

PlainsFacts

Events and announcements

- World Wetlands Day:
2nd February.

Edition 7 Summer 2007

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PlainsTender Update

Anne's departure

Since the last newsletter there have been many changes, the most obvious one being the departure of VVP PlainsTender project leader Anne Buchan. After 2 years running the project Anne has moved into a Policy role with DSE Head Office in Melbourne. Anne did a fantastic job running the project and we wish her all the best in her new position. I will now be taking over the running of the project so please feel free to call me with any questions and no doubt I have already met you during a monitoring visit or will be likely to contact you shortly to arrange a visit.

We also hope that everyone had a safe and happy Christmas.

Kind Regards,
Chelsey Langley



Anne working on the VVP

If you would like to contribute an article for the next edition of PlainsFacts, please call PlainsTender on 52329115 or email us at vvp@ccma.vic.gov.au

VVP Research and Development forum:

The 2nd VVP Research and Development forum was held during October at the Geelong Conference Centre. Thankyou to all that attended, we had a great variety of presentations on different aspects of the Volcanic Plains. Some examples of the presentation topics were Vegetation history on the plains, Native Grassland Grazing Trials, PlainsTender

etc. Some of the main outcomes for the day were the importance in continuing to meet and update each other on the latest research and distribute that knowledge out into the wider community. There will be a CD available with the presentations for anyone who is interested.

PlainsTender Day

On October the 3rd PlainsTender received a visit from numerous representatives from the Department of Agriculture and Fisheries and the Department of Heritage and Environment.

We had the opportunity to give them some information about the Volcanic Plains, talk about the success of PlainsTender and gain some important landholder perspectives. A huge thankyou to Margaret and Garth

Allen for speaking on the day and allowing us to set up the marquee in their backyard, thanks also to Mary Dixon who spoke about her property in Bannockburn. It is hoped that the promotion of the project with the assistance of our landholders, will demonstrate how well people are responding to the Tender process and the benefits of being funded to dedicate time to managing their native vegetation.

Field Day

For the third consecutive year, the Grazing Native Grasslands Field Day was held at Tom Calvert's property in Darlington. Regardless of the dry conditions we were able to have a couple of great speakers who really demonstrated the balance that is needed between a productive farm and retaining native vegetation. The speakers for the day were:

Chelsey Langley giving a brief update on where PlainsTender is at.

Frank MacKenzie from DPI talking about the Evergraze project. This project is all about growing the most appropriate pasture species in different areas of your farm.

Jaimie Mavromihalis from the Arthur Rylah Institute at

DSE discussing the latest findings from the native grazing plots situated on the property and to tie it all together Bill Malcolm an Agricultural Economist has been doing some work for PlainsTender on the costs and benefits to farmers in retaining native vegetation on some areas of the farmers and utilizing the most productive areas to their full potential.



Grassland Field Day

Grassland Training

Throughout late October and November PlainsTender ran a series of Grassland Training Days for both Landholders and Extension staff. Andrew Hill, a botanist from Ecology Partners in Geelong took the training which included a morning theory session and a couple of site visits in the afternoon. We held sessions in Hamilton, Lismore and Werribee giving people from all over the Plains the opportunity to attend. Unfortunately due to the current dry conditions the grasslands weren't at their best but we were still able to see and identify a wide variety of herbs and grasses.

We hope to run a couple of these sessions again in spring 2007.



Grassland Training

Tyrendarra Schools Day

Tyrendarra School

During October VVP PlainsTender, Glenelg Hopkins Waterwatch and Winda-mara Aboriginal Corporation held a schools day at the Tyrendarra Football ground and the Tyrendarra Indigenous Protected Area. We had about 200 schools kids from the surrounding schools ranging from primary to secondary.

The day started with some great presentations from the kids on a range of subjects to do with the Volcanic Plains such as volcanoes, native fauna and aboriginal



Tyrendarra School



foods. Then it was off to their activities, there were talks and demonstrations on reptiles and birds of prey giving the kids the opportunity to touch and hold some of the animals. The children were also given the opportunity to learn about the local indigenous culture through the staff from Winda-mara in the form of dancing, art and a guided tour around the Indigenous protected area showing reconstructed eel traps, stone huts and the occasional snake. Overall everyone had a great day and we look forward to next years day being bigger and better.

