



PlantNetwork

**The Plant Collections Network
of Britain & Ireland**

**Teaching and Research in Gardens
Training Day**

March 20th 2015
University of Leicester Botanic Garden

www.plantnetwork.org

Programme

9.30am Registration opens

10.00 am Welcome

10.05 - 10.35am *Research at the University of Leicester Botanic Garden*

Dr Richard Gornall Director of Botanic Garden & Curator of the Herbarium, University of Leicester Botanic Garden

10.35- 11.05am *Engaging with a wider education network – beyond school visits*

Ruth Godfrey Education Officer University of Leicester Botanic Garden

11.05 – 11.25 Discussion and questions

11.25 – 11.45am Coffee break

11.45 – 1.00 pm Tour

1.00 – 1.45 Lunch

1.45 – 2.15 *Offering RHS qualifications in the garden – benefits of becoming an approved centre*

Philip Windle, Head of Qualifications Standards and Compliance, RHS

2.15 – 2.45 *Opportunities for gardens to work with OPAL*

Dr David Slawson Director, Open Air Laboratories (OPAL)

2.45 – 3.15 *Observatree, an early warning system for tree health*

Dr Kate Lewthwaite Citizen Science Manager, Woodland Trust

3.15 – 3.45 *Plant Identification classes- engaging with the local botanical community*

Louise Marsh Publicity and Outreach Officer Botanical Society of Britain and Ireland (BSBI)

3.45 – 4 00pm Discussion and questions

4.00pm close

Speakers

Dr Richard Gornall Director of Botanic Garden & Curator of the Herbarium, University of Leicester Botanic Garden.

Richard graduated from University of British Columbia, PhD Botany in 1980 and has been Director of Botanic Garden & Curator of the Herbarium since 1999. Richard teaches on the BSc Biological Sciences .

His research interests: include plant taxonomy, systematics and evolution, with a focus on:

- taxonomic and biosystematic studies of the Saxifragaceae, using morphological, anatomical and molecular data; including floristic accounts for various genera of the Saxifragaceae for the Flora of North America, Flora of China and Flora of Nepal. Currently writing an account of *Saxifraga* for the Flora of the Pan-Himalaya
- studies of gene flow, genetic diversity and evolution in aquatic plants (esp. *Potamogeton* and *Callitriche*)

Ruth Godfrey Education Officer, University of Leicester Botanic Garden.

Ruth Godfrey has been the Education Officer at the University of Leicester Botanic Garden since 2005. She leads a team of teachers that run a wide range of innovative Education programmes for both primary and secondary children at the Botanic Garden and nearby Attenborough Arboretum. Alongside the regular school programmes Ruth has co-ordinated many additional projects at the Botanic Garden bringing in a greater variety of community groups.

Philip Windle, Head of Qualifications Standards and Compliance, Royal Horticultural Society

For the past 8 years, Philip has headed the awarding organisation of the RHS, with responsibility for the delivery of a suite of 11 horticultural qualifications through a network of Approved Centres throughout the UK and Ireland. During this period, he introduced a range of practical horticultural skills qualifications assessed in centres, and also led the awarding organisation through the process of gaining recognition by the qualifications regulator, Ofqual. Previous responsibilities within the RHS have included the management of the Master of Horticulture programme and the RHS Bursaries scheme. Prior to joining the RHS, he was Director of Support and Training for an international software company.

Dr David Slawson, Director, Open Air laboratories (OPAL)

Dr David Slawson is the Director of Open Air Laboratories (OPAL), a citizen science partnership based at Imperial College London. The OPAL network is a UK-wide partnership initiative that inspires communities to discover, enjoy and protect their local environments through citizen science-based activities.

Before joining OPAL Imperial College, David spent 30 years in Defra most recently working in plant health where he managed surveillance and eradication campaigns against plant pest and diseases, most notably *Phytophthora ramorum*. In recent years, David has focussed his interests on engaging with industry and the public to raise their awareness and to help them to adopt practices to reduce the risk of plant pests and pathogens damaging gardens, parks and the wider landscape. This included a secondment to the National Trust, where he produced biosecurity guidance and a poster for the garden community.

