

Foundation Arboretum Wespelaar Year Report 2015



2015 was another year of progress and growth for the Arboretum and the word “growth” can be taken literally this time. The number of visitors rose from 5.767 in 2014 to an impressive 7.696 in 2015; in other words an increase of 33%! This is largely due to our very successful autumn weekend which brought together 1.340 visitors in just two days.

Thanks to a generous donation of our founder, Philippe de Spoelberch, the Arboretum increased in surface from 15 to 20 ha in 2015. Visitors will not necessarily see this difference on the grounds as we already had these extra 5 ha on loan, but in December of this year the Foundation Arboretum Wespelaar became the actual proprietor of the grounds.

The collections

The **living collections of woody plants** in the Arboretum currently (as of February 10th 2016) contains 4.934 specimens representing 2.250 different taxa (versus 15.909 specimens and 4.787 taxa on the whole of the estate). These numbers include the 628 new accessions on the estate during 2015 of which 211 (or 33,6%) are of documented wild origin. Around 90 plants were removed from the collection as part of an ongoing effort to improve the public perception, aesthetic value and health of the living collection.

Having a perfectly labelled collection is one of the main objectives of the Arboretum. Since 2014 we have significantly increased our efforts and our team continues this **major inventory round** at the Arboretum and the dendrological collections of the surrounding private estates of *Herkenrode* and the *Potager de Wespelaar*. This important and valuable work continued in 2015 and a total of 111 beds have been thoroughly inventoried. During this inventory each plant in a certain bed is localized, its health status is assessed, the identity is verified if possible and/or needed, and the label is placed on a healthy branch clearly visible for our collaborators and visitors.

A very large percentage of our plants (42% in 2015) is obtained through in-house **propagation** by seed and by cuttings. In our ARWESP database a special field is available for each accession where we can indicate that a certain specimen needs to be propagated in that specific year. In 2015 about 40 accessions have been propagated by cuttings; these are mostly plants that are rare and important for the collection or plants that are in bad shape and that we would hate to lose. We are especially focussing on small leaved *Rhododendrons* as these are fairly easy to propagate via cuttings and are an important target group for the collection. Thanks to our new professional facilities and the dedication and efforts of our gardeners, we are again

getting more successful with this vegetative propagation of plants. For grafting however, we continue to work together with propagators who are specialised in this specific horticultural technique.



1. Young seedlings and cuttings of target taxa performing well in the greenhouse. All these plants are of course already labelled at this early stage!

Databases

All Arboretum collections (woody and perennial plants, herbarium, bonsai collection, wood samples, cones and fruit, books and journals) are kept in a database management system which is updated on a daily basis. It is easy to extract and distribute information from this comprehensive database. The catalogue of woody and perennial plants can be downloaded from the Arboretum Wespelaar website and the woody plants information is at the same time available in an on-line searchable database. This information is also shared – by means of a yearly upload of our data – with two other on-line searchable databases. The first one, www.plantcol.be, is a user-friendly interface allowing the visitor to simultaneously search data from nine Belgian living plant collections, including thus those of Arboretum Wespelaar. The second is the PlantSearch database of Botanic Gardens Conservation International (www.bgci.org/plant_search.php) which is a global database of living plants with more than 1.100 contributing institutions, including Arboretum Wespelaar. The PlantSearch database of BGCI gives us the possibility to

identify what taxa at the Arboretum are of conservation concern. We currently have 198 species which are listed in the IUCN Red List of Threatened Species. One species, *Franklinia alatamaha*, is extinct in the wild; three species are critically endangered; 26 species are listed as endangered; 33 species as vulnerable, etc. The full list is available on our website. Moreover, all threatened red list species are also marked in the field with a red tag on the display label and information on these is available at the reception desk.



2. *Franklinia alatamaha* unfortunately extinct in the wild, but thriving at Arboretum Wespelaar

Visitors

Spring of 2015 was exceptionally beautiful and floriferous and cold periods with freezing temperatures were almost absent. This is undoubtedly one of the reasons why we again had a **substantial increase in visitor numbers** from 5.767 in 2014 to 7.696 in 2015! The main reason for this growth in visitor numbers however is with certainty the autumn weekend that we organized on Saturday 24 and Sunday 25 October. For this event we made limited publicity in local magazines and

journals and in specialized media and an announcement was placed on our website and Facebook page. Every hour a free guided tour in Dutch and French was offered to the visitor by our staff and volunteers. We can proudly say that this event was a major success with 1.340 enthusiastic visitors in just two days!



3. Number of visitors to the Arboretum in the period 2011-2015

This increase was of course also observed in the number of individual visitors (4.073), number of groups (87), number of annual tickets for families (280), etc.

