

Where Propagating Can Take You

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Keywords: Botanic gardens, wetlands, Melbourne, IPPS tours.

INTRODUCTION

Royal Botanic Gardens Victoria

The gardens have two sites one in Melbourne and one in Cranbourne. The Melbourne site sits on 38 Ha and is 171 years old, it also contains the National Herbarium of Victoria. The gardens have 1.6 million visitors a year and this is expected to double by 2070. The Royal Botanic Gardens Victoria has over 50,000 plants in their collection representing over 8,000 taxa. The gardens have 30 living collections including; Southern Africa, Southern China and Californian collection. The Cranbourne site is 363 Ha and was built in 1970. The Australian Garden takes up 10 Ha and the remaining 353 Ha is remnant bushland.

Royal Botanic Gardens Nursery Melbourne

The Royal Botanic Gardens Nursery has 3 staff and was built in the 1850's. The nursery has 3 main functions – propagation and production; research; and collections.

Propagation and Production

The nursery produces approximately 50% natives and 50% exotics by various methods including; cuttings, seed, grafting, layering, spore and tissue culture.

Plants are grown to order for horticulturists, botanists, research students, Government Department of Environment, Regional Botanic Gardens and local government.

The garden has contracts to grow rare and threatened species for reintroduction to the wild as well as for seed orcharding for the Victorian Conservation Seedbank.

Research

Research at the garden includes seed collecting trips throughout Australia. Australian native plants are grown for taxonomic assessment at National Herbarium of Victoria as well as plants grown to produce herbarium voucher specimens. In the garden, plants are placed in areas divided into families, Rhamnaceae, Asteraceae, etc.

Collections

The gardens currently house a Terrestrial Orchid and a Tropical Plant collection located in the nursery. Victorian terrestrial orchids are grown as an ex-situ collection as well as for reintroduction in the wild.

The tropical glasshouse grows plants of economic importance to assist our education department with their programs. It also houses plants collected from all over the world such as *Amorphophalus titanum*.

Recent Projects at RBGV

Working Wetlands Project

Rainfall harvested from the surrounding streets and stored in our lake and treatment tanks. The lake holds 30 Megalitres which saves 40% of potable water use now with a plan to be 100% self-sufficient. Floating treatment wetlands will filter the water as it circulates the three main lakes. This project also gave the nursery experience in germinating and growing wetland species.



Figure 1. Fern Gully area.

Fern Gully Boardwalk Project

Opportunity to learn how to grow ferns from wild collected spore. The boardwalk is now completed, and the second stage is underway (Figures 1 and 2). The

second stage will contain health and wellbeing spaces as well as a sensory garden.



Figure 2.
Fern growing in the Fern Gully.

Landscape Succession Plan

The RBGV landscape to remain the same just with different species able to adapt to a drier climate. The whole garden has had every tree and shrub audited for its suitability for the future climate. All garden beds have been placed into high, medium and low water requirements. Climate modelling suggests that Melbourne's future climate will be similar to Dubbo in New South Wales. The RBGV is projecting climate change to 2090 and unsuitable species will be sent to other gardens with a better climate.

Benefits of IPPS

I joined IPPS in 2006 and was elected to the board in 2016. The benefits of being a part of IPPS are many and include:

- Attending Local and International IPPS Conferences and tours.
- Broadening my plant knowledge.
- Encouraging young propagators.
- Sharing plant production knowledge.

Tours

I have attended many tours and workshops around the world and gained valuable knowledge and many friends. These tours include:

- Seedbank, Herbarium and Nursery workshop in United Arab Emirates.
- Oman Botanic Gardens, David Hancock and I ran field trips and propagation workshops for staff.
- IPPS Europe preconference tour through England, Belgium, Netherlands and Germany (Figure 3).
- IPPS Conference and post conference tour in Port Elizabeth, South Africa.
- IPPS New Zealand post conference tour of Southern New Zealand.



Figure 3. Solitair Nursery, Belgium