Member profile

Manfred Jusaitis

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What is your current role?

I am currently an Honorary Research Associate with the Botanic Gardens and State Herbarium in Adelaide, having retired after working there for 25 years in the field of plant conservation biology.

How did you end up working in plant conservation?

I've had an interest in plants since an early age, possibly sparked by my parents' interest in gardening. I remember being fascinated while watching my dad budding and grafting fruit trees in the back yard, and within a few weeks seeing new growth emerge from dormant scions. My parents must have noticed this interest, since they gave me a small section of their garden to call my own, to plant and cultivate whatever I desired. Before long, I was growing an assortment of vegetables and fruit trees from seed and experimenting with budding and cultivation techniques. I never really considered a career in plant science until my first year at university. I had enrolled in a science degree to pursue my favorite subject, physics. One of my first-year subjects was biology, which included a series of lectures by plant physiologist Dr Nick Marinos. His inspirational lectures birthed in me a passion for the subject, and I decided to change my focus from physics to the plant sciences, eventually completing a PhD in Plant Physiology at the Waite Campus of the University of Adelaide.

I worked initially with an agricultural chemicals company, field-testing their plant-protection products in southern Australia, and then held a teaching/research position in plant physiology with the University of Adelaide, before accepting a position with the Botanic Gardens of Adelaide as Plant Scientist in charge of Black Hill Flora Centre.

**Members of the *Friends of the Great Victoria Desert* standing in front of a newly discovered population of Wyola mallee, mapped and delineated with the use of a drone. (L to R) Geoff Rishworth, Anne and Manfred Jusaitis, and Harald Ehmann.
Photo: Mavik Pro Drone, Manfred Jusaitis, 2017**

This position initially involved research into the commercialisation of Australian plants for horticulture and floriculture, as well as studies on the conservation biology of selected threatened plants of our State. However, from 1998, with the shift of our laboratories into the city, our research became totally focused on the conservation biology of our most endangered flora. Our studies covered all aspects of a species ecology and biology, and for many species included translocation trials to gain an understanding of how populations could best be reintroduced, reinforced or enhanced in the wild using this technique.

What projects are you working on at the moment?

When I retired from the Botanic Gardens, I found that I still had a fair bit of interesting data sitting in filing cabinets and on my computer, that remained unpublished. So I have been using my time as an "Honorary" to try to tidy up some of those loose ends by publishing them before the data is lost. Also, recently an opportunity arose via the Threatened Species Recovery Hub of the National Environmental Science Program, to consolidate details of all the plant translocations our Gardens have been involved in over the years, for inclusion in a national translocation review. I am also assisting with the current revision of the ANPC's Translocation Guidelines. These publications should provide very valuable resources for future plant conservationists.

Four years ago, I joined the *Friends of the Great Victoria Desert*, who assist the SA Department for Environment and Water with monitoring and surveying flora and fauna populations in the remote Maralinga Tjarutja lands. Projects we have been involved with include growth and recruitment studies on the vulnerable Wyola mallee (*Eucalyptus wyolensis*) and the majestic marble gum (*E. gongylocarpa*), post-fire recruitment studies, identifying and recording weed infestations, monitoring vegetation photo-points, and assessing the extent of camel grazing damage to quandong (*Santalum acuminatum*) trees. Recently, we have been examining the use of drones to survey and monitor populations of *E. wyolensis* and *E. gongylocarpa* with excellent success. The known range of *E. wyolensis* has been extended significantly as a result of these surveys. Visiting these remote regions also provides unique opportunities to collect plant herbarium specimens from sparsely-surveyed and under-collected areas.

I am also interested in conserving the vegetation of the southern Fleurieu Peninsula, and to that end, 28 years ago I purchased a block of land with a remnant population of messmate stringybark open forest in pristine condition. The land is listed as a conservation block, so can't be cleared or grazed, but a portion of it adjacent to the road is available for planting and I have successfully cultivated some of our endangered species in this area. We have also recently joined the *Friends of Private Bushland*, a group of people who own, or want to help maintain, areas of native bushland on private land, as a means of networking with like-minded individuals.

What is your favorite plant and why?

I have found that I fall in love with pretty well all the plants that I spend time studying, but perhaps my real favourites are those that have aromatic leaves. The sense of smell has the powerful ability to transport a person back to a time and a place, while bringing back emotive memories with a rush of nostalgia. So even today, the fragrant, crushed leaves of *Phebalium glandulosum, Dodonaea subglandulifera, Prostanthera eurybioides,* or *Olearia microdisca* will take me back to moments and scenes in the field many years ago, while I was perhaps setting up a flowering experiment, counting or measuring seedlings, or maybe bagging shoots to collect seed. Plant smells can be so evocative!

I also particularly love Tillandsias (air plants), of which I have a collection of over 100 species. I'm fascinated by their diversity, their ability to grow without soil, the challenges involved in their husbandry, their unique beauty and outstanding potential for use as decorative elements.