We had, as every year, many visits from **specialized groups** both national and international which reflects the importance and impact of the Arboretum Wespelaar in the world of woody ornamental plant collections and plant connoisseurs. Amongst those were plant specialists Ken Cox (*Rhododendron* specialist from Scotland) and Emily Veltjen (PhD student on *Magnolia* from the Caribbean at Ghent University); specialist tree breeders such as Chris Lane and Chris Sanders (UK), Paul Reimer (Canada), Franck Sadrin and Vert'Tige (France), Van den Berk (Holland), Carlos Verhelst and Paul Van Laerhoven (Belgium); specialist photographers (Cédric Pollet); colleagues from other collections such as the gardeners of Utrecht BG (Holland), John Grimshaw (Director Yorkshire Arboretum), Didier Willery (Vastérival, France), Michaël Dreisvagt (Härle

Arboretum, Bonn), Catherine du Roy (Kreftenbroeck Arboretum, Belgium).

An occasional recurring remark from new visitors relates to the **map of the Arboretum** which appears to be difficult to interpret. It is true that indications on the map which seem very unambiguous for us (such as location of the buildings, numbers of the beds, position of the main vista's, etc.) may be less obvious for the first time visitor. We are now collaborating with an illustrator at the Botanic Garden Meise who will help us with the creation of a new map which will be more logical and easier to interpret using different colours and three dimensional watercolour. The new map should become available in 2016.

In this day and age of social media, we must also take into account the **virtual visitor** to the Arboretum! In 2015 our website received 13.570 users (vs. 10.547 in 2014) visiting a total of 70.377 pages with a peak in spring and again in the second half of October. Several members of the team are also active on the Arboretum Wespelaar Facebook page where at least every week several pictures and messages are posted. The number of followers on our Facebook page raised from 330 in 2014 to 858 in 2015.



4. High definition scan of the stem and leaves of *Carpinus fangiana*. This is just one of the almost 13.000 images that are available on the Arboretum Wespelaar website (© Jan De Langhe)

One specific part of the Arboretum website has been expanded considerably. There are now no less than 24 vegetative identification keys for selected woody plants in cultivation in Western Europe, composed by Jan De Langhe, available at our site. Moreover, we have redesigned part of the website to make the accompanying high-definition images more easily accessible as small thumbnails in an alphabetical list of illustrated taxa. There are now almost 13.000 images consultable on the website, making this more and more an inexhaustible source of information and beauty.



5. *Camellia x williamsii* 'Saint Ewe'. Winter flowering trees and shrubs was one of the themes of the botany class for our guides

Education

The substantial rise in visitor numbers is easily accommodated by our group of committed guides, each with their own speciality and background, and we are often highly commended for our excellent guided tours. It is of course important to keep the (botanical) knowledge of our guides at a high standard and for that reason a class is organized on a monthly basis. Some of the subjects that we

studied in 2015 were the identification of species in the genus *Pinus*, from nursery to collection, winter flowering trees and shrubs, lepidote *Rhododendron*, and autumn colours. We also started with an in-depth study of the woody plant specimens per location focussing on identity, nomenclature, morphology, systematics, natural habitat and occurrence, maintenance, background stories, etc. The idea behind this approach is to provide our guides with the necessary background to which they can fall back to if needed or wanted.



6. *Rhododendron augustinii*, was one of the study objects during the BDB study day on lepidote *Rhododendron* organized by Arboretum Wespelaar

On the 22nd of February we organized two lectures for members of the **Belgian Dendrology Society**; one talk by Philippe de Spoelberch had the Flora of the Mountains of Yunnan as subject (in French) and the second talk by Roel Jacobs dealt with the European Champion Tree Forum and their travels and encounters with veteran trees (in Dutch). These lectures were preceded by a guided tour in the Arboretum and the private garden

of Herkenrode focussing on winter flowering shrubs such as *Chimonanthus*, *Hamamelis*, *Rhododendron*, *Sarcococca*, *Camellia* etc.

Two months later we organized a study day on the lepidote *Rhododendrons*. Four talks on biogeography, taxonomy, microscopic features and the cultivation of these most interesting plants were followed by a guided tour through the collections. We were proud to have Kenneth Cox, one of the most distinguished *Rhododendron* expert, plant hunter and grower (Glendoick nursery in Scotland) among our midst.

Sharing knowledge and expertise does not necessarily have to happen in-house and therefore we also offer **talks to third parties**. The director gave a talk on yellow flowering Magnolias for the Dutch Dendrological Society and two talks in the Seattle region (WA, USA) on Arboretum Wespelaar and its history, mission, main objectives, working methods and realizations.

Publications are also very important in getting the message across and we published articles on yellow flowering Magnolias in *The Plantsman*, on Hamamelidaceae in the *International