

FOREWORD

The third Global Botanic Gardens Congress was held in Wuhan, China between 16-20 April 2007 and the meetings, presentations and discussions that took place were all relevant to botanic garden horticulture and management. The Congress attracted nearly 1,000 participants from 67 countries and included 4 plenary sessions, 42 symposia, 7 workshops and 6 network meetings. A total of 202 oral and 145 poster presentations were given during the week.

The Congress organisers were Botanic Gardens Conservation International (BGCI), the Chinese Academy of Sciences, the Hubei Provincial Government, the State Forestry Administration of China and the Wuhan Municipal Government. These organisations, together with Wuhan Botanical Garden who actually hosted the Congress, deserve our congratulations for staging an excellent meeting.

On the basis of reports from each symposium session, conclusions from the various sessions were presented at the end of the Congress. These focussed around the four main themes of the Congress: Understanding and Documenting Plant Diversity, Conserving Plant Diversity, Using Plant Diversity Sustainability and Promoting Education and Awareness about Plant Diversity. For each theme, the conclusions highlighted the main achievements presented at the Congress, challenges remaining to be addressed and recommendations for future actions. These conclusions will form the basis of a document to be presented to the Executive Secretary of the Convention on Biological Diversity as a contribution to the in-depth review it is presently undertaking of the Global Strategy for Plant Conservation (GSPC).

Full proceedings of the Congress will be available from BGCI later this year but, in the meantime, for botanic gardens planning to incorporate Congress recommendations into their strategies and corporate plans, the main conclusions and a statement to the congress by Mr Ahmed Djoghlaif, Executive Secretary to the CBD, provides a useful up-to-date summary of the current status of the CBD and GSPC. It can be found from links at the end of the Congress page on the BGCI website (<http://www.bgci.org/index.php?id=1875>). They are both well worth reading.

The Second *Sibbaldia* Guest Essay has been written by Kingsley Dixon, Director of Science at Kings Park and Botanic Garden, Perth, Australia. Dr Dixon is one of the leading conservation scientists working in the botanic garden environment and has championed the value of good practical conservation biology underpinned by sound science. In his many projects working on endangered species of Western Australia he has frequently called upon the combined efforts of horticulturists and scientists and in his paper he promotes the value of good quality living collections to support research.

New for *Sibbaldia* this issue is the idea of highlighting a particular botanic garden, for a particular reason. This new Botanic Garden Profile will become a regular feature and the editors plan to use it to focus on a botanic garden that has reached an important milestone in its history, has redesigned or redeveloped itself in some way or has launched some new or groundbreaking initiative, strategy or project. The first to be highlighted in

this way is Dawyck Botanic Garden, one of the Regional Gardens of the Royal Botanic Garden Edinburgh (RBGE). Dawyck was chosen because last year it celebrated 25 years under RBGE management. In his paper Curator David Knott describes the history and development of the garden from family arboretum to botanic garden. The transformation from a derelict and overgrown woodland garden (but containing an interesting and historic collection of trees) to the well maintained, diverse and interesting garden it is today is astonishing. Interestingly, the garden now also contains the Heron Wood Cryptogamic Sanctuary, believed to be the first of its kind in a botanic garden. Later in this issue Professor Roy Watling, former mycologist at RBGE, describes the history of this remarkable plot at Dawyck, cited as “an outstanding example of research being undertaken in a botanic garden and of national and international significance” in a recent science and horticulture review of RBGE.

Geoffrey Harper and Leigh Morris continue with Part II of a paper on phenology, started in *Sibbaldia* No. 4. The amount of data coming from the various phenological projects now running at RBGE are probably sufficient to produce at least one article for each issue of *Sibbaldia*. Linking living collections with collections data, meteorological data and science as they do the editors believe that phenology is an important topic for *Sibbaldia* and look forward to receiving papers from other botanic gardens doing this type of work. This paper focuses on the reaction of plants to climate change, particularly warmer winters, and goes on to describe plants which exhibit ‘mediterranean-type’ phenology.

The importance of plant records have been highlighted in several *Sibbaldia* papers. Records are, however, only as good as the last time the plant was checked in its location out in the garden. The publication of RBGE’s latest *Catalogue of Plants 2006* (Rae, 2006) brought to the fore the importance, but also the time consuming nature, of frequent collection stocktaking. In her paper Janette Latta describes the use of a ruggedised laptop live-linked to the plant collections database using wireless technology to speed up the process of stocktaking.

Following an extensive study tour of some of the leading botanic gardens in the world Galen Gates, Director of Plant Collections and Curator of Perennials at the Chicago Botanic Garden, has developed an interesting list of 12 criteria that he has called ‘Characteristics of an exemplary living plant collection’. Readers will no doubt be interested to assess whether their gardens include, or take part in, all 12 of these characteristics.

We are particularly keen to feature detailed papers in *Sibbaldia* describing cultivation techniques for particular groups of plants. We are pleased therefore to include papers on the cultivation of alpine at Utrecht, written by their alpine plant authority Wiert Nieuman, of the mighty Titan Arum by Wolfram Lobin and colleagues at Bonn, of *Blechnum cycadifolium* by Andy Ensoll and Kate Hughes at Edinburgh and monocarpic *Meconopsis* by Christopher Grey-Wilson and John Mitchell. The last paper describes briefly the 14 species that make up *Meconopsis* subsection *Eupolychaetia* and goes on to describe both their cultivation and the challenges, because of ready hybridisation, of building a collection of these species.

Index Semina have been produced and used by botanic gardens for many years. Indeed, many gardens include the requirement to produce an annual seed list in their mission statement. David Aplin has undertaken an analysis of numerous *Index Semina* and his paper takes a critical look at their content and value and concludes by suggesting that the worth of some material is questionable and that the time and effort devoted to them could perhaps be better used elsewhere.

With its small native flora and historic research interest in other parts of the world, the representation of native species and habitats has not had a prominent place in RBGE's landscapes. With both the interest in Target 8 of the Global Strategy for Plant Conservation and the development of two ecologically-based garden areas within RBGE there is a renewed interest in native plants and their display at Edinburgh. In his paper horticulturist Gordon Schofield and others describe the collection and cultivation of some important Scottish native plants.

Following on from their paper in *Sibbaldia* No. 3 which looked at apical temperatures and hardiness in *Dicksonia* Alasdair Wardlaw and colleagues from RBGE examine the winter protection of tree ferns. Appropriately perhaps, this is followed by a very descriptive paper from Tim Upson and Pete Kerley from the University of Cambridge Botanic Garden describing the original development and subsequent refurbishment of their Winter Garden.

Sibbaldia No. 5 concludes with a short technical note from Steve Scott describing the use of wine corks in potting compost. The editors would be very pleased to receive other short notes of about 500-800 words on aspects of botanic garden horticulture that perhaps do not warrant a full paper.

REFERENCE

RAE, DAVID, *et al.* (2006). *Catalogue of Plants 2006*. Royal Botanic Garden Edinburgh.

David Rae

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