



Board of the
Botanic Gardens and
State Herbarium

Report on the **2012-17 Strategic Plan**



Presiding Member's foreword

The Board of the Botanic Gardens and State Herbarium is pleased to present this report on its Strategic Plan 2012-2017.

Over this period, the institution has seen considerable change in its administration and leadership. Stephen Forbes' was Director from 2012 to 2016, followed by Janice Goodwins and Greg Mackie, who acted in the role until the recruitment of Dr Lucy Sutherland in October 2016.

Stephen Forbes has left an important legacy from his 16 years as Director (2000—2016), which are outlined in the Board's Annual Reports.

Over the lifespan of this plan, he led staff through the management of the Aquifer Storage and Recovery project as part of the First Creek Wetland development and the State's commitment to managing water for the future.

He was also instrumental in the development of the Little Sprouts Kitchen Garden in Adelaide Botanic Garden. The associated education programme now plays a critical role in educating young South Australians about healthy eating and raises awareness about the origins of plant ingredients in the food they eat.

As this report will highlight, the Botanic Gardens and State Herbarium has accomplished a tremendous amount over the past five years. On behalf of the Board, I take this opportunity to acknowledge the passionate staff and others that have been involved in delivering these remarkable outcomes.

Judy Potter

Presiding Member
Board of the Botanic Gardens
and State Herbarium

Introduction

The Board of the Botanic Gardens and State Herbarium's *Strategic Plan 2012-2017* was a roadmap for the organisation's future vision and plans over a five-year period. The Plan was informed by the International Agenda for Botanic Gardens in Conservation's definition of a botanic garden, as a "cultural institution holding documented collections of living plants for the purpose of scientific research, conservation, display and education"¹.

The Board's 2012-13 Annual Report directly acknowledges this definition and notes "It follows that the *Strategic Plan 2012-2017* positions the Botanic Gardens and State Herbarium as a keeper of collections and knowledge and, further, as a champion and storyteller of how plants shape our future. In this, it connects people with plants".

The *Strategic Plan 2012-2017* also followed the organisation being accredited by The American Alliance of Museums (AAM) in 2010. It was the first institution outside of America to do so. This accreditation's mark of distinction – reinforcing integrity, authority and international standing – demanded a bold

strategic planning process to ensure the rigorous maintenance of the same high professional standards in collections management and continual institutional improvement.

The Plan was comprised of four major themes: *Collections, Knowledge, Sharing and Our Organisation*. The themes aligned with four of the Gardens and State Herbarium's major organisational areas and its managerial structure – its collections, science (knowledge), education and interpretation (sharing) and our organisation.

The Board's overarching vision was that the organisation, "will be unsurpassed in sharing our knowledge of plants. We will be at the forefront, amongst the world's leaders in our scientific endeavours and our resolve to meet future challenges. We will be agile in all respects of our business to maintain our relevance to the community. We will be sought after for strong partnerships. The beauty and diversity of our plants and displays will inspire our visitors."

Formulating the Strategic Plan was a lengthy process, led by Director Stephen Forbes and the Botanic

Gardens and State Herbarium's management and leadership teams. Adopting the *Think One Team* method in drafting the Plan and devising the organisation's key values, the team produced a document that succinctly distilled the organisation's vision and plans, including a one-page visual summary (a diagram) for easy reference. It was hoped the document would be simple, easily understood and accessible to all staff, which would result in more ownership of the Plan, as opposed to a lengthy and detailed corporate document. While the Plan was released to the public, it was designed primarily as an internal document, with staff front of mind.

The purpose of this report is to reflect on the success of the Board in delivering the Botanic Gardens and State Herbarium's Strategic Plan 2012-2017, on the organisation's achievements over its lifespan, and highlighting any shortfalls in delivering the planned strategy.

1. Wyse Jackson, P.S. and Sutherland, L.A. (2000) International Agenda for Botanic Gardens in Conservation. Botanic Gardens Conservation International, U.K

Collections

- Enhance our collections
- Make our collections accessible
- Create and showcase beautiful gardens

2012-17 key achievements

We have made 578 seed collections, representing 449 specific taxa. The percentage of South Australia's threatened flora represented in the seed bank has increased by 15% since 2011.

The herbarium collection reached 1,053,750 specimens of flowering plants, algae, lichens, fungi, bryophytes and ferns.

A net increase of 909 trees was added to the Gardens' collection across the three estates (1,078 planted and 169 removed), comprising 322 taxa.

