

Swamps also provide a valuable ecological and farming value to the valley. With careful management these swamps can provide farmers with significant areas that sustain agriculture well into and through a drought - an important resource in a changing climate.

Before European settlement swamps were widespread across a number of landscapes but many of these have been lost due to catchment clearing, artificial draining, pest animal and weed infestations and other land management practices.

Erosion of swamps significantly reduces their water holding effectiveness. Once a swamp is incised, the water table is lowered to the depth of the erosion and the surrounding swamp is drained very quickly. This leads to a drying out of the surrounding landscape. The coarse sediment released by erosion of swamps is also a major cause of large volumes of sediment in our rivers, for example the Bega River. This sediment can take decades to move through the river system.

Rehabilitation of swamps takes time and depends on the degree and type of damage. In some cases, simple approaches such as fencing and revegetation may be sufficient in slowing down the velocity of water through an incised swamp. Over time, sediment may gradually build up in the area, raising the level of the bed and retaining water in the landscape, thereby improving the overall water storage capacity of the catchment. Sometimes works including rock ramps and log sills may be required to control erosion points and allow vegetation to recover.

Fencing swamps can give landholders more control over when stock have access to these areas. This can help prevent damage to swamps during wet times and also improve livestock health by reducing exposure to liver fluke and other animal health issues.

Southern Rivers Catchment Management Authority can help landholders identify swamps on their



Log sill installed at Packers Swamp

properties and provide technical advice on possible solutions for their restoration. Contact the Bega office on 64918200.

Frogs Hollow Swamp Rescue

Rick and Fiona Stafford live at Frogs Hollow on a 100 acre property with one of the few remaining 'valley fill' swamps along major waterways in the Bega catchment. They are about to start a project with the Southern Rivers Catchment Management Authority to protect the swamp from erosion.

Rick and Fiona moved to the Bega Valley from Melbourne where they raised a family whilst running a hay and grain store and a pet supply store over 20 years. They made the move here four years ago, drawn by the beautiful views of the ranges, the proximity to the coast, access to an airport and a reasonably sized town centre. They wanted to manage some land for small scale production in a way that also improved the environmental assets of the property.

Both Rick and Fiona were new to farming when they arrived and have been learning on the job ever since. Being keen observers, they are quickly getting to know their land and are working out successful ways to manage it. Says Rick, "I've learnt a lot through trial and error. You just have to get in there and give it a go".

The Staffords have tapped into local knowledge through neighbours involved in Landcare and by joining the rural fire service. Other useful places for advice have been stock and station agents and farm supply stores. "I also went to a couple of field days which gave me some new ideas to try out on the property" said Rick.

The property was largely cleared when the Staffords arrived, with a small number of remnant Bega Dry Grass Forest species still present including a sparse *Eucalyptus baueriana* (Bluebox) canopy and some native grasses. Patches of *Melaleuca ericifolia* (Swamp paperbark) were growing and regenerating in wetter areas.

Rick and Fiona started off planting around 500 trees for windbreaks and controlling weeds like blackberry



Rick and Fiona Stafford with Blanche

and fireweed. They called in Landcare for advice about some erosion in the swamp and eventually developed a project to protect the swamp with the help of Shannon Brennan from the Southern Rivers Catchment Management Authority.

The project involves fencing to control stock access to 2.75 hectares of the wettest areas, installing water troughs for stock, and revegetating the site with 600 plants native to the area. The plants will help hold banks in place where the swamp has eroded and will work with natural regeneration of grasses, reeds and rushes to slow down the velocity of water and help trap sediment from higher in



Blanche checks out the erosion

the catchment.

The protection of the swamp is much more likely to succeed because it complements a riparian fencing project undertaken by their neighbour downstream last year. The swamp will be more stable and the habitat corridor values will be greatly increased.

Rick and Fiona love wildlife and animals. In addition to their swamp restoration project, they said "we'd like to create a corridor for wildlife from the creek to other parts of the property and improve habitat to attract smaller birds".