

The Australasian Systematic Botany Society 2015 conference – papers and perspectives

Darren Crayn

The Australasian Systematic Botany Society (ASBS) is proud to present this special issue of papers from its 2015 Annual Conference, held in Canberra, 29 November–3 December. The conference theme was ‘Building our Botanical Capital’, reflecting both the location in Australia’s political centre, and the key role of ASBS conferences in supporting, developing and growing taxonomic capability across Australasia.

Established in 1973, the ASBS aims to promote the study of plant systematics – the science that unravels the relationships and evolutionary history of flora – in Australasia. In the 43 years since inception it has become a professional society that is successful on any measure. It maintains a very healthy financial position and a stable membership, and achieves its aim through a broad range of initiatives and activities. These include providing competitive grants for plant systematics research from the Hansjörg Eichler Scientific Research Fund, recognising our highest achievers through the Society’s most prestigious honour – the Burbidge medal, and promoting communication among members and the public through diverse media such as the quarterly ASBS Newsletter (free online at <http://www.asbs.org.au/asbs/newsletter.html>), website (<http://www.asbs.org.au/asbs/index.html>), Facebook group (<https://www.facebook.com/groups/434955569922530/>) and Twitter (@ASBS1). A key milestone in the Society’s history was the formal expansion in 2013 of its geographical remit to include New Zealand, and a change in name to the Australasian Systematic Botany Society.

Perhaps the most important activity the Society undertakes is the annual scientific conference, which brings together members to present, discuss, and debate their science, and strengthen, renew or establish friendships and collaborations. Student engagement, support and recognition has always been a conference priority and the Society offers a range of student awards including the Pauline Ladiges Prize for best student oral presentation, the Australian Systematic Botany Journal prize for best poster, and the Bob Anderson Award to assist a student from a developing country to attend an ASBS conference.

Successive Councils have sought to take ASBS conferences to all corners of the country, which is important for the Society to reach and service members wherever they may be and to foster opportunities for interaction with diverse floras and regional stakeholders. Since the Society became Australasian the conference has travelled even more widely – our New Zealand colleagues have hosted two very successful and rewarding meetings, in Lincoln in 2010 and Palmerston North in 2014.

The 2015 conference furthered the Society’s mission through many excellent talks and posters on a wide range of topics,

workshops and discussion sessions on issues of importance to the future of Australasian systematic botany, and social and networking opportunities for systematists and other plant and ecological scientists of all career stages. The location – Canberra – prompted delegates to reflect on and celebrate the work of Dr Nancy Burbidge, Curator of Herbarium Australiense (now the Australian National Herbarium, CANB), and perhaps the most vigorous of the founders of the group that would become the ASBS in 1973. Her contribution to the Society and to Australasian plant systematics more broadly is commemorated through the eponymous Nancy T. Burbidge Medal, the highest award the Society can confer. She also had a key role in events that lead to the establishment of this journal. Under her leadership of CANB the journal *Contributions from Herbarium Australiense* was launched in 1972, becoming *Brunonia* in 1977 (the year of her death), and in 1988, *Australian Systematic Botany* – a journal that has become international in focus and scope.

Dr Burbidge was a visionary in many ways, so it is appropriate to reflect briefly here on the state of plant systematics in Australasia today. It has been frequently argued and it is well documented that there has been a significant decline in our workforce and recurrent funding over the last 20 years. Efforts, individual and collective, to bring attention to this and arrest it have not generally met with lasting success. But the Society continues to advocate strongly for its discipline and the interests of its members, not least through its participation in and financial support for the development of a ‘Decadal Plan’ for plant systematics in Australasia.

Yet despite this trend, Australasian plant systematists continue to produce world class science. We are renowned for our outputs and innovation. The virtual taxonomic infrastructure we have built – including the virtual herbaria of Australia (AVH) and New Zealand (NZVH), the Atlas of Living Australia (ALA), the national nomenclators and consensus species lists (Australian Plant Name Index, Australian Plant Census, and New Zealand Organisms Register) and innovations in identification tools and systems such as LucID and KeyBase – is the envy of the world. We have not always succeeded, however. One of the most important products of the taxonomic enterprise is Floras, and it is regrettable that 35 years since publication of the first volume, Australia has not completed the Flora of Australia series. Declines in our workforce, university training options, and recurrent funding are key factors that have greatly slowed the rate of publication of volumes. A new approach to completing the Flora is now being pursued, which has significant advantages over the previous model of hard-copy volumes published as

a series. This new model – an online eFlora platform – allows authors to develop taxonomic treatments in web-based proformas that are interoperable with the existing virtual infrastructural elements that manage names, images, distributional data, and keys. When deployed, this model will greatly improve the efficiency and timeliness with which Flora treatments are produced, updated, and made available. This new model is our best hope of completing the Flora, and of integrating it with Australian State and regional Floras, and the eFlora of New Zealand.

In addition to infrastructure and products to manage our biodiversity knowledge, Australasian plant systematists publish new taxon discoveries at one of the world's highest rates. Kew's recent publication – the *State of the World's Plants* (see https://stateoftheworldsplants.com/report/sotwp_2016.pdf, accessed 2 November 2016) – notes that Australia is one of the top two source countries for plant species new to science, a place it has held since 1995. Nearly 200 new species of plants are discovered every year in Australia (10% of the world's annual total based

on a 10-year average), a rate that adds 1% to the national species total every 2–3 years and shows no signs of slowing down. It is undeniable that this record is in part due to the extraordinary taxonomic virtual infrastructure we enjoy, which greatly facilitates access to literature, nomenclature and data for taxonomic research.

ASBS 2015 showcased the breadth and depth of Australasian plant systematics research and left this delegate in particular with unbridled optimism about the future of our discipline. It is a pleasure to introduce a selection of this great science in this special issue, and the Society congratulates the authors and journal editorial team for bringing these excellent conference papers to publication. We trust they will make a lasting contribution to the literature.

Prof. Darren Crayn is the President of the Australasian Systematic Botany Society and the inaugural Director of the Australian Tropical Herbarium, James Cook University