The First Creek Wetland was constructed at Adelaide Botanic Garden, with 250ML of water injected into the aquifer since opening in November 2013. It is hoped, in 5-8 years, the Wetland will be able to recover up to 100ML of water a year - enough to meet the annual irrigation requirements of Adelaide Botanic Garden.

Landscape architects TCL awarded the 2016 AILA National Parks and Open Space Award and 2015 AILA SA Medal for Landscape Architecture for its work on the First Creek Wetland. OXIGEN Landscape Architects awarded the 2017 AILA Gardens Landscape Architecture Award for their work on the Little Sprouts Kitchen Garden.

The Wittunga Botanic Garden Masterplan was completed in 2012.

The Weeds Botanist continued to engage with regional biosecurity managers and communities, and this has led to the detection of 103 new weeds to South Australia.

Ten exhibitions were presented in the Santos Museum of Economic Botany (attracting more than 300,000 visitors), providing a contextual backdrop for an exploration of plants, people and culture through the language of art.

Thirteen publications, focussing specifically on the cultural collections and the exhibition program, were produced, with two winning major awards.

The organisation forged partnerships with many other cultural institutions (including the Art Gallery of South Australia, JamFactory, Flinders University Art Museum, Carrick Hill, the South Australian Museum, Kangaroo Island Fine Arts, National Wine Centre and SA Maritime Museum) to present nature-themed exhibitions.

BGSH is now regularly involved in the Adelaide Biennial of Art and TARNANTHI: Festival of Aboriginal and Torres Strait Islander Art.

Over 9.5 million page views on The eFloraSA website - the main access point of information provided by the State Herbarium.

The State Herbarium's specimen records attracted more than 170-million downloads through Australasia's Virtual Herbarium (AVH).

Over 40 tours were conducted to provide public access to the State Herbarium's restricted vault quarantine zones, conveying the importance and relevance of the Herbarium's work. More than 400 refereed and non-refereed articles were published in scientific journals and magazines.

Audit of the current collections of the Classgrounds as part of the Revitalisation project, which will improve this important feature in Adelaide Botanic Garden.

The Journal of the Adelaide Botanic Gardens (now called Swainsona) and its supplement published 41 articles on 859 printed pages.

Adelaide Botanic Garden's City Crop conveyed the importance of food to more than 20,000 people, connecting them with plants through events and displays.



Face to face interpretation as part of the Little Sprouts Kitchen Garden programme has addressed key messages including where food comes from, healthy eating, sustainability, lifecycles of plants, and diversity of foods. The Kitchen Garden opened to pre-school and early-years school groups in April 2015 as part of a \$1.6 million South Australian Government commitment, over four years, to help inspire SA's next generations of kitchen gardeners.



The display of iconic species such as *Amorphophallus titanum* - which flowered for the first time in South Australia at Mount Lofty and Adelaide Botanic Gardens, connected new generations of people with plants. The three *Amorphophallus* flowering events attracted around 20,000 visitors in just a few days.



A number of sculptures were restored and relocated, including Venus and Diana (above) and the Owl in Toad Stool in Adelaide Botanic Garden.



The South Australian Seed Conservation Centre team has 293 taxa collections listed as threatened (96 Endangered, 66 Vulnerable, 131 Rare). South Australia's threatened flora represented in the seed bank is now 74%.

Knowledge

- *Know our collections*
- *Enhance knowledge of plants*
- *Learn from others*

2012-17 key achievements

A Plant ID Course was initiated in partnership with the University of Adelaide in 2016, providing tertiary students with a basic understanding of the diversity of plants and developing specialised technical skills in the identification of vascular plants.

Staff taught third-year Biology students in partnership with the University of Adelaide and Flinders University.

Two Natural Resources Management Science Conferences (2014 and 2016) were coordinated in conjunction with DEWNR and the University of Adelaide.

One lecture and herbarium tour per year for the ACoHE (TAFE) students held by herbarium staff. Five tours per year for 'other' TAFE students were also held.

Over 150 scientific collaborations were undertaken with South Australian, interstate and international universities and herbaria.

Cooperation continued with Natural Resource Management bodies, Primary Industries and Regions SA, South Australia Research and Development Institute, and other DEWNR groups on weeds and feral animals, threatened species and revegetation projects.

The Herbarium Blog (know.ourplants.org) was developed in 2013, with more than 199 blog entries published, attracting more than 24,740 page views.

The Herbarium and South Australian Seed Conservation Centre were partners on 80 grants for projects, valued at \$14,697,423.

