



Spring splendour in the grasslands....

It's been a fantastic Spring for grasslands this year. I was lucky enough to spend some time in the field assessing the condition of roadside vegetation and monitoring the project's on-ground works.

There have been some really enjoyable and informative events and field days across the region.

A highlight this season was a field day to Illabarook Nature Conservation Reserve in October. Simon Heyes and Dr John Morgan led a group through the large reserve, paying particular attention to the 'inch flora'. It's truly amazing to experience getting down to eye-level with the tiniest of grassland plants and realising just how much diversity is possible in a small area.



Dr John Morgan exploring Illabarook's inch flora.



Salmon Sun orchid, *Thelymitra rubra*.



Pale Sundew, *Drosera peltata*

If you'd like to know more about Illabarook Reserve or you're interested in being involved in future working bees, please contact Simon - S.Heyes@latrobe.edu.au

Grasslands information day - the wonderful wildflowers of Woorndoo

Once again the Woorndoo Land Protection Group (W LPG) delivered a fantastic day packed with presentations and field visits. On 1 November more than 90 attendees flocked to Woorndoo to learn about the fantastic results the W LPG have achieved in grassland restoration with direct seeding.

Participants visited a high-quality remnant grassland on the Woorndoo-Streatham Road, guided by Neville Walsh, Senior Conservation Botanist from the National Herbarium.

With so many grassland enthusiasts in attendance, it was great to have some expert botanists in the crowd to help with identifications – special thanks to John Morgan, John Delpratt and Neil Marriott.



Neil Marriott and John Delpratt point out some of the hidden treasures in the grasslands, while Neville Walsh (with microphone) provides expert commentary.

First-time visitors to the W LPG restoration site were so impressed they needed to be reminded that it was once a cropped area that had to be scalped of top-soil, to reduce nutrients and the weed seed load, before direct seeding with a mix of indigenous grasses and herbs.

Neville Walsh spoke about some of the under-described flora of the Victorian Volcanic Plains. There are approximately 900 flora species making up the native grassland community, representing about a quarter of all of Victoria's native flora!

Ben Zeeman from the Glenelg Hopkins CMA spoke about research into the importance of small vegetation patches, that they often contain a high diversity of species and how this was reflected in the results of their assessments on private properties. Ben emphasised that larger patches of native grasslands on farms were often relied on for production, whereas smaller patches had in many cases been left intact and the soil crust remained.

The day rounded out with a visit to another spectacular grasslands site near Wickliffe.

If you'd like to know more about the W LPG, including updates about news and volunteer opportunities, please visit their Facebook page. Volunteers are an integral part of the work they do; it's a great opportunity to assist, learn and spend time in the company of fellow plant-nerds.

<https://www.facebook.com/groups/540399562959460/>



Neville Walsh taking us on a virtual tour of the Volcanic Plains.



Red Parrot Pea

Dillwynia hispida.



Basalt Sun Orchid

Thelymitra gregaria.

Vite Vite gets a fence fence

The small rail reserve at Vite Vite (near Derrinallum) has some fantastic grassland values and contains numerous records of threatened flora, including Spiny Rice Flower and Fragrant Leek Orchid. The site's overall quality has been declining in recent years and was in need of management to prevent weedy infestations.

Working on sites managed by rail authorities has previously posed a challenge to the Linear Reserves Project, as legislation requires contractors to be supervised by an accredited Track Protection Officer, which is cost prohibitive. Through discussions with an Australian Rail and Track Corporation (ARTC) representative, we came up with a plan to enable safe and practical access to the site for approved staff.

The first step was to have the site burnt. ARTC worked with the local CFA brigades who coordinated a fuel reduction burn in May this year. CFA volunteers from Lismore and Vite Vite were happy to see a reduction in fuel loads and weeds, and to enhance the grassland vegetation. Following the successful burn, ARTC arranged and paid for a fence between the train track and the grassland vegetation to allow the site to be accessed safely by weed control contractors. Contractors were engaged shortly after and weed control was carried out at the start of December.



Thanks to the CFA volunteers involved, particularly Chris and Val Lang, for their local knowledge and for being so proactive in the enhancement of the native grasslands.



After: Burn complete and fence up, ready for follow-up weed control.



Before: High levels of biomass in Autumn before the planned burn.



Vite Vite reserve flowering in Spring.

How to help Button find love on the VVP...

Step 1: DELWP's Natural Environment Program (NEP) in the Barwon South West plan a great threatened flora monitoring program for spring 2019.