Dr Kate Lewthwaite Citizen Science Manager, Woodland Trust

Dr Kate Lewthwaite has worked at the Woodland Trust for the last 11 years, most recently as Citizen Science Manager. She oversees the Woodland Trust's contribution to the multi-partner Observatree project which uses volunteers to help professional scientists monitor and report tree disease. In addition, she manages the long running 'Nature's Calendar' scheme which encourages volunteers to record spring and autumn phenology of trees, shrubs, insects and birds. These records add to a dataset that began in the 17th Century and is now used extensively by scientists and government to monitor the impacts of climate change on wildlife.

Prior to joining the Woodland Trust, Kate spent a short while working in the Widening Participation team at Newcastle University and three years at a science communication company advising on the development of interactive science exhibits.

Kate's degree and PhD are from Durham University where she specialised in plant ecology and environmental change.

Louise Marsh Publicity and Outreach Officer, Botanical Society of Britain and Ireland (BSBI)

Louise is Publicity & Outreach Officer for the Botanical Society of the Britain and Ireland (part-time since 2013), with additional roles including data inputting to the BSBI database and providing editorial assistance to the New Journal of Botany. Active in setting up and administering a local botanical group, and also contributing to the work of existing local nature conservation bodies on a voluntary basis. University of Leicester Herbarium Assistant, (part-time since 2012), with duties including demonstrating and tutoring on Botanic Garden plant identification courses.

PlantNetwork Strategy Education Policy

(2015 draft revision)

PlantNetwork aims to promote and increase the use of plant collections for education and inspire an interest in plants in people of all ages.

Plant collections are a major resource for education about plants, their importance in every aspect of our lives and in the maintenance of the biological environment. Issues that can be explored through plant collections and the gardens and historic landscapes they are cultivated within may include the public understanding of science, plant conservation and sustainability, garden history and social well-being. In addition to this plant collections have a major role to play in inspiring the next generation of horticulturists, field botanists and conservationists.

PlantNetwork will:

- encourage its members to establish sound education policies for the use of their collections ·
- encourage the use of plant collections for education and engagement
- encourage collection holders to employ trained education staff, use staff expertise and develop communication skills among all members of staff
- seek to draw on the skills and best practice of other bodies, such as museums and galleries, as necessary, in developing educational programmes and activities, including interpretation
- continue to liaise with the Botanic Gardens Education Network

The PlantNetwork Strategy Document is currently undergoing revision. We would welcome feedback on current Policy documents. The current Strategy is available on our website.

www.plantnetwork.org/strategic-plans

Resources

RHS Qualifications

For information about RHS qualifications

<https://www.rhs.org.uk/education-learning/qualifications-and-training/rhs-qualifications>

For information about becoming an RHS Approved Centre

<https://www.rhs.org.uk/education-learning/qualifications-and-training/rhs-qualifications/approved-centres>

Email: qualifications@rhs.org.uk

Open Air Laboratories

The Open Air Laboratories (OPAL) network is a UK-wide citizen science initiative that allows you to get hands-on with nature, whatever your age, background or level of ability.

OPAL develops activities and resources, including national surveys, which allow you to get closer to your local environment while collecting important scientific data. We also arrange and take part in nature events and workshops around the country.

OPAL are funded by the Big Lottery Fund and began in 2007, operating across England. Since January 2014, OPAL has expanded to Scotland, Wales and Northern Ireland.

The OPAL network is led by Imperial College London and includes leading museums, universities and environmental organisations across the UK.

<http://opalexplornature.org>

Observatree

The Observatree project aims to not only detect the occurrence of tree pests and diseases earlier, but encourage people to learn more about tree health. We will be encouraging everyone, from members of the public to foresters, to act as citizen scientists to report sightings of pests and diseases that are not usually found in the UK. We need more eyes on the ground looking out for these pests and diseases to ensure that they are spotted as early as possible. The project will use a network of 200 specialist volunteers who will help to verify reports of these pests and diseases. They will be trained over the four years to help analyse the data and will undertake survey work.

Observatree aims to protect the UK's trees, woods and forests from harmful pests and diseases – existing or new. The earlier we spot these, the quicker we can try to eliminate them or help control the spread. Observatree is a project to harness people's love of trees to provide that early warning.

The project will:

- Focus on high priority pests and disease
- Encourage people to report sightings using the TreeAlert tool.
- Identify the most significant reports
- Share best practice

<http://www.observatree.org.uk>

Botanical Society of Britain and Ireland

Our mission is to advance the study and enjoyment of wild plants and support their conservation in Britain and Ireland. We do this through:

- Providing a forum for botanists to communicate and exchange ideas through meetings, conferences, publications and electronic media

- Training the next generation of botanists through courses, field meetings, grants and educational materials
- Supporting research and study of plants in Britain and Ireland through our network of recorders, the work of our staff, access to data, and through grants
- Working with people in other organisations and other countries to encourage communication and collaboration in pursuit of shared objectives.

http://bsbi.org.uk/about_bsbi.html

Botanic Gardens Conservation International

BGCI provides a global voice for all botanic gardens, championing and celebrating their inspiring work. We are the world's largest plant conservation network, open to all.

www.bgci.org

International Diploma in Botanic Garden Education

Botanic Gardens Conservation International (BGCI) and the Royal Botanic Gardens, Kew offer a five-week course in botanic garden education every two years.

The latest course took place between 12th May -13th June, 2014 and offered training about botanic garden education in all its forms to nine professionals from botanic gardens in China, Canada, Oman, Latvia, Greece and Norway, who represent novice educators, but also experienced curators, horticulturalists, teachers and plant scientists. Find out more.

The next course will run in spring/summer 2016.

Dr Pat Griggs, International Diploma in Botanic Garden Education
P.Griggs@kew.org

Global Strategy for Plant Conservation

The Global Strategy for Plant Conservation (GSPC) outlines a series of targets through which the ultimate aim of halting the current and continuing loss of plant diversity can be achieved. The strategy provides a framework to 'facilitate harmony between existing initiatives aimed at plant conservation, to identify gaps where new initiatives are required, and to promote mobilisation of the necessary resources.' Its mission is to 'be a tool to enhance the ecosystem approach for the conservation and sustainable use of biodiversity and focus on the vital role of plants in the structure and functioning of ecological systems' (GSPC 2002). The framework outlines 16 targets to achieve its aims.

The role of education

Target 14 of the strategy involves 'Promoting education and public awareness about plant diversity: The importance of plant diversity and the need for its conservation incorporated into communication, educational and public-awareness programmes'.

Engaging with ex situ plant conservation

Target 8 of the strategy involves 'At least 75 per cent of threatened plant species in ex situ collections, preferably in the country of origin, and at least 20 per cent available for recovery and restoration programmes'.

A list of the UK target 8 species and ways of getting involved in your garden are on our PlantNetwork website. Target 8 offers many opportunities to be part of global plant conservation and engage people with actual conservation programmes .

For updated information about GSPC

<http://www.plants2020.net>

Redefining the role of botanic gardens: towards a new social purpose

The report, 'Redefining the role of botanic gardens: towards a new social purpose' (PDF, 146 pages) was published in April 2010. An Executive Summary (PDF, 16 pages) was published in December 2010.

This research, the first of its kind, was commissioned by BGCI and funded by the Calouste Gulbenkian Foundation. Conducted by the Research Centre for Museums and Galleries (RCMG), School of Museum Studies, University of Leicester, it sets out to investigate the social role of botanic gardens in the UK.

Botanic gardens, like many organisations in the cultural sector, are concerned with being more socially relevant, working with their communities and addressing contemporary concerns like climate change. However, whilst much good work is being done there is the potential for botanic gardens to do much more and this will require in-depth reflective work. This report argues for a broader social role of botanic gardens. It begins this process by examining the current situation and providing a background for dialogue and discussion.

Through this report, BGCI aims to challenge traditional thought patterns in botanic gardens and support them to examine their philosophies, values and practices so that they can develop their potential as positive contributors to social and environmental awareness and change. This is critical if they are to successfully articulate their relevance to wider society.

