INTRODUCTION

Welcome to the second issue of *Sibbaldia*, the journal devoted to botanic garden horticulture. This issue contains nine papers and is illustrated with photographs for the first time.

Having recently returned from the Second World Botanic Garden Congress in Barcelona and an *ad hoc* meeting of the Global Partnership for Plant Conservation at BGCI, thoughts of the Global Strategy for Plant Conservation (which was discussed in detail at both meetings) are uppermost in my mind. The Strategy, which is firmly rooted within the Convention on Biological Diversity (and described in *Sibbaldia* No 1), offers an exciting opportunity, and challenge, for botanic garden horticulturists to make a real contribution to global plant conservation.

Many of the articles in this issue are of direct relevance on our ability to achieve the responsibilities presented to us in this Strategy. Issues of plant records, wild origin material, collecting, the cultivation of challenging plants, curatorial surveys and collection standards are covered along with an article describing how horticulture can contribute to the various GSPC targets.

Cathy Badley, a recently graduated MSc student from the University of Bristol, opens this issue with a paper on the quality of plant records, co-authored with David Hill and Nicholas Wray. In the paper, the genus *Hebe* is used as a tool to test the accession data quality between records held in botanic and NCCPG gardens. The paper goes on to challenge the view that botanic gardens should only concentrate on plants from the local indigenous flora.

The importance of plant records is also covered in a paper looking at key collection quality indicators such as accession numbers, percentage wild origin and percentage of verified plants. It argues that regular monitoring of these factors, and the setting of targets where necessary to improve standards, is beneficial. While this paper makes the assumption that wild origin material is valuable, James Cullen points out that it can, in fact, be highly variable and argues that much of the wild origin material in botanic gardens simply does not warrant that status.

The cultivation of two very interesting and different species is described in detail. Bob Ursem, from Delft, describes the cultivation of *Welwitschia mirabilis* and Andy Ensoll and Kate Matthews, from Edinburgh, cover the fern *Thyrsopteris elegans*. While these two papers describe plants in cultivation, Simon Crutchley, also from Edinburgh, gives a very personal and descriptive account of a recent expedition to Nepal where he saw and collected many wonderful species.

Just as cultivation could be described as the art and science of growing and nurturing plants, so curation is about managing and caring for a collection of plants. Sometimes major change is required, perhaps for a new project or change in policy. In such cases a curatorial survey may be called for to take stock of what is in cultivation, what should be in the collection, but isn't, who uses it and for what purpose. David Mitchell, Curator of the Indoor Department at Edinburgh, takes us through the process of undertaking such a survey, in this case for the plants in the Temperate Palm House at Edinburgh which had to be cleared for redevelopment work.

The diversity of uses to which a botanic garden plant collection can be put is amazing, and I was reminded of this frequently at the World Congress. Speaker after speaker described projects as diverse as fruit breeding to drought resistance and electrospraying of *Taxus baccata* to release taxol without damage to the tree, to work on coastal defences using mangroves. Phenological research and observation is yet another area where collections can be used. At Edinburgh various phenological projects have been developed over the last two years and are described by Geoff Harper, David Mann and Roy Thompson. Botanic garden collections are ideal for this type of work because of the long-term nature of the collections, the quality of plants records and the fact that the plants are usually correctly identified and labelled.

In the next issue I hope to progress to a guest essay from a leading figure in botanical horticulture, a greater number of international authors and colour illustrations inserted adjacent to their text, rather than being grouped together in the centre. In the meantime, I hope that readers find this issue useful and enjoyable.

David Rae
Director of Horticulture and Editor