Little Whip Snake: *Unechis flagellum*

The Little Whip Snake is a small brown snake similar to a baby brown snake but has a black tip on the top of its head. The baby brown snake would also be darker in colour.

These snakes grow to 50cm in length and live in lightly forested areas, grasslands and stony barriers. They can be found in the states of Victoria, New South Wales, southern South Australia and inland Queensland.

They are a nocturnal species and spend most of the day hiding under rocks or within loose soil. If they are disturbed they can let off a horrible smell, throw itself around like a whip hence the name 'whip snake' or let out a low hissing sound. These snakes can give a painful bite but the amount of venom in their little body is so small it is virtually harmless. The snake feeds on lizards and frogs at night and can have up to seven young.

This snake is listed as vulnerable in New South Wales but not in Victoria. This is not to say that the species doesn't need some assistance in order to continue in good numbers. Threatening actions such as the

removal of habitat like rocks and fallen timber, changes in vegetation composition from fires and introduced weeds and animal species all effect the ability of the snake to survive. Things we can do to help them are keeping cats in doors at night especially around suburban areas like Melbourne, leaving rocks and branches lying around for habitat and maintaining good fox control.



Little Whip Snake

Grassy Research update: PlainsTender monitoring

Last spring, several properties with native grassland under the PlainsTender scheme were surveyed as part of the Long-term Ecological Grazing study (LTEG), a collaborative project between PlainsTender, DSE (ARI) and Grain&Graze. The impact of various grazing management regimes on native grassland diversity and structure is being examined in this study. Native and exotic plant richness was assessed on the private farms along with the abundance of native forbs and sward variability. It has been suggested that greater variability in sward structure (different plant heights) may benefit fauna species (reptiles, invertebrates, mammals).

An interesting finding from the survey is that fertiliser application appeared to have a negative effect on native forb richness, with sites that were recently fertilised having fewer native forbs than sites that had not been fertilised for a long period or had never been so. The impact of grazing management regime on native plant diversity is unclear, as data has been

collected at 1 time point only at this stage. More data is required to examine potential impacts in greater depth and surveys will be undertaken again this spring.



Grassy Research

Changing Landscapes - Ballarat Region Seed Bank

Ever wondered where the seed for revegetation comes from?

Ballarat Region Seed Bank plays an integral role in the supply seed for revegetation. The Seed Bank was established in the early 1990's in response to the growing awareness and need to utilise and ensure the availability of regionally based indigenous seed for native vegetation restoration activities. It is non-profit, community based organisation overseen by a Steering Committee and the three staff employed by Greening Australia Victoria (GAV).

The Seed Bank is located at the Victorian Landcare Centre, Creswick. Initially it was operated on an as needs basis turning over 150kg annually and has grown substantially, today turning over 1 to 1.5 tonnes annually. The Bank services four catchments areas - North Central, Corangamite and parts of Glenelg-Hopkins and Port Phillip.

Services that the Seed Bank provides include:

- supply seed for revegetation projects (retail catalogue available monthly).
- co-ordinated seed supply for specific projects (pre-orders required by September each year).
- retail of seed on consignment for individuals and groups.
- provision of seed cleaning facilities for the community.

- delivery of workshops and training on all facets of seed collection, cleaning, storage, quality control and information management.

The Seed Bank also gets involved in the delivery of regional projects such as the North Central Seed Supply Services for North Central CMA and DPI which is a project that directly matches demand to supply through a co-ordination approach. This project has led to an increase in direct seeding as an establishment tool and a greater diversity of species going back into the landscape.

Another project highlight is the delivery of the Corangamite Seed and Revegetation Framework (supported through NAP & NHT in partnership with GAV, DPI and the Corangamite CMA). This project has given the Bank opportunity to stimulate industry development through the development of a network and direct input into indigenous plant research. Training in seed collection, propagation, monitoring and evaluation etc and various technical forums have been key project outputs. As has the development of technical info such as the regional revegetation guide, plant provenance notes and quarterly newsletters.

For further information about the Ballarat Region Seed Bank and its services or for a copy of our seed catalogue, please contact:

Christine Gartlan phone (03) 5345 2200 or email christine.gartlan@dpi.vic.gov.au.

Ballarat Environment Network: Grassland Weed Control Trial 2006-2007

The Ballarat Environment Network (BEN), through the Biodiversity Crew (BEN Biodiversity Services BBS), is conducting research into the effectiveness of herbicides and other weed control treatments at a number of grassland sites in south-western Victoria including the Bannockburn Rail Reserve, Dobie Rail Reserve, Manor Rail Reserve, Middle Creek Rail Reserve (three sites), Plains Road Rail Reserve Lara, Poorneet Station Ground Reserve (west), and Rokewood Cemetery Extension Reserve. All these sites have a recent history of ecological burning (2-5 year intervals). The project has been funded through the Landcare Australia / VicTrack Grassroots Program (2005). Through the Grassroots Program, BEN is also undertaking grazing management trials at Skipton Common, and when the weather is warmer, will be conducting small mammal surveys (including bats) throughout a number of grassland and grassy woodland reserves in conjunction with the Centre for Environmental Management at the University of Ballarat.

Stage 1: Initial herbicide application

Initial spraying of weed infestations within the study sites was undertaken during Spring 2005. Infestations were marked, their locations recorded, and the plants photographed prior to spraying. A range of herbicides were used to carefully spot-spray the infestations which included grassy weeds such as Cocksfoot, Paspalum, Phalaris and Serrated Tussock; herbaceous weeds such as Artichoke Thistle, Curled Dock, Fennel, Golden Thistle, Spear Thistle; and bulbed plants such as Tritonia. Woody weeds including Boxthorn and Golden Wreath Wattle were cut and the stumps painted with herbicide.



Barb Miles & Roger Thomas spraying weeds at the Manor Rail Reserve Biosite

Stage 2: Initial site monitoring

At each of the study sites, initial monitoring was undertaken in late June 2006 to assess the effectiveness of the spot-spraying. Quadrats (1m x 1m) were established around the marked locations within which site condition details were recorded. Data collected included all vascular plant species present and their cover/abundance; percent cover of bare ground, rocks, litter, bryophyte/soil crust, living and dead weeds,



Only dead Artichoke Thistles remain following the spot-spraying

and native plant species. Photographs were taken of each plot and their locations (lats/longs) recorded. The initial monitoring was undertaken to help determine:

- Which weeds, if any, had germinated or resprouted at the sprayed spots since the autumn rains?
- Did the bryophyte mat, where present, appear to be affected by the initial spot-spraying?
- Which secondary weed control treatments would be suitable to trial (e.g. further spot-spraying, burning, carbon supplements such as sucrose or sawdust, weed matting)?
- Which sites should the secondary weed control treatments be applied to?

The results of the initial monitoring showed that there was little or no post-spray weed colonisation within the majority of treated plots nor was any damage to the bryophyte mat observed. Moderate to high levels of weeds had recolonised only a few of plots, where it appeared that high levels of nutrients were present in the soil. At the grasslands studied, such sites are typically the result of past soil disturbance or rubbish dumping (e.g. garden waste). A follow-up experimental trial of secondary weed control treatments will be undertaken at high nutrient sites at Manor Rail Reserve and Plains Road Lara through 2006 and 2007.

Stage 3: Secondary weed control trial

The trial will seek to observe general responses of the vegetation to further herbicide application, burning (using a flame burner), carbon supplements (sucrose and sawdust), weed matting (to block sunlight) and no secondary treatment (control). Adding carbon such as sucrose or sawdust to the soil has been shown to reduce plant-available nitrogen and alter competitive interactions among grassland species at certain sites to favour growth of native species. This has particularly been the case where the weeds are nitrophilic relative to the native species. At each of the two secondary treatment study sites, ten treatment plots (each 1m x 1m) will be subjected to a combination of flame burning, sucrose supplement, sawdust supplement, weed matting, and no treatment, with and without a prior secondary herbicide application. Each ten-plot treatment combination will be replicated twice within each study site. The plots will be monitored at approximately three-monthly intervals after the secondary treatments have been applied in spring 2006.



Dead Artichoke Thistle in 1m x 1m quadrat

Written by Janet Leversha, BEN Biodiversity Services

Is your wetland dry?

In the current dry conditions many wetlands on the Victorian Volcanic Plains look like this photograph of cracking mud.

Wetlands throughout eastern Australia have been affected by the ongoing drought with waterbird numbers falling below 200,000 prompting the State Government to ban duck-hunting this year.

In the Winter edition of Plains Facts we looked at what makes a wetland “good” and discussed the fact that a wetland doesn’t always have to be wet or have a constant water level. The cycle of flooding and drying is necessary for wetlands to remain healthy and to support the many animals and plants that have adapted to this unique type of environment.

So, with many wetlands in the “dry” phase, what is actually happening in them?

- The cracking mud provides storage for drought-tolerant plant seeds and eggs produced by animals. The mud also stores the nutrients of the

- desiccated plants and animals. Introduced pest species such as Carp and Mosquito
- Fish are naturally controlled. Wetland soils, usually low in oxygen, become
- aerated. Dryland (terrestrial) plants may temporarily replace wetland plants.

With the return of the wet phase wetlands are able to respond within hours, releasing nutrients from the soil and providing food for plants and algae the basis of the food web. The seeds and eggs once held dormant within the cracking mud, become activated in the now soaked soil and are able to respond within one to two weeks. Soon the wetland is alive to croaking frogs, small fish and happy waterbirds.

Personally I can’t wait!

**Written by Leanne Rolfe,
Wetlands Officer,
Corangamite Colac**



Cracking Mud

Mooramong Banksia listed as a Significant Tree

A massive and ancient remnant specimen of Silver Banksia (*Banksia marginata*) located at the National Trust property “Mooramong” near Skipton was recently classified by the National Trust as a Significant Tree at State level.

The Mooramong Banksia is one of the largest and most isolated remnant specimens of Silver Banksia on the Western District Basalt Plains. Once widespread across the plains, the Silver Banksia is now extremely rare on the basalt soils of the Western District.

For many decades, the tree stood alone in the Mackinnon Nature Reserve at “Mooramong”. The basalt stony rise where the Mooramong Banksia stands was probably once a Banksia woodland. Whatever the reasons for its survival, it avoided the same fate as its companions perhaps due to its massive girth, or maybe out of respect for its majestic qualities.

The significance of the tree has long been recognised locally. In the 1990’s, steps were taken to protect it by constructing an enclosure which was revegetated with basalt plains provenance Banksias.

Massively proportioned and heavily branched, the tree is 7.0 m tall with a crown 9.0-9.5 m across. The

circumference of its trunk at chest height is about 4.0 m, while it is estimated to be more than 200 years old. It is also a valuable source of propagation material (seed, pollen and cuttings) that will help to ensure the survival of the plains provenance of *Banksia marginata*.



*Mooramong Banksia
Significant Tree*

The Mooramong Banksia possesses several valuable qualities in terms of its age, size, isolation, depleted status and genetic value, which gave it significance at the State level.

Mooramong was acquired by the National Trust of Australia (Victoria) via a bequest from the estate of D.J.S. (Scobie) and Claire Mackinnon. It lies approximately 10 km north west of Skipton in Western Victoria, and is currently 1,560 hectares (3,854 acres) in size, incorporating the Mackinnon Nature Reserve of 243 hectares (600 acres).

The reserve contains significant remnant grassland vegetation including threatened plant species while also supporting, along with the Homestead and surrounds, a self-sustaining population of the critically endangered Eastern Barred Bandicoot.

Deadline for Plains Facts Summer Edition: 4th April 2007

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A JOINT INITIATIVE BY:

