

# Plant Records Meeting 2022 – summary of event

Originally due to take place in May 2020, the Plant Records Meeting at Shuttleworth House and Swiss Garden eventually took place on 28 September 2022. This meeting focused on the wider application of plant records and hence some of the key considerations that a plant records officer might need to consider when gathering data to input into their database.

As with all Plant Records Meetings, this event was primarily an information sharing and networking event, allowing those working in plant records to discuss the latest topics, issues of concern or simply share experiences. They are all informal sessions, allowing for interaction between speakers and delegates throughout the event.

## Plant records – why, what and how?

Rupert Wilson, Principal Data Manager with the Royal Horticultural Society, started the meeting by highlighting some of the questions that a plant records officer might be approached with in any organisation. Examples included specific questions relating to the collection for use in social media posts (e.g. numbers of a particular taxa, historical data on plants in the collection, links to celebrities etc.), plant health issues including working towards biosecurity accreditations, rare or signature plant information, and so much more! To be able to answer such questions, data are needed and this is informed by what is recorded. This might be what the plant is, who supplied the plant to the garden and in what form (e.g. seed, mature plant etc.), origin (of individual plant as well as of taxa), and time line of plant (when it arrived and key activities since then e.g. planting out, propagation, relocations etc.). From when the plant arrives to when it is officially recorded as dead or removed from the garden, each important 'interaction' with the plant needs to be recorded including P&D checks, weather damage, propagation, pruning and even spraying. The system used to record all this information must be fit for purpose, easy to use by all who need to use it or with adequate training and support, be able to link to external databases if required (such as Plant Heritage, BGCI, TROBI etc.), link to internal systems for label printing, interpretation, planning etc. Linking to national/international plant health surveillance, conservation programmes, education and outreach, biodiversity mapping, research programmes etc. can all be done through a suitable plant records system – ensuring that collections are well curated. After all, if it is uncertain what is in a collection (and where it is in the collection), it is difficult to curate a garden, check for pests and diseases, propagate if rare or unusual, use in garden interpretation, contribute to ex situ conservation or research projects – and so much more. Records = preparedness!

Rupert also highlighted the importance of plant records in the RHS for the production of the Find A Plant publication and its online and publicly available plant profiles which are widely used by the public as well as other gardens, nurseries and the wider horticultural sector.

## Plant records at the National Trust – and further afield

Alison Crook, National Curator of Living Collections, provided an overview of how plant records are managed at the National Trust. With over 220 gardens at different scales, sizes and national importance, the records system has to be dynamic and resilient. From significant collections at gardens such as Bodnant which has many wild-collected specimens to gardens with one or two signature or historically significant plants, such as Isaac Newton's apple tree, plant records serve many different purposes for the National Trust and often are used in different ways to those systems in botanic gardens. It is very much about story-telling, the history of a garden or a link to a particular person or period of time. As well as the gardens, the NT has over 200 parks, more than 650 gardeners and thousands of volunteers working with 32,000 taxa and a growing number of accessions (220,000 at last count). With these numbers, a record system is needed to understand what there is to care for, what is historically, horticulturally or botanically important, and how to best share this information with NT members. Experts are needed to identify the living collection specimens that might have gone unreported and also to help monitor the health of the collections as a result of climate change, new pests and disease etc. Plant records will be an important tool in assessing the long-term care of collections and mapping potential movement between properties to ensure rare plants are conserved.

Currently, the National Trust uses five different living collections management systems including Floria and IrisBG. There are over 500 users across the trust with access to these systems but none are yet linked to publicly accessible information. There is a need to further build relationships between garden teams and plant records to ensure that records are kept up-to-date and relevant to the teams who are using them.

Alison ended the presentation by showing the different criteria applied to plants in the National Trust – and hence determining the records required for that plant (namely landscape value; historical or cultural value; horticultural value; wild plant conservation; and/or, nature conservation). Criteria are also applied to plant collections: dispersed collections, large garden collection; small garden collection; specific collection (all decreasing size).

#### [“A rose by any other name....” – the importance of common names in plant records](#)

Dawn Moore, Plant Records Officer at the National Botanic Garden of Wales, introduced the role of common names in plant records. Stressing that scientific nomenclature provides a worldwide system of classification that removes much of the earlier confusion regarding plant naming, it is not without problems as DNA sequencing reveals new plant relationships leading to new scientific names. Dawn highlighted Asters as one example of this! Nevertheless, as many plants don't have common names whilst others have a multitude of common names, this system does provide a consistent approach to plant naming and identification. Common names still have a role as they have historical and cultural value as well as being seen as easier to understand by garden visitors/non-horticulturists.

The trilingual naming of plants at the National Botanic Garden of Wales was highlighted by Dawn, with common names in English and Welsh provided on plant labels with the scientific name. The plant records database records as many common names as can be identified but the one used on the label is the one perceived as more commonly used or recognised. The recent introduction of QR codes on labels will allow visitors to access more information about the plant, including more information of the names.

Following Dawn's presentation, there was a short workshop to discuss how delegates use common names in their plant records and then apply these in garden labels and other interpretation. A summary of some of the items discussed by delegates is provided below.

### Workshop summary

Delegates were asked to consider how common names are used in their records and list issues/problems or benefits associated with their use (if used at all). Responses included:

- The main issue was: there are too many common names [for many plants] so which do I pick for use in garden labels? Some respondents suggest that they use the one listed at the top of the record as this is likely to be the most commonly used name while others use Google to determine popularity of name to use.
- Common names are used to assist search functions in the public domain so it is important to consider as many as possible in records to ensure searches are successful.
- Use of country of origin common names e.g. Chinese character, in labels/interpretation but there is a need to check these for accuracy and to determine if there are other common names in country of origin.
- Inform the public about how plants are named and labelled in the garden (website/interpretation board) to avoid conflict and confusion arising from common name choice.
- Does provision of common names enhance the visitor experience? Evidence is needed that common names are useful to the visitor.
- QR codes might save space on labels but as 20% (sic) of people don't have a mobile phone, QR code use is not inclusive. [NB. ONS indicates that smartphone use in the UK might be >90% adults].
- Depends on the audience e.g. use of local dialect/language not relevant if lots of international visitors but can demonstrate local uses and cultural heritage, or help to make the plant memorable to visitors ['Is 'sticky willy' or *Galium aparine* more memorable?]

### Persephone: Wider application of plant records at Plant Heritage

Dr Penny Ross, Project Manager for the development of the new iteration of Persephone and Liz Edwards, Plant Conservation Officer, provided an overview of the plant records work undertaken by Plant Heritage. With the responsibility for managing the records of hundreds of National Collections in the UK and Ireland, Plant Heritage has sought to bring all the records into one searchable database. The online database currently holds records of 280 National Collections, covering more than 30,000 taxa, with more being added all the time. Persephone is also available for wider use outside Plant Heritage, to record any collection of plants held in gardens etc.

Penny provided a live demonstration of the database during the presentation, showing the range of different permission levels available to users, facilitating collaboration between them. She also showed how use of customised note fields, images and mapping was supporting work on a dispersed collection of *Physocarpus* in the North East. The value of Persephone as an educational tool was also highlighted, showing how horticultural college

students are being introduced to plant records and taxonomic naming through active use of the database.

Liz ended the session with a review of the how the Persephone plant records system supports management of the Plant Guardians conservation scheme. This scheme aims to protect rare & unusual plants not readily available in commerce. Plant Guardians range from having a single plant to over 150 plants, held in a range of environments (including domestic gardens and on windowsills!). This is a collaborative project, sharing images and information via the records system.

Plant Guardians data held on Persephone will shortly be published on the Plant Heritage website via a live link (API) between the database and the Plant Heritage website.



*Figure 1: Images from the day, including all speakers, tour of the Swiss Garden and participants taking part in the workshop.*

### Tour of Swiss Garden

Sissel Dahl, Head Gardener at Swiss Garden, provided a tour of the garden which was created in the 1820s - though there are no records from this time, dating has been sourced through researching the manufacturers of original garden ornaments and ironwork structures. The garden was further embellished by the Shuttleworth family, with the Swiss Cottage at its core, and the garden team are discovering new elements all the time. The Swiss Garden is part of the Shuttleworth Visitor Attraction which also includes the Collection of historic aircraft and motor vehicles, and the Shuttleworth House. The garden was restored in 2014 with National Heritage Lottery funding, and in 2020 joined the RHS's Partner Garden scheme.

### Tremap: new developments

Jonathon Jones OBE, Founder of Tremap, introduced Tremap which was started in 2020 as a mobile databased aimed at collecting data in the field and initially focusing on mapping the

world's trees by non-professionals. Tremap is already a global database of trees, with 15 million records. It will soon be available from all app stores (having been a Beta version until now) with other developments including: development of a desktop interface (for professionals); geofencing options to protect rare or specimen trees/species; more precise geolocation (down to cm rather than metres); development of tours of collections; integration with QR codes. The aim of Tremap is to provide total tree transparency so that any one location will now show the number of trees there are!

#### [Hortis by Botanical Software: When time is of the essence.](#)

Dave Twomey, Product Designer at Botanical Software, provides an update on Hortis, the cloud-based plant records system that can be used on any device and integrates maps, photos and audit logs. Dave emphasised the 10 principles of good design that can be utilised for any designed product or service including plant records. They are: to be innovative; makes a product useful, aesthetically pleasing and understandable; unobtrusive; honest; long-lasting; detailed; environmentally friendly; and uses as little design as possible. Applying these principles to Hortis has simplified mapping of records and integrates images while also allowing all record changes to be tracked in the system and an ability to retrieve/restore deleted data.

#### [IrisBG: Garden Explorer – how plant records enhance visitor engagement.](#)

Laura Murray, GIS Coordinator and Community Outreach Assistant with IrisBG, and Shanna Jones, Community Outreach Assistant with IrisBG and Plant Collections Manager at Cheekwood Botanical Garden, provided a pre-recorded presentation which was sent out to all workshop participants. In the presentation, Laura described how Garden Explorer, part of the IrisBG collections management system, can be used by gardens to engage their visitors during and before/after they visit. Each garden has a profile in Garden Explorer which can be formatted to match the garden's website. Each main page profile includes a text introduction, garden maps or photos and a search for plants in their collection. Interactive maps are also available to allow visitors to search the garden for plant records as are alphabetically arranged lists of plant records: customised maps showing higher resolution (cf. Google maps) can be used. Each plant record that is available to view can include photos, videos and text (with links to more detailed information) as well as location information to allow visitors to visit the plant. Garden Explorer can be used on mobile devices, can be multilingual, social media integrations (especially useful for videos), QR code integration (by IrisBG and linking to Garden Explorer).

Shanna demonstrated how tours can be included on Garden Explorer – often led by garden volunteers. The tours can include descriptions, photos and maps – and non-plant items too such as sculptures. These tours can replicate ones taking place in the garden. Different access levels allow volunteers to have access to create content for Garden Explorer without impacting on the records. Garden Explorer can also be used to engage donors e.g. those wishing to sponsor a bench or tree. It can also be used to show photo opportunities, garden amenities and practical features such as parking. Plants can be grouped in searchable themes such as medicinal or origin location. There are also tools to make text in Garden Explorer more easily formatted to improve readability.

Watch the recording here: <https://vimeo.com/753877434/fd153af8a5>