



Timothy Walker joined the staff of the University of Oxford Botanic Garden in August 1980 as a trainee gardener. After short periods of training at Askam Bryan College, Windsor Great Park and RBG Kew he returned to Oxford in January 1986 as General Foreman. In July 1988 he was elected to the Ernest Cook Lecturership in Plant Conservation at Somerville College Oxford. He is now Director of the Garden, a post that involves a mixture of teaching, administration and fund raising.

## SIBBALDIA GUEST ESSAY

### OBSESSION IS GOOD

*Timothy Walker*<sup>1</sup>

There can be few professions where obsession is more omnipresent than Horticulture. Whether it is in a garden or in a nursery there are people who have become passionate about a group of plants. The passion could be for a family, a genus or just one species. The choice of the object of the obsession is often purely serendipitous. As Rob Marrs so eloquently observed ‘one man’s weed is another man’s *Euphorbia*’ (and this from a man whose life work was the study of *Pteridium aquilinum*).<sup>2</sup>

The obsession can manifest itself in many forms. In some cases it is as an evangelist for the plants concerned and it should never be forgotten that plants need evangelists. Animals on the other hand do their own PR. How else can one explain the affection felt for the grey squirrel in children’s literature? This is after all just a rat with a fluffy tail. Some plants are easier to promote than others. Orchids, for example, are the pandas of the plant kingdom while *Apium repens* is less easy to sell on the grounds of beauty utility or scientific value. Be that as it may, it is possible to enthuse others about almost anything given enough genuine passion, and genuine passion often accompanies obsession.

The obsession may result in a life-long programme to propagate, distribute and generally cosset just one species. It is easy to pour scorn on those who become besotted in this way. For some biologists conservation at the level of species is at best a short term fix that is as much use as sticky plaster on a broken leg. At worst it is perceived as distasteful, resulting in a garden full of geriatric species. These ecologists may argue that the conservation and protective management of whole ecosystems is the only lasting way to conserve biology. These same people may reject the idea of maintaining indefinitely the remains of a species as organic stamp-collecting.

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<sup>2</sup>Editor’s footnote: Dr Rob Marrs was Director of Ness Botanic Garden from 1991 to 1997. He was also the first Chairman of PlantNet (now renamed PlantNetwork), the plant collections network of Britain and Ireland. Timothy Walker is well known for his enthusiasm for the genus *Euphorbia*, a genus in which he is an acknowledged expert.

This would be a reasonable argument if whole habitat conservation was a rip-roaring success. Sadly, a recent report by WWF, *Extreme weather, does nature keep up?* (Climate Change Publications, December 2004) concludes that:

*'It will be impossible under such conditions of rapid climate change to uphold UN-CBD's aim to reduce the rate of biodiversity decline significantly by 2010.'*

The underlying problem for habitat conservation is highlighted in this report.

*'Degradation is a generally fast process (days to decades), while recovery through growth and succession is a slow process (decades to millennia), often constrained by habitat fragmentation, pollution and other human-induced stresses. This mismatch in time scales will lead to local die-backs and rapidly increasing extinction rates'.*

If the conclusions of the WWF report are correct then habitat conservation is deeply flawed as a strategy for species conservation unless the habitat is to be managed to the same intensity as a garden. In this context the 'distasteful' maintenance of species in gardens must be taken seriously. However, the report does make an important point when it states that the stresses under which the world's flora is failing to thrive are human-induced. The present extinction crisis is probably different from its predecessors in at least two ways. First, it is induced by one species as opposed to some stochastic event. Secondly, plants are going to suffer more than before. This crisis needs a human solution and all gardeners are part of that solution.

There are now many strategies and policies that have been drawn up to guide and focus the limited resources available for plant conservation. There may be too many, with the result that the effort becomes fragmented and spread too thinly. The IUCN Species Survival Committee policy guidelines are important in this respect (IUCN Technical Guidelines, December 2002). For example, it is undeniable that:

*'if the decision to bring a taxon under ex situ management is left until extinction is imminent, it is frequently too late to effectively implement, thus risking permanent loss of the taxon'.*

This means that as soon as a threat is identified measures should be taken to reduce or remove that threat. The IUCN-SSC guidelines state that:

*'ex situ conservation should be considered as a tool to ensure the survival of the wild population'.*

In the early 1970s the number of private collecting expeditions travelling to the Guayana Highlands was reaching an unsustainable level. The populations of several species, including the insectivorous *Heliophora nutans* (Sarraceniaceae) were declining. A successful way of reducing this threat of over-collection was to make the plants available commercially. My predecessor, Ken Burras, began a programme to learn how to propagate

and cultivate this plant. Sadly, we could not put plants on display due to thieves visiting the garden. However, once a protocol for micro-propagation had been drawn up, plants were produced in numbers that satisfied the commercial demand and enabled us to put the plant on display for honest people to see. The obsession of Mr Burras for carnivorous plants thus removed the threat of over collection and headed off a problem.

While general guidelines are needed to give principles it is also most important that any conservation strategy is time-limited with targets. For the first time such a strategy exists and it is for the conservation of plants. The Global Strategy for Plant Conservation (GSPC) gives botanic gardeners the opportunity to do two things. First, we can show the animal people how to carry out successful conservation programmes because never before has there been an internationally supported strategy with targets. Secondly (and far more importantly), all of us working in horticulture and particularly those in botanic gardens can find a way to contribute to the GSPC. There are 16 targets; each one of us can select a target and do what we can.

You may choose to become an evangelist; there are too few people prepared to talk to local societies and community groups. You may offer your time, energy and skills to a local conservation project; this hits three targets since it results in networking. It builds capacity through training and it gets *in situ* work carried out on the ground. You may already have an interest that you can develop into a species recovery programme. Like Mr Burras, you can remove the threat to a species from both international trade and unsustainable trade as well as establishing this species in an *ex situ* conservation programme and developing a propagation protocol based on research. That alone contributes to four more targets. These three examples alone address 8 of the 16 targets.

There is a school of thought that believes that obsession is a disorder, yet the alternative to obsession is indifference. Indifference to the needs of the GSPC is not a morally defensible position. Obsession in horticulture is not a disorder; it is a virtue that gets results.

#### REFERENCES

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