Conservation, Preservation and Demonstration: the What, Why and How of National Plant Collections

26th September 2019
Upton House and Gardens

In conjunction with:

@PlantNetwork    @PlantHeritage
PlantNetwork is a charity and membership organisation that provides training and network support to gardens and gardeners throughout Britain and Ireland.

Through its work, PlantNetwork contributes to maintaining and developing the horticultural and plant conservation skills for which our gardens are renowned. The goals of PlantNetwork are:

- Supporting gardens and plant collections for conservation, knowledge and enjoyment.
- Providing networking and professional development for the plant network community.

Since being formed in 1996, PlantNetwork has brought together both institutional and private members and now represents over 300 gardens including all the major public horticultural and botanic gardens in the countries.

Chair: Simon Toomer
Vice-Chair: Faye Tuffrey
Treasurer: Christopher Weddell
Co-Treasurer: Robert Brett
Hon President: Dr Matthew Jebb

Contact details
Coordinator: Rebecca Slack
PlantNetwork, Unit 20231, PO Box 15113, Birmingham B2 2NJ

Email: office@plantnetwork.org
Telephone: +44 (0)1535 382214
Twitter: @PlantNetwork
facebook.com/plantnetwork/
linkedin.com/company/plantnetwork

https://plantnetwork.org/

PlantNetwork: The Plant Collections Network of Britain and Ireland is a company limited by guarantee, registered in England 3777793; registered charity 1081747.
Registered office Beaver House, 23-38 Hythe Bridge Street, Oxford, OX1 2EP
Introduction
A plant collection is simply a collection of plants. However, the Plant Heritage National Plant Collection® scheme supports individuals or organisations to document, develop and preserve a comprehensive collection of one group of plants in trust for the future. Such collections can be used to conserve rare or threatened plants, preserve heritage cultivars or to demonstrate the range of plants in a particular genus or species.

This Plant Heritage and PlantNetwork training day provides a toolkit for anyone thinking of starting a National Plant Collection, or anyone involved in managing and maintaining a National Plant Collection. It looks at the practical issues and implications of plant collections, and the support available.

For more information about Upton House and Gardens, which holds the National Plant Collections of *Symphyotrichum cordifolius*, *Symphyotrichum ericoides* and *Aster amellus*, go to: https://www.nationaltrust.org.uk/pton-house-and-gardens
<table>
<thead>
<tr>
<th>Time</th>
<th>Event Description</th>
<th>Speaker(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>From 09:30</td>
<td>Registration opens</td>
<td></td>
</tr>
<tr>
<td>10:00 - 10:10</td>
<td>Welcome and outline for day</td>
<td>PlantNetwork &amp; Plant Heritage</td>
</tr>
<tr>
<td>10:10 - 10:40</td>
<td>Plant Heritage and the National Plant Collection Scheme</td>
<td>Vicki Cooke and Lucy Pitman, Plant Heritage</td>
</tr>
<tr>
<td>10:40 – 11:10</td>
<td>The art of correct recording</td>
<td>Rupert Wilson, Principle Data Manager, Royal Horticultural Society</td>
</tr>
<tr>
<td>11:10 – 11:40</td>
<td>Curation of plant collections</td>
<td>Barry Clarke, Botanist/ Plant Records Officer, The Sir Harold Hillier Gardens</td>
</tr>
<tr>
<td>11:40 - 12:15</td>
<td>Lightning Talks &amp; Round-table Discussion</td>
<td>Participants are invited to present and/or discuss any issues that they have</td>
</tr>
<tr>
<td>12:15 – 13:00</td>
<td>LUNCH &amp; networking</td>
<td></td>
</tr>
<tr>
<td>13:00 – 14:15</td>
<td>Tour of Aster &amp; Symphyotrichum collection at Upton House</td>
<td>Heather Aston, Head Gardener, Upton House and Gardens</td>
</tr>
<tr>
<td>14:15 – 14:30</td>
<td>Case study 2: practical issues and implications of a NPC</td>
<td>Speaker TBC</td>
</tr>
<tr>
<td>14:30 – 15:00</td>
<td>Tea/coffee &amp; individual surgery sessions</td>
<td>Informal discussions over refreshments</td>
</tr>
<tr>
<td>Time</td>
<td>Topic</td>
<td>Speaker</td>
</tr>
<tr>
<td>--------------</td>
<td>----------------------------------------------------------------------</td>
<td>------------------------------------------------------------------------</td>
</tr>
<tr>
<td>15:00 – 15:30</td>
<td>Why bother with a plant collection?</td>
<td>Stephen Herrington, Head Gardener, Leonardslee Lakes and Gardens</td>
</tr>
<tr>
<td>15:30 – 16:00</td>
<td>From policy to process – practical management</td>
<td>Will Ritchie, Curator, National Botanic Garden of Wales</td>
</tr>
<tr>
<td>16:00 – 16:30</td>
<td>The importance of cultivated plant diversity and its conservation in relation to the Global Plant Conservation Strategy, Nagoya &amp; ABS</td>
<td>John David, Head of Horticultural Taxonomy, Royal Horticultural Society</td>
</tr>
<tr>
<td>16:30</td>
<td>Close</td>
<td></td>
</tr>
</tbody>
</table>
Speaker information

