

PlantNetwork Target 8 Project

Making progress in Wales



PlantNetwork
The Plant Collections Network
of Britain & Ireland

Notes of a meeting held at the National Botanic Gardens of Wales on 8th October 2008

Present: Sam Bosanquet, Rosie Carmichael, Judy Cheney, Laura Davies, Natasha de Vere, Jessica Gould, David Hardman, Matthew Jebb, Paul Lewis, Ann Maloney, Jackie Read, Tim Rich, Danielle Satterthwaite, Angela Singleton, Mark Sparrow, Anna Williams, Kate Williamson

Apologies: Louise Allen, Ivy Berkshire, Trevor Dines, Alistair Griffiths, Barbara Jones, Andy Jones

1. Attendees at the meeting were welcomed by Kevin Lamb, Director of NBG Wales, who expressed his hope that, as Wales was a small country with ready access to decision-makers, the meeting could help to deliver an action plan for Wales' vulnerable plants, and roll out a strategy to the rest of the UK.
2. Matthew Jebb (MJ) who chaired the meeting, explained that we were gathering in an attempt to give the Target 8 project a kick start; the project had been on-going for 3 years, and PlantNetwork was planning a series of 4 regional meetings across Britain and Ireland, of which this was the first.
3. After a short introduction from all delegates, MJ explained the background to PlantNetwork's Target 8 Project, namely the intention that all botanic gardens in Britain and Ireland should adopt a couple of endangered native species, so that an understanding could be built up of what it takes to germinate their seed, grow them on and get them to seed again, in order to ensure their long-term survival. The project was designed to bring those working with plants *in situ* and *ex situ* together. He emphasised what the Project was not about, as well as the procedures and hoped for outcomes from the project (<http://www.plantnetwork.org/forums/nbgwalest8/summary.htm>).

The expertise of horticulturists at BGs would enable a 'recipe book' of germination and cultivation protocols to be built up, while at the same time providing opportunities to raise awareness of and educate visitors about the threats to native plants, together with a source of genetic material for DNA studies. Growing plants *ex situ* was often the only way to gather information on a plant's lifecycle, its preferences and pollination mechanisms, and the reasons for its endangered status.

The PlantNetwork Project aimed to foster collaboration between BGs and conservation bodies, so as to establish whether cultivation of particular species might be useful, to identify priorities according to threat level, appropriateness

and feasibility, and to provide coordination to reduce duplication of effort in the UK and Ireland.

It was emphasised that gardens should not collect seeds or material from the wild; Simon Linington of the Millennium Seed Bank (MSB) had expressed a willingness to supply germinated material weaned off agar from their collections. This would enable the MSB to obtain the viability testing data they require for monitoring their collections, and allow material to be distributed to BGs that would normally have been discarded at the end of the germination trial. However, approval to distribute this material would be dependent upon consent of the various country agencies under whose auspices the material was being held – in England (Natural England), Wales (Countryside Council for Wales), Scotland (Scottish Natural Heritage) and Northern Ireland (Environment and Heritage Services). Matthew had written to all four agencies in February, but had not yet had any replies, he would be writing again.

4. MJ gave examples of projects already underway at the National Botanic Gardens, Glasnevin in Ireland, such as work on *Inula salicina*, *Astragalus danicus*, *Otanthus maritimus* and *Mertensia maritima*, explaining some of the techniques which had proved useful in cultivating these plants and in re-establishing some of them in the wild.

Because of close links between Glasnevin, Trinity College Botanic Gardens and the National Parks and Wildlife Service, which is responsible for *in situ* conservation in Ireland, the partnership of *in situ* and *ex situ* conservation was well integrated. Ireland's response to the Global Strategy for Plant Conservation had been developed by MJ (who acts as Ireland's Focal Point for the GSPC).

Over 90 delegates had attended the launch meeting of the Target 8 project at the PlantNetwork conference ehld in Dublin in April 2005 (<http://www.plantnetwork.org/proceeds/gln2005/summary.htm>).

5. It was suggested that amateur gardeners might have a role to play in contributing to the 'recipe book' since it was likely that some held rare natives in their collections and had built up considerable expertise in growing them. Such info could be tapped into, perhaps, through a carefully worded article in *The Garden* or other amateur gardening publication; it would have to be made absolutely clear that the intention was not to raid material from the wild. MJ explained that this had been discussed, but that this was not an area in which PlantNetwork were confident to act. There were problems in that approval to grow threatened species, especially those covered by Schedule 8 of the Wildlife act, might be forthcoming at an institutional level, but possibly not for individuals. Because of the risks of misunderstanding, this was an area that would have to be approached with care and caution. PlantLife already has the 'Grow wild to know wild' project (<http://www.plantlife.org.uk/uk/plantlife-discovering-plants-grow-wild-intro.html>)

