



Note from the editor

Welcome to the first edition of The Grassy Groundcover Research Project's e-newsletter the Grassy Gazette. This newsletter will be posted on a bi-to-tri monthly basis and aims to bring those interested in the progress of this unique and ground-breaking restoration project up-to-date in formation about progress, news of field or technical days and stories from the many fabulous people involved across the south-west of the state.

This edition will feature some of our regular article sections. In addition to these sections we invite you to contribute to the content of the gazette. If you have a story, tips, hints or advice from your experience in the grassy groundcover research project we would love to hear from you! Please forward your short (max 200 word) article or tip to Rebecca Passlow rpaslow@gavic.org.au and we will do our best to include it in the next edition. Happy reading!

This project was initiated in November 2004, and through the hard work and extraordinary commitment of all those associated, we have sown the first of three annual sowings at each of thirteen 1 ha experimental sites across southwestern Victoria. These locations range from Bendigo in the state's central region to Colac in the south, and from Hamilton in the west and Donald to the north. Our first year sowings followed a seed collection effort that was probably the largest single provenance-based collection of indigenous species undertaken for such restoration purposes (approximately 200 species). In addition, we have established a number of seed production facilities, linked to each of the sowing sites. Here we have grown approximately 30,000 plants to produce seed that will supplement field collections for 2nd and 3rd year sowings.



Paul's Piece

Since this is our first edition, I'll take the time to set the scene. The GGRP is a three-year experimental project funded by the National Heritage Trust and sponsored by several southwestern Victorian Catchment Management Authorities. It is managed in partnership by Greening Australia (Victoria) and the University of Melbourne. As a quick background, the main goal of the GGRP is to demonstrate that direct sown seed mixtures are a practical way to reintroduce complex grassland communities to agricultural lands. The GGRP is also investigating containerized seed production systems in order to supplement field seed supplies.



Germination of Kennedia prostrata

We are now entering our second year. Excitingly, almost every site has a diverse number of species germinated and establishing since the spring sowing. We were hit quite hard at 9 sites by grasshoppers which have kept them mown low, but not to worry, hopefully they'll soon grow on. At three sites, in the absence of grasshoppers, individual plants from a number of locally threatened species have flowered and set seed. These will hopefully recruit on the sites. This is very exciting, considering these sites where canola or wheat paddocks just six months ago.

We are now gearing up for our second sowing at each field site and have increased the quantities of seed collected in the field this season by ten fold. This again is due to the skill and commitment of our collectors, and by the use of mechanized methods where appropriate. Seed collection from the seed production areas has also

been exciting. A great number of species grew successfully under this system, producing multiple and extended harvests of clean seed. At the moment we are in the process of digesting all this information from our seed production areas and using this to improve this year's effort.

In summary, the GGRP has achieved a great deal in a short period of time, due to the input and commitment of our seed collectors, propagators and growers, landholders and technicians. We all hope the GGRP may be an important part of a range of activities that are attempting to reverse the decline of this highly threatened plant community.



Amazing results from Minyip. Can you believe this site was under a canola-wheat rotation?

Seed Production Nursery News

For me this has been an incredibly challenging and exciting year. I joined the Grassy Groundcover team after the sites and landholders were on board and the huge effort of first round seed collection was drawing to a close. My first starting point was to get out and meet everyone involved. Since then I never cease to be amazed at how lucky I am to be surrounded by the most passionate and committed bunch of people. Its been an absolute pleasure working with you all and thank you to everyone who's shared their knowledge and skills with me. The learning curve will never end.

At times the logistics of getting around the sites and the daunting seed sorting and collecting goals have seemed beyond me but always someone has come to the rescue. Thank you to Natalie Woodward who after taking on the Wimmera Greencore Team half way through their project time showed her passion and initiative to independently assist the project on days when I was committed elsewhere. The crew was great fun and good company for those fencing days. To Marlene, Jason and the Stawell Lawns and Gardens guys, I appreciate your dedication to learning and having a laugh at the same time. Thank you also to those of you who have put me up in your homes when the thought of driving home was too much at the end of the day.



Seed production nursery at Narri Seeds

In summary, seed collection has achieved an even greater diversity of species this year and from initial testing the season appears to have improved the viability of seed for many species compared to last year. In addition to wild seed collection the seed production nurseries have proved an excellent source of seed, bulking up our seed lots almost to the point where we can eliminate the need for many species to be harvested from the wild. This is a very worthy goal as all of us who collect seed are very aware that our remnants often need that seed to stay right where it is.

Currently we are expanding the number of species in seed production and ensuring the genetic diversity of plants grown for seed production. After finally getting some rain up this way and the days cooling down site prep will be full steam ahead for the expansion of the trial sites. The results from monitoring are looking very promising however another couple of monitoring rounds over the next 3-4 months will tell the full story.