Plant Collections Toolkit

Vicki Cooke

I joined Plant Heritage as the Conservation Manager in January 2019. With a background in practical horticulture, I have strong interests in heritage and conservation. Spending the last 5 years setting up and running the walled kitchen garden at Hampton Court Palace gave me an appreciation of working in historic environments and the joy of researching plants to grow within them. Before that, I worked in the National Collection of Heritage Vegetables, as the collection co-ordinator for Garden Organic’s Heritage Seed Library.

Lucy Pitman

I work as Plant Conservation Officer at Plant Heritage. Joining Plant Heritage in 2015, I am responsible for supporting the National Collection holders, managing the nationwide network of local and regional Collections Coordinators and coordinate the Plant Guardian® scheme for Plant Heritage members.

I have long been involved with the conservation of plants and gardens, studying at Pershore and Wisley, working in horticulture (Hiller Gardens, garden design and renovation) for over 30 years. I am passionate about the need to protect and conserve the valuable legacy of generations of plantmen and gardeners and write a blog – Stories of Rare Plants, and
have been involved in the conservation of Walled Kitchen Gardens since the early 2000s. I work to encourage and educate people of all backgrounds and ages to be actively involved in plant conservation.

Rupert Wilson

I am Principal Data Manager, Horticultural Information & Advice at the Royal Horticultural Society. With thirty years experience handling plant information I still get a buzz working in this rich environment.

Following my first degree in Botany I spent twelve years developing the collections management system at Plant Sciences in the University of Reading and was also lucky enough to go plant collecting in North Africa. I moved to horticulture in 2001 when I joined the RHS and have since been cultivating the extensive knowledge reserves held by the Society. I lead a team whose diverse roles include the upkeep of the plant records at Wisley, compilation of the RHS Plant Finder, providing training and first line support of the RHS Horticultural Database and ensuring consistency in the data held and publications from across Science.

Outside work my hobbies include filming, gardening and tending to my growing collection of Raspberry Pi’s. Recently I’ve become a passionate advocate for Electric Vehicles and renewable energy.
Barry Clarke
My role is botanist and plant records officer for the Hillier Gardens where I have been working for almost 18 years. I was a career changer and turned to horticulture in my late twenties after a life on the stage as a classical ballet dancer. I am also the Gardens student coordinator and am responsible for the 12 month student training programme, a practical gardening course which includes the plant sciences and plant identification skills.

I oversee the Gardens 14 National Plant Collections, taking regular surveys and collating information and am responsible for the propagation and sharing of plant material. I am constantly working to build the collections from searching nurseries and gardens as well as collecting from the wild, when possible. I have personally been a National Plant Collection holder since 2004 and hold 5 Collections. *Asclepias* including *Gomphocarpus*, *Calycanthus*, *Lobelia* species, *Roscoea* and *Rubus*. I am a specialist in *Rubus* species and have a National collection of over 250 species. I have had exhibits and the RHS shows at Chelsea, Hampton Court and Westminster. I have had an exhibit at the Hampton Court Flower show for the past 15 years, achieving several Gold Medals. I am a part time advisor for the RHS and attend various shows. I have been on several research and collection trips to China, Taiwan, Japan and South Africa.

Notes:
Practical Implications and Case Studies

Heather Aston
I have worked in three National Trust gardens, starting my career in Cragside in Northumberland before heading down to Somerset to lead the team as Head Gardener at Montacute House. More recently, I moved back to the Cotswolds to lead the team as Head Gardener at Upton House & Gardens and Farnborough Hall, with responsibility for Upton’s National Aster Collection (see below).

Stephen Herrington
I have just taken up a new role as Head Gardener at Leonardslee Lakes and Gardens in West Sussex. Leonardslee is currently undergoing major restoration works and improvements to its 240 acres of woodland gardens. The gardens are renowned for its rare and unusual plant collections, especially rhododendrons, magnolias, camellias and conifers.

From 2014 until recently I worked for the National Trust, firstly as Head Gardener at Nymans and then as Programme Lead for the Gardens Programme for London and the South East, a pilot project looking at
objectives such as member retention, all year round gardening offer and investing in our gardeners. Previously I was Curator of Glasgow Botanic Gardens where I carried out extensive improvements to the tree collection with wild origin material and implemented upgrading of the plant records system. From 2005 to 2011 I worked at the Royal Botanic Garden Edinburgh and I trained at Tresco Abbey Gardens, RHS Garden Wisley and also have a BSc (Hons) in Horticulture and Plantsmanship awarded by Glasgow University.