Step 2: NEP engage a contractor, Karl Just, as botanist to survey targeted threatened flora species and ask that he also note any other significant finds, including Vulnerable, Rare or Threatened (VROT) species.

Step 3: Have a great working relationship with Karl Just and Glenelg Hopkins CMA (GHCMA) staff.

Step 4: Be aware of GHCMA's Button Wrinklewort project, led by Aggie Stevenson and Ben Zeeman, working on the 11 known populations. (Aggie presented at the recent Biodiversity Forum in Warrnambool.)

Step 5: Karl conducts surveys at various locations for several species, including Fragrant Leek-orchid, *Prasophyllum suaveolens* and Basalt Sun Orchid, *Thelymitra gregaria* near Caramut.

Step 6: Karl finds a new record for Button Wrinklewort, a single plant near Caramut and mentions it to Dr Steve Sinclair from the Arthur Rylah Institute, Steve jumps for joy and says to tell Aggie (GHCMA).

Step 7: Karl contacts Laura Prentice (NEP) with the news and Laura passes on the details to Aggie and Ben. Make that 12 known populations!

Step 8: Aggie and Ben jump for joy and go to site to see for themselves.

Step 9: Aggie and Ben start working to hand pollinate the newly discovered Button Wrinklewort.

Step 10: GHCMA staff create a dedicated Facebook page for you to follow the progress of Button's love life: <https://www.facebook.com/buttonwinklewort/?fref=ag>

The moral of the story: Great working relationships, an awareness of each other's projects and taking time to revisit known threatened flora sites will have positive outcomes for threatened flora conservation. Engaging specialist botanist contractors who also have great working relationships with many of our partners is a winner. Telling the story creatively in the media is fun and helps raise the profile and general public 'care factor' of the VVP wildflower wonderlands.



The Lonely Button Wrinklewort, *Rutidosis leptorrhynchoides*.

Threatened flora update

Grassland roadsides were the focus of this year's threatened flora monitoring in the Barwon South West region.

Monitoring targeting 7 threatened taxa was conducted across 11 sites with the results submitted to the Victorian Biodiversity Atlas (VBA). In total 5,332 individual plants of the threatened target species were recorded. Some sites were areas of roadside several kilometres long.

Records of 11 additional (non-target) threatened taxa were mapped, representing 1,330 individual plants across several locations. Of these, 11 taxa several are FFG (five) or EPBC (four) listed and all are on the Victorian Advisory List of Rare and Threatened Flora.

Another seven records for three species considered to be rare or of interest were also submitted to the VBA. Information about threats and associated management actions were collected at all sites. We will review all information and, where required, start working on threat mitigation actions. Prioritising species and planning for next year's monitoring will also soon begin.

<https://www.environment.vic.gov.au/biodiversity/victorian-biodiversity-atlas>

How fire can help a vulnerable lizard

The Striped Legless Lizard is part of a uniquely Australasian reptile family – the legless lizards. While it looks a lot like a snake, it is more closely related to geckos, and is non-venomous.

DELWP have worked with the University of NSW and Charles Sturt University to research how fire and grazing are impacting the Striped Legless Lizard and its habitat. The results of the study, recently published in the international journal *Landscape Ecology*, show how important fire and grazing management are for conserving the species.

Dwindling grassland habitat poses a threat to the survival of this nationally vulnerable reptile. But nine years of scientific surveys have provided valuable insights into how we can manage this habitat and support the Striped Legless Lizard's survival.

More than 290 sites in western Victoria were surveyed over 9 years, to determine where the lizard could be found, in what numbers and where it no longer existed. After looking at all the data it became clear that the species is clearly still declining. The research indicated however that the key to maintaining the Striped Legless Lizard in its current habitat is getting the fire and grazing regime right.

Burning in particular was important for the persistence of the species as the grassland can be invaded by weeds, which is detrimental for the lizard's habitat and survival.

The research also discovered roadside grassland areas are now very important to the lizard's survival with over 50 per cent of sites where the lizard was found being on roadside native grassland.

The study also considered the potential benefits grazing livestock could have on the lizard's habitat and while grazing has some benefits for the lizard, the preferred management tool is burning, which also has beneficial outcomes for other small vertebrates, and native flora species. The active burning of our roadsides in particular is one of the key reasons these are now the 'jewels in the crown' of our remaining grasslands in Victoria.

