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## GENERAL MEETING

TUESDAY JUNE 7, 2022 7:30PM

### PRESENTATION

#### *“ROYAL PARK DIRECT SEEDING PROJECT”*

**Katherine Horsfall**

**Researcher & PhD Candidate, University of Melbourne**

The aim of Katherine’s research project, undertaken in conjunction with the Melbourne City Council, was to test direct native plant seeding in Royal Park using different substrate surface treatments and assess the different outcomes. The project was to use plant species that would have comprised the flowering meadows that existed pre-European settlement, re-establishing species lost from the landscape in the urbanised settings, reinstating species associated with indigenous culture for tools and fibres and re-acquainting people with our natural and cultural heritage. Additionally, the project aimed to provide a source for future seed collection. The project commenced in 2020.

Royal Park is characterised as open grassy woodland. The project aimed to recreate its grassy ecosystem, to create a biodiverse-rich native understorey plant community, one that was more drought resistant, provide a food and habitat resource for birds and insects, involve lower maintenance compared to mown turf and, given the urban setting, provide a long-flowering period and aesthetic appeal for the public.

The perimeter edge of Royal Park along the northern section of Gatehouse Street, Parkville was chosen for the project site, providing the necessary understorey setting under existing mature eucalypt trees. However, the existing soil was highly modified, nutrient-rich and un conducive to native plant propagation, for which low nutrient substrates are preferable. Ideally, to remove nutrient-rich soil, the top 100mm is ‘scalped’, however this was not possible in Royal Park due to soil contaminants and underground services.

Over an area of 1300 sq metres, Katherine set up plots using 80mm sand, no sand, 10mm soil, all with and without jute matting (to suppress weed growth). Close to one million seeds, comprising 27 species were sown, weeded bimonthly, monitored at 6 and 12 months. At six months, slow progress but by 12 months in Dec 2020, there was good coverage. 25 of the 27 species grew, some were more dominant, e.g. Wallaby grasses and everlasting daisies; Kangaroo grass was a ‘late starter’. Importantly, a number of critically endangered species grew. Differences in the soil substrates evened out, but sand did affect weed growth as did jute matting to some extent. Katherine showed progressive photos of the project.

Follow-up will involve seed collecting from the project’s ‘grassy floral meadow’ and this will be undertaken in conjunction with another University of Melbourne researcher and the Royal Botanic Gardens. Katherine’s project will be extended as 2.0 Direct Seeding by another researcher further south along Gatehouse Street, examining seeding quantity/quality/timings and how to ensure self-sufficiency in recreating our earlier grassy ecosystems; in doing so, rehabilitating our urban landscapes and providing the opportunity to promote threatened species.

ForRP Convenor, Primrose Lentin, thanked Katherine for presenting her research to the ForRP, appreciating her long-awaited presentation due to Covid interruptions over the past year+.

Being a virtual meeting on Zoom, a gift of thanks could not be made, but will be in person soon – perhaps in a seed swap, where FoRP can assist in growing special species in our nursery.



**'Before'** Photo: Parks & Leisure Australia



**'After'** Photo: Inner City Nrepews, 1 June 2022