I have been fortunate to go on several plant collecting/conservation expeditions over my career, most recently a National Trust led expedition to Tasmania in January. While at Edinburgh I carried out research for the International Conifer Conservation Programme (ICCP) in the Solomon Islands and the Azores.

As well as being a trustee for PlantNetwork I have been involved with Plant Heritage for many years, firstly in Scotland then as a committee member for the Sussex Group. I am also a board member for the United Kingdom Botanic Gardens and Arboreta Consortium.

Will Ritchie

I am the Curator at the National Botanic Garden of Wales with responsibilities for horticulture, development of the living collections and Waun Las National Nature Reserve. As a member of the senior management team I am also involved in the delivery of Growing the Future, a five-year programme which aims to promote and develop horticulture in Wales by providing training and knowledge transfer opportunities. I was previously Curator at Glasgow
Botanic Gardens and have worked in botanic gardens and universities in the United Kingdom, United States and Oman.

I trained at the Royal Botanic Garden Edinburgh and gained a BSc (Hons) in Horticulture with Plantsmanship. In 2012, I completed a MSc programme in Horticulture at the University of Arkansas, specialising in breeding and taxonomy.

Links relevant to presentation:
https://botanicgarden.wales/getting-core-welsh-heritage-orchard/

**John David**
John David is RHS Head of Horticultural Taxonomy responsible for botanical research, the herbarium and cultivar registration. He convenes the working group on the Nagoya Protocol and Horticulture and is involved with the Defra stakeholder forums for CITES and Access and Benefit Sharing. He also co-edited the Growing Heritage Action Plan (2007) which led to the setting up of the Threatened Plant Project and has actively supported the role of cultivated plant conservation in delivering the Global Strategy for Plant Conservation.

**Notes:**
Plant Heritage

Formerly known as the National Council for the Conservation of Plants and Gardens (NCCPG), the organization adopted the name of Plant Heritage in 2009.

It was founded as a registered charity in 1978 to combine the talents of botanists, horticulturalists and conservationists with the dedication of keen amateur and professional gardeners. Plant Heritage's aims are to:

- encourage the propagation and conservation of cultivated plants in the British Isles;
- encourage and conduct research into cultivated plants, their origins, their historical and cultural importance and their environments; and,
- encourage the education of the public in cultivated plant conservation.

Through its membership and the National Collection Holders, Plant Heritage seeks to rediscover and reintroduce cultivated plants by encouraging their propagation and distribution to prevent the loss of the genetic diversity of cultivated plants. Plant Heritage works closely with other conservation bodies as well as botanic gardens, The National Trust, The National Trust for Scotland, English Heritage, The Royal Horticultural Society and many specialist horticultural societies.

Plant Heritage operates a number of initiatives aimed at increasing the range and diversity of plant grown in the UK:

- Supports 600 National Plant Collections® around the UK;
- Operates the Threatened Plants Programme to identify garden-worthy plants with the highest risk of extinction;
- Initiated the Plant Guardian Scheme to save rare plants;
- Supports networks of local groups and operates a plant exchange

Read more at: [https://www.nccpg.com/](https://www.nccpg.com/)
National Plant Collection® Scheme

What is a National Plant Collection®?
Plant Heritage's mission is to conserve, grow, propagate, document and make available the amazing resource of cultivated plants that exists in the UK.

The main conservation approach is the Plant Heritage National Plant Collection® scheme where individuals or organisations undertake to document, develop and preserve a comprehensive collection of one group of plants in trust for the future. Most of the collections are based around a related group, for example a collection of oaks or daffodils. This allows the scheme to develop systematic coverage of cultivated plants in the UK and Ireland.

All Collections are categorised into one of three types:

- Historic: a collection of plants that has been grown in British or Irish gardens, with a connection defined by a common history or association, or by importance to society;
- Horticultural: collections of garden plants of aesthetic (foliage, scent etc.) or functional (food, medicine etc.) value; and,
- Reference: a group of plants important for taxonomic (naming) reference and research (for studying same taxa in one setting).

The Missing Genera campaign aims to highlight several much-loved garden plants that are not currently in a Collection. Plant Heritage want to encourage people with a passion for plants to bring together a National Plant Collection of their own. The long list can be downloaded from the Plant Heritage ‘What are Missing Genera?’ website and includes Armeria, Cosmos, Echinacea, Echinops, Helianthemum, Knautia, Papaver, Pittosporum, Verbascum and Veronica.

