

Prickly Challenges: Conservation or Delusion?

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During the past two years the National Botanic Garden of Belgium (NBGB) took a dramatic step by radically evaluating the cactus collection the institution has been growing for many decades. That process was a consequence of several facts the NBGB had to face up to. Firstly, the cactus collection was the largest single plant collection growing at NBGB. Secondly, no scientific research on cacti or the collection had ever been conducted at the NBGB; thirdly despite the fact that many of the accessions were considered part of a conservation collection, most of them were devoid of data that would be useful for that purpose. Not only must we consider the costs in time and energy to keep plants, but also that times have changed – for example the *European Strategy for Plant Conservation* (ESPC, 2008) requires critical evaluation of the *ex situ* collections, including an evaluation of the scientific data that come with the plants.

So that is why, but what about the how and the results? Updating the nomenclature was a first step (more than 1,000 changes were made in our database). Two independent experts were involved in the process, David Hunt and Nigel Taylor, who scrutinized the whole collection of cacti in July 2007. Besides their nomenclatural expertise, they also came to the conclusion that two-thirds of the collection was of no importance at all for conservation. Only 21 out of 251 wild-collected accessions (0.84%) were actually regarded as valuable for that purpose. The main reasons for such conclusion were: poor data; wrongly identified plants; hybrids; taxa better represented and documented in other collections and the fact that none of the plants had ever been used for scientific research at NBGB...

As a result, the NBGB donated more than 1,000 plants to other institutions – amongst others the *Museum National d'Histoire Naturelle*, in Paris – who will use them for education and display.

Is this a depressing conclusion, or a new opportunity? Fewer, but better plants, means more time to care for them and better growing conditions. It gave us the opportunity to create an outside hardy bed with spare plants. Also, it allowed us to launch an *ex situ* seed conservation/production program and we even had time to put red-dotted labels in the pots of some cacti to mark those of particular conservation value.

Some of the lessons we learnt in the process of this evaluation were that we must involve the whole staff in the process; ask for independent experts; unveil the results in order to motivate other institutions to act similarly. The keywords would definitely be: quality rather than quantity. With such an approach a new era will dawn for living collections throughout the world. Success in protecting endangered species and, in the process, in managing public collections, will only come from an up-to-date and honest evaluation of the pots we keep in our botanic gardens and collections. Incidentally, liberating and extending the data held in the *BGCI PlantSearch* database would help considerably.