Partnerships were developed with the Rose Society of South Australia, the Dahlia Society of South Australia and the Palm Society of South Australia.

Delivery of over 200 school holiday workshops with over 1000 primary school-aged children participating in plant-based activities with their families.

The State Herbarium attracted more than 100 visiting researchers.

Specialist training courses for SA Police and the Attorney General's Department were initiated, the first was Cannabis ID training for Forensics SA.



A partnership with the Department for Education and Child Development delivering plant-based education to 120,000 school students.



Over 240 talks, presentations and workshops by BGS Herbarium staff were presented to DEWNR staff, other organisations, community groups and the general public.



A partnership was developed with TAFE SA (2013-2015) and ARO Education (2015-2017) to deliver Certificate Training in Horticulture.

Sharing

- Share our knowledge of plants
- Share our space and gardens
- Share stories about our gardens

2012-17 key achievements

Over 10 million visits to the three Botanic Gardens and Botanic Park from 2012-17.

A review and realignment of child-focussed education programmes to curriculum was completed, resulting in:

- 120,000 schools students learning about plants at the Gardens
- 10,000 early years children participating in the Little Sprouts Kitchen Garden programme,
- 2,153 adults and 1,100 teachers participating in associated education programmes
- Delivery of specific education events in partnership with Tandanya Aboriginal Cultural Institute, SA Museum, State Library of South Australia, Zoos SA, Children's University and Adelaide Mount Lofty Regional Natural Resources Management.

The Australian Centre of Horticultural Excellence Masterclass programme established in 2013, resulting in the presentation of plant-based topics to 380 participants across 24 specialised classes.

Community outreach was delivered through the Kitchen Garden Outreach programme, supporting 60 community gardens across South Australia, and engaging more than 12,000 people through its online e-Newsletter.

Annual Visitor Service Quality surveys conducted by the University of South Australia reveal Adelaide Botanic Garden achieved an average 86% visitor satisfaction rating between 2012-17 - an a 94% satisfaction rating in both 2015 and 2016.

The Green Infrastructure programme was delivered - working together with government, industry and community towards the achievement of South Australians living in healthy, resilient and beautiful landscapes that sustain and connect people with plants and places. The programme won a Commendation in the Planning Industry Association (PIA) 2014 Awards for Planning Excellence in the category of Cutting Edge Research and Teaching. The Plant Selector+ tool and online Evidence Base resources were established.

More than 55 lectures were delivered to both undergraduate and postgraduate students in a variety of disciplines through partnering with Adelaide University, the University of South Australia, and TAFE SA.

A range of publications were produced, including:

- 39 articles in the scientific *Journal of the Adelaide Botanic Gardens* (now renamed *Swainsona*)
- Twenty family treatments of the new, 5th edition of *Flora of South Australia* were published
- The new *Feral Opuntioidei Cacti of Australia*
- Annual reports on the status of South Australia's weeds

The State Herbarium staff and associates have published more than 406 articles in scientific journals and magazines.

Economic Botany Today - three courses delivered in 2014, 2015 and 2016 by Prof David Mabberley - to 48 full-fee paying students. The course was augmented by the richness and depth of the BGSB Living, Herbarium and Cultural collections.

BGSB worked with more than 10 plant societies and specialists, including the Dahlia Society of SA, Rose Society of SA, Palm Society of SA, Mediterranean Plant Society, Rhododendron Society of SA, Cactus and Succulent Society of SA.

A host of social media profiles - on Facebook, Twitter, Instagram and Snapchat - were established to share updates on the Garden's collections, news, events, public programmes and more. Significant followings were subsequently fostered on each platform, including more than 24,000 page likes on Facebook, 8,000 followers on Instagram and 5,000 followers on Twitter.

A complete overhaul of the BGSB website's content and design was conducted, which saw weekly page views almost double, from around 7,000 to 13,000, allowing users around the world to see the latest news, events, media releases, blogs and more.

A partnership with Google facilitated the creation of a virtual "tour" of Adelaide Botanic Garden using its Street View Trekker technology.

The Botanic Gardens launched a YouTube channel as a hub for videos to promote the organisation's collections, events and more. It has garnered more than 180,000 views from 62 countries.

More than 120,000 people attended a range of community, public and arts programs across the Botanic Gardens per year.

Informal education sessions to 5700 children and their families through the School Holiday programme.