6. If such amateur knowledge were to be tapped, there would need to be somewhere to record any information available; such a repository was not really available at present. MJ suggested that, if forthcoming, such information should be written up and submitted to him at PlantNetwork, where it could be collated and placed on the website. A pro-forma setting out the data of use could eventually be developed.
7. It was suggested that the Welsh Red Data List, should dictate the focus of activity within Wales, in the absence of a strategic overview from conservation bodies in Britain setting out the real priorities from a European/global perspective. County and National Park BAP lists had just been reviewed under section 42. Special Areas of Conservation (SACs) should have management plans; a database of actions was being developed by CCW. BSBI members, together with individuals such as T. Dines and T. Rich, would have a view as to which species should be absolute priorities. use red lists only? PlantLife has developed a priority list of Welsh species (<http://www.plantlife.org.uk/uk/plantlife-wales-back-from-the-brink.html>)
8. With 90 institutional gardens, and their range of facilities and expertise, if each garden within PlantNetwork was to grow 2-3 species that would be a sizeable chunk of the 500 or so endangered species in these islands covered; if gardens worked on the species closest to, or most meaningful to, their locality, that would go some way towards setting priorities.
9. Chester Zoo's conservation work on rare British (and principally North Welsh) plant species had depended on them forging links with, in particular, CCW and Denbighshire CC; recent projects had included work on *Juniper communis ssp. communis* as well as *Cotoneaster cambricus*. They had managed to collaborate with local BioDiversity Officers, who were granted licences to deal with particular species; Chester was named as one of the partners under such licences, which were required to collect material, to hold it and to re-introduce it, where appropriate, into the wild. MS pointed out that it had initially proved very difficult to persuade others to collaborate because they had not appreciated the potential role of horticulture in supporting conservation activities.
10. The BioDiversity Officers Network in Wales could perhaps act as facilitators of local initiatives in their areas, linking conservation bodies and gardens, as could Local Wildlife Trusts, Plantlife etc.; if they were concerned about particular plant species in their areas, they could ask a local garden to undertake *ex situ* research.
11. NdeV described some of the work being undertaken at NBG Wales (<http://www.plantnetwork.org/forums/nbgwalest8/01devere/slide00.htm>), where the 51 native species in these *ex situ* collection include just over 7% of the plant species rated as vulnerable or worse in the country.

12. Photographs of plants in various stages of growth could be extremely useful for conservationists and others who might not recognise a species at all stages of its lifecycle. Plants grown *ex situ* could be used to train people to recognise some species, for example at the seedling stage. The Royal Botanic Garden Edinburgh had grown *Fumaria* species for workshops for their native plant identification courses.
13. Treborth BG had likewise built up a sizeable collection of native plants (25 spp.), but had been able to do, thus far, little recording on plant growth/germination techniques used. Perhaps the gardens' active Friends group could help to collate such information.

Likewise, Hugh McAllister at Ness BG was planning to write up protocols for the native plants held in their collection, for publication in *Sibbaldia*.
14. NCCPG collection holders were suggested as valuable sources of information on growing certain native species, with their expertise with particular families or genera. The PlantNetwork Directory provided an index to gardens with expertise on particular families (<http://www.plantnetwork.org/directory/family.htm>) and genera (<http://www.plantnetwork.org/directory/genera.htm>).
15. Kew and Wakehurst were gathering expertise in growing many native plant species, but generally information about how to do so was not recorded in their database. MSB material that was used in germination trials was going to waste, but it was not easy to distribute it, without permission from SNH, Natural England, CCW etc. to do so. There were issues around the licences needed to permit recipient gardens to deal with the material. Germinating seed in agar was one thing, but real world experience was needed too.
16. Having individual institutions linked into the Target 8 Project could help in this respect, since most of them would have systems already in place to comply with CBD, and could sign Plant Transfer agreements if necessary.
17. Under Target 8, all endangered plant species were lumped together. Scotland had developed a plan to include lower plants, but Bryophyte conservation work required considerable expertise that was not readily available in BGs.
18. The *Plant Diversity Challenge* document was useful in raising the awareness of people who were not familiar with the Global Strategy for Plant Conservation (GSPC) at all, but came with no funding attached to it.

After a tour of NBG Wales' back of house facilities, home to their Welsh natives collection, the meeting reconvened for a summing up.

Conclusions

Several points were noted:

1. We needed a simpler way of reporting success in propagation/growing protocols to PlantNetwork. MJ would prepare this.
2. CCW had suggested that PlantNetwork should contact Anna Robinson at JNCC which should be the lead agency on these matters for all Country Agencies. MJ and Judy Cheney would try to meet her at Peterborough before the next regional Target 8 meeting in Cambridge in the spring.
3. NdV would be at the next PlantLink Cymru meeting in October in Bangor, and would report back on this meeting to the plant conservation bodies there.
4. All present were asked to spread the word about the project to people in charge of sites/habitats; a simple intro to the project was readily available on the PlantNetwork site. The success of the project would hang upon getting the right contacts in the various Country Agencies.
5. As far as licences to collect material were concerned, as long as the species were not listed under schedule 8 (<http://www.jncc.gov.uk/page-1816>), then permission to collect material from the wild was certainly still required from the landowner, or agencies responsible for protected sites. Species on schedule 8 require a licence for the plant to be handled or grown in any institute.
6. A pan-Wales body, Wales Biodiversity Partnership (WBP - <http://www.biodiversitywales.org.uk/>), including representatives such as David Parker and Diana Reynolds, was meeting in Bangor at the beginning of November; a taxonomic group was the focus of each meeting, and bodies could ask to present to the meeting if desired. MJ would write again to CCW.
7. Re. point 7 above, it would be useful if someone could collate information on the collections already held by Welsh and other nearby botanic gardens so that they could be 'crossed off' the list of species needing action, and then circulate the list of species still requiring attention. JG and NdV agreed that they would attempt this. Picton Castle may have some species.
8. MJ pointed out that PlantNetwork will look into finding funding for someone to go to Treborth and other gardens, particularly those BSBI VC recorders with an interest in growing plants. This personal approach would be likely to collate a lot of information that people might otherwise not have the time to write down.