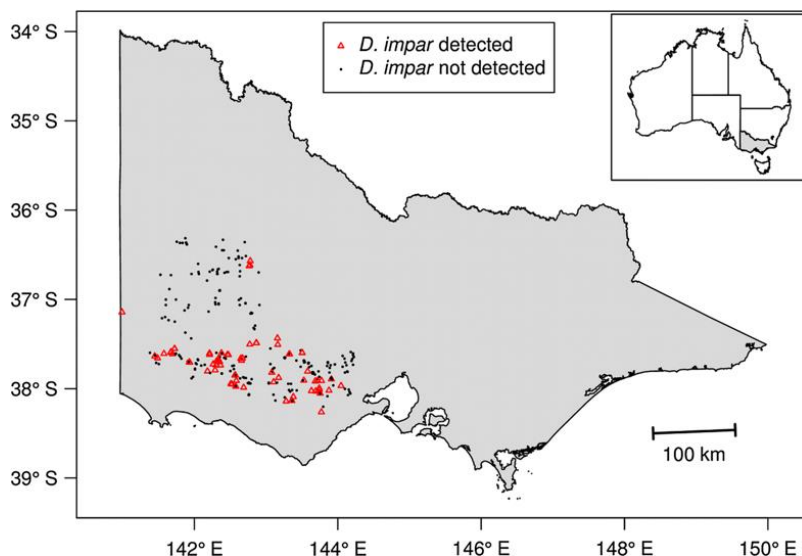
DELWP is hoping that future research will revisit the areas surveyed through this study. They are also interested in investigating how climate change is impacting the Striped Legless Lizard and other small grassland fauna.

<https://link.springer.com/article/10.1007%2Fs10980-019-00865-0>



The Striped Legless Lizard, *Delma impar*.

(Photo by Geoff Heard.)



Map of the study sites in Victoria, Australia, showing locations where *Delma impar* was detected and not detected during the study

Thank you ...

To all the project partners, individuals and organisations that assisted us with the Linear Reserves Project this year.

The work we deliver requires engagement with a wide range of stakeholders and land managers. We are a diverse group of agencies, organisations and individuals with different priorities but all working towards the common goal of protecting the environment.

Recently, I was invited to a Regional Roads Victoria training day for maintenance and works crews to speak about the importance of grasslands. This was a great opportunity for me to communicate the seriousness of protecting FFG and EPBC listed vegetation communities and species. I was also able to show participants the basics of how to identify native grasslands on the roadsides where they work. The presentation generated some really positive discussion on a range of topics, including vehicle hygiene to prevent the spread of weed seeds.

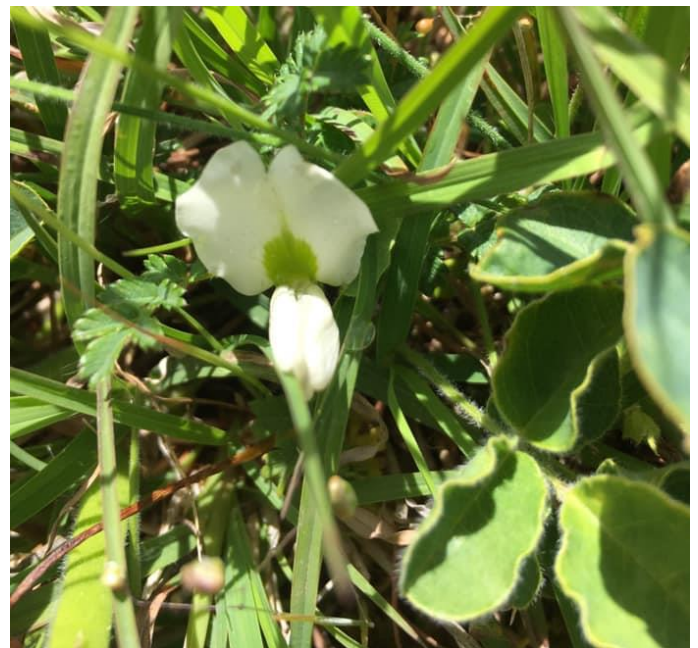
The Linear Reserves project is supported by Glenelg Hopkins CMA through funding from the Australian Government's National Landcare Program. The project also receives funding from the Victorian Government's Biodiversity on Ground Action grants and Biodiversity Response Planning.

Merry Christmas and Happy New Year...

Here's a little treat for you... spotted at a grassland remnant on a roadside near Orford, a white flowering form of Running Postman, *Kennedia prostrata*.

This is one of my favourite plants, so I was pretty excited by this discovery and keen to learn more. Google didn't reveal much, except that this white form of Running Postman is referred to as 'the Ghost of the Running Postman'. I personally would prefer to name it 'Running Milkman' if it were up to me.

If anyone has seen this before or knows more about it, I'd love to hear from you!



White flowering Running Postman, *Kennedia prostrata*.

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