Partnerships with Arts Projects Australia (presenters of WOMADelaide) and Greater Union (presenters of Moonlight Cinema) were strengthened resulting in over 540,000 attendances across their annual events.

BGSB collections were documented through the publication of *Imitation of Life* (a catalogue of the 19th Century botanical models in the SMEB) and *Out of the past* (a catalogue of the Edwardian Era postcards in the BGSB Library & Archive). *Imitation of Life* and *Out of the past* won the national prize for best book at the 2014 and 2015 Museums Australia Publication Design Awards.



Science & Art: 12 years of the Waterhouse Prize was on display at the South Australian Museum in June and July 2015. In the exhibition, several specimens from the State Herbarium were on display along with the artwork to illustrate and explain the connection between science and art.



New partnership developed with Space Events to present concerts in Botanic Park, which attracted a further 30,000 attendances each year. Concerts included James Taylor and Santana.

Our organisation

- *Develop a diversified and sustainable income stream*
- *Utilise efficient business technologies and processes*
- *Ensure a world-class paid and volunteer workforce*

2012-17 key achievements

Over \$1.65 million was raised by the Adelaide Botanic Gardens Foundation from a range of corporate partners, and philanthropic supporters.

New corporate partnerships were developed with ElectraNet, Beach Energy, Zero Waste, Coopers Brewery, Lobethal Bierhaus, in addition to existing sponsors Santos.

The Australian Centre of Horticultural Excellence (ACoHE) commenced in 2012-2013. This aimed to develop a skilled workforce for the horticultural industry where students gain industry qualifications while working with the Botanic Gardens collections and learning from expert Botanic Gardens staff. The ACoHE learning pathways included accredited Certificate II and III Horticulture, as well as non-accredited Masterclasses on topics such as plant propagation, pruning for fruit, and gardening in fire-prone areas and Mediterranean climates.

During 2012-13, 24 Botanic Gardens staff undertook training in readiness to teach in ACoHE, including nine who completed Certificate IV in Training and Assessment.

Since the commencement of courses in 2013, ACoHE has delivered to:

- 62 graduates in Certificate II or III with TAFE SA (2013-14)
- 14 graduates in Certificate III with ARO Education (2016-2017)
- 19 existing Certificate III students who will graduate in June 2018 with ARO Education
- 380 masterclass students across 24 specialised classes, including six classes in each of the first two years, increasing to 12 in 2016-17.

Seven horticultural staff visited other botanic gardens to review operational and collection aspects, including the International Rose Garden (IRG) Curator reviewing internationally-accredited rose gardens in Victoria, prior to BGSB applying for accreditation for the IRG.

A Fee For Service model was introduced for the Schools Education Programme from January 2017 to ensure sustainability of the programme.

More than 300 solar panels were installed across BGSB sites, which improved power consumption.

The introduction of tablets and smartphones provided access to remote applications in the field including the operation of the irrigation system.

e-Book education experiences on iPads were developed, as well as education trails involving mobile device photography for school students and teachers.

A wireless network was installed in the Tram Barn, allowing staff, honoraries, volunteers and visitors to work on electronic devices and access collection data anywhere in the building.

BGSB staff attended 123 conferences on plant-related themes.

Improvements in the Workplace Health and Safety culture were facilitated through training, systems and new equipment, which helped achieve no Lost Time Injuries for over six years (over one-million working hours). The date of the last LTI was 27 March 2011.

Over 223,000 volunteer hours contributed to BGSB business.

Personal and physical safety has been improved through significant, targeted training programmes. Through this training staff have an increased awareness in how to approach vulnerable people who are under duress.

Activating the Gardens by working collaboratively (and commercially) with on-site leasees Diggers and Blanco (e.g. Heirloom Weekend and Valentine's Day).



The Foundation worked collaboratively with the Friends on various projects, including the The Great Escape family activity and City Crop, which was supported by ElectraNet.



A partnership between the Mount Lofty Botanic Garden Support Group and the Friends of the Botanic Gardens of Adelaide raised \$365,000 to build the Chris Steele Scott OAM Visitor Pavilion at Mount Lofty Botanic Garden, which was opened to the public in 2015.



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Government
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The Botanic Gardens and State Herbarium is dedicated to building an understanding and appreciation of the botanical world. It relies on support for its horticulture, science, conservation and education programmes. Please help us with our work today, and in the future. The Board has deductible gift recipient status (items 1 & 4), and our work is also supported by fundraising efforts of The Trustee for Adelaide Botanic Gardens Foundation Fund, which has deductible gift recipient status (item 2).