There are over 630 National Plant Collections® in the UK, Ireland and Channel Islands. Search the collections at https://www.nccpg.com/National-Collections/Collection-Results.aspx
**Start a Collection**
Are you interested in a particular genus or group of plants? Would you like to contribute to preserving the diversity of garden plants in the UK for future generations? Become a National Collection Holder!

Follow these five steps:
1) Fill in a simple proposal form and send it back to Plant Heritage. At this stage you do not need to have a large collection of plants. An information sheet is available to help you complete the form.

2) Get in touch with your local coordinator who will be able to help you through the process, or with our friendly Conservation team. Contact information is available from the Plant Heritage website.

3) The Proposal is passed on to our Plant Conservation Committee who will provide advice, direction and contacts.

4) Once the collection is ready you will be able to fill an application form, which gives a full picture of the collection: types of labels and records, local climate, facilities, contacts with other growers, research undertaken, etc.

5) Your local coordinator will visit and review your collection so that it can be presented a second time to the Plant Conservation Committee, who will decide to award you National Collection status and an entry in the Directory (online and print).

For all forms (proposal and application), information sheets, contact information and other links, please see: [https://www.nccpg.com/National-Collections/How-to-Start-a-Collection.aspx](https://www.nccpg.com/National-Collections/How-to-Start-a-Collection.aspx)
Upton’s National Aster Collection

Upton House and Gardens has grown and looked after a National Collection of Aster and Symphyotrichum species since 1985. Three particularly important species are grown: Aster amellus, Symphyotrichum cordifolius and Symphyotrichum ericoides, and nearly 100 different cultivars across the three species.

A flourishing collection
Miss Elizabeth Allen propagated and hybridised asters from the 1940s for more than 50 years and grew a large range of cultivars. These asters were then distributed between several gardens including Upton, where it was finally recognised as a National Plant Collection®.

Asters at Upton
The collection is planted on the west side of the kitchen garden in three rows so that the plants can be viewed whilst they are in flower. The best cultivars are also planted in a traditional mixed border together with other late flowering plants to give autumn colour, structure and an important food source for pollen-seeking invertebrates. The collection is at its best in late September.

Aster amellus
Most were raised in the early 20th century with the introduction of ‘King George’ in 1914, one of this species most popular cultivars. While purple-blue flowers predominate, there are pink-toned cultivars, such as A. ‘Jacqueline Genebrier’. A. amellus cultivars need frequent regeneration by lifting and dividing the clumps every few years.

Symphyotrichum cordifolius
The leaves are thin, dull green, slightly hairy and heart shaped. The flowers vary from pale violet-blue, to lavender and almost white, on thin, wiry stems and short branches forming graceful spires. The best time to divide the plants is when the new shoots start to show above the ground. They will tolerate light shade and are resistant to mildew.
Aster amellus ‘Empress’  S. cordifolius ‘Blutenregen’

**Symphyotrichum ericoides**
This species will tolerate a wide range of soils and summer droughts. They begin to flower in mid-autumn with many cultivars still looking good almost into winter, with softly coloured flowers on branching stems that arch up from healthy-looking mounds of foliage. ‘Esther’ is one of the most spectacular cultivars, with pale pink-toned-purple flowers, sometimes so freely borne that the plants need support.

The mixed border in early autumn, showing the best asters in the collection.

Text adapted from: https://www.nationaltrust.org.uk/upton-house-and-gardens/features/uptons-national-aster-collection

*All images copyright National Trust.*
Notes and contacts
Will this meeting change how you manage your garden? If so, we would like to hear from you. Let us know what you are planning to do: office@plantnetwork.org or @PlantNetwork.

#PlantNetwork
PlantNetwork Events 2020

PlantNetwork Annual Conference and AGM with Sibbaldia: Promoting Horticultural Excellence
RBGE, 22-23 April 2020

Training Days

- Winter Gardens
- Herbarium Techniques
- Glasshouse Forum
- Plant Records Group
- Exotic Gardening
- Tourism & Gardens
- Tree Forum
- Plant Health

And introducing…. The Sustainability Programme with in-depth analysis of topical issues concerning growing media, plastics, herbicides, water use and many more issues.

If you have suggestions for training days or discussion topics, or would like to host an event, please contact us.
PlantNetwork Events 2019

Climate Change & Gardens: PlantNetwork Annual Conference and AGM
08-09 May, Abbotsbury Subtropical Gardens, Dorset.

Training days:

**Plant Records**, 15 May, Chester Zoo.

**Arboreta and Woodlands: Tree Forum at RHS Rosemoor**, 04 June, RHS Rosemoor, Devon.

**Garden Masterplans and Management**, 12 September, Trewthen Gardens, Cornwall.


**Play & Engagement in Gardens**, 09 October, Walmer Castle & Gardens, Kent.


More information and online booking at the PlantNetwork website:

[www.plantnetwork.org](http://www.plantnetwork.org)