The research identified seven key areas where botanic gardens - at different levels of motivation and sophistication - were concerned with being more socially relevant:

- Broadening audiences (audience development)
- Enhancing relevance to communities (meeting the needs of communities)
- Education
- Research which has socio economic impact locally and globally

- Contributing to public (and political) debates on the environment
- Modelling sustainable behaviour
- Actively changing attitudes and behaviour.

A wide range of examples and case studies in relation to each of these points are provided in the full report, alongside chapters on change inhibitors and forces for change.

The Executive Summary and full report are available to download from www.bgci.org/education/socinc

Botanic Gardens Education Network (BGEN)

BGEN promotes and advances the delivery of education in member organisations. BGEN offers specialist support and training network for professionals working in education related to plants and the natural world. The network has more than 200 members, most of whom are educators in botanic gardens and other centres of environmental education in the UK and Ireland. Anyone is welcome to join BGEN, though as a support network, those likely to gain the most benefit are professional biodiversity educators within the UK.

<http://bgen.org.uk>

RBGE Certificate in Practical Horticulture

The Royal Botanic Garden Edinburgh (RBGE) Certificate in Practical Horticulture (CPH) is a unique course that focuses on the essential skills needed by budding horticulturalists today.

Building on over 100 years of professional horticulture training at the garden, this compact course has been designed to give students a solid grounding in horticultural techniques. The course has been endorsed by Botanic Gardens Conservation International (BGCI) and the support of The Stanley Smith (UK) Horticultural Trust.

CPH students learn key practical skills, taught by experienced and enthusiastic horticulturalists.

As well as being delivered at RBGE, the course is being taught in partner organisations in the UK (The Eden Project, Cornwall) and abroad (Nezahat Gökyiğit Botanic Garden, Istanbul and the Oman Botanic Garden, Muscat). This is possible through the use of concise and flexible course materials that can be tailored to the needs of different organisations. To ensure that quality and standards are maintained RBGE administers the assessment, qualification and verification guidelines.

To find out how we can bring the CPH course to your institution, please contact the Education Department, Royal Botanic Garden Edinburgh.

education@rbge.org.uk

For other learning resources see <http://www.rbge.org.uk/education/home>

Council for Learning Outside the Classroom (CLOtC)

The Council for Learning Outside the Classroom is a registered charity existing to champion learning outside the classroom (LOtC).

2We believe that every child should be given the opportunity to experience life and lessons beyond the classroom walls as a regular part of growing up. These experiences expand the horizons of young people, opening their eyes to the wonders of areas such as art, heritage, culture, adventure and the natural world. We ensure that more young people have access to these life changing educational experiences by providing support on the ground, facilitating the sharing of best practice and promoting the benefits of LOtC in raising attainment and aspirations, reducing truancy and re-motivating those who are disengaged from their education”.

The CLOtC aims are:

- Influencing and challenging learning outside the classroom policy and practice
- Raising the profile of learning outside the classroom and promoting the benefits
- Providing support for education and LOtC professionals, aiming for good quality learning outside the classroom that meets the needs of young people.

More information and activity packs and resources are available from

<http://www.lotc.org.uk>

Inspiring Learning for All (ILFA)

The Inspiring Learning Framework is built on a broad and inclusive definition of learning, adapted from the Campaign for Learning.

ILFA is a self-help improvement framework for museums, libraries and archives that supports you to review and improve performance. It can help develop more effective learning opportunities and create learning environments by

- Helping to understand how to achieve best practice in supporting learning
- Helping to identify how your museum, library or archive supports learning
- Helping to plan and develop effective learning partnerships with other teams and organisations

Generic Learning Outcomes (GLOs)

There are five Generic Learning Outcomes which describe what and how people learn in museums, libraries and archives.



Generic Social Outcomes (GSOs)

There are three Generic Social Outcomes which demonstrate how museums, libraries and archives support wider community benefits.



<http://inspiringlearningforall.gov.uk>

Notes