For all our nursery people I hope that the weather changes mean you can take some kind of break from watering demands.

See you soon
Jess Gardner



One of our many new friends making the seed production nurseries their home

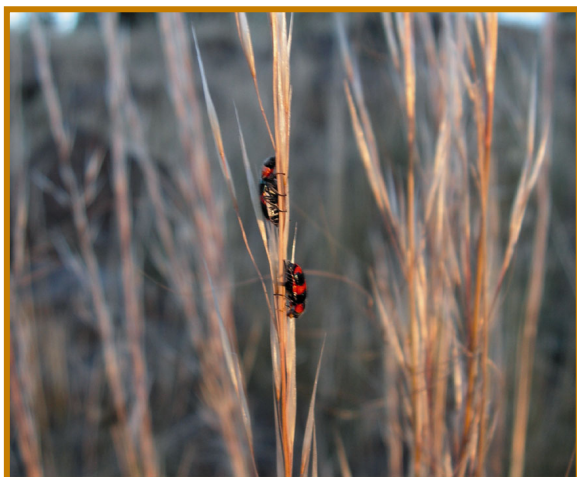
Report from the field

Happily, we can report that plants have germinated and established in high numbers at all of our thirteen sites. Unfortunately, nine sites were severely impacted on by grasshoppers. This was particularly so because our indigenous species were a source of green material during the harsh summer conditions (an important point to consider when thinking about sources of summer feed for stock). At those sites not impacted by grasshoppers results were extraordinary. Plant numbers range from 100 to 500 per m², with most individuals flowering and setting seed. In many instances, these were locally threatened species. As expected, grasses germinated and emerged most successfully, but many forb species are also present and thriving.

In terms of our experimental treatments we looked at weed control and seedling establishment in the first year. In respect to weed control, we compared a traditional biomass removal followed by cultivation to stimulate weed germination and herbicide applications, with a treatment that involved a surface scrape (to remove weed seed and nutrient loads) and herbicide applications. Plot monitoring has shown that the surface scrapes have significantly reduced weed loads in comparison to the cultivation and spray approach. This year we will compare two years weed control against the soil scrape method.

We also imposed a treatment that aimed to increase the success of seedling establishment. This entailed the addition of an open layer of coarse organic material onto the sown surface. The theory was that this organic material would create favourable micro-climate conditions for germination or seedling growth by retaining soil moisture and reducing wind movement at the soil surface. At the completion of these first seasons monitoring this treatment was indeed responsible for more consistent germination and establishment on plots.

In summary, across all thirteen sites the plots that looked most impressive in terms of sown vegetation present and lack of weeds were the scrape plots with organic material.



Some exciting new techniques have been developed using the latest of modern technology. Paul demonstrates the seed settler.

Seed collector tips and hints

Check that your seed is ripe before you collect it and make sure the seed is completely dry before you store it.

Thanks to Anne Ovington for your tips. If you have an idea/tip or hint that will contribute to the grassy groundcover project please send it through to Rebecca Passlow at rpasslow@gavic.org.au

Some sad news

It is with great sadness I must report that we lost a most valuable and committed person involved in the GGRP. Nathan Kleidon, a staff member at the Geelong Botanic Gardens tragically passed away earlier this year. Nathan was an engaging and enthusiastic person and widely respected in his workplace. He had a great passion for restoring grassland communities and was very keen to become involved in the GGRP from the beginning. Nathan was much respected by all those who worked with him as a one who had a knack for understanding and working with plants. He undertook a wide range of roles at the gardens in general, and was instrumental in the setting up and running the GGRPs seed production facility alongside Julie and Phil. Nathan was a great contributor to this project and his inputs and efforts will not be forgotten.

Who is that?!



The Grassy Groundcover Gazette would like to introduce **Daryl Barber**.

Darryl is the President of the Yarriambiack Landcare Network. He is also a leader in the newly formed Victorian No-Till Association.

Daryl amongst his other fabulous environmental contributions owns one of the largest covenanted blocks of buloke woodland in the Wimmera.

It is fantastic to have such an enthusiastic and active farmer and conservationist committed to the grassy groundcover research project.

Calendar of events

July 26 GGC Volunteer forum

Your chance to meet other GGC volunteers swap ideas and tips and hear a report on the project to date.
10am-3pm Aarat community hall
BBQ lunch provided
Contact Jess or Paul for more details

October 23 Technical Field day

Join Paul in the field to discuss the GGC project, updates on results, key learnings and visions for the year to come
10am-4pm Ravenswood
BYO Lunch
Contact Paul for more details

Want to know more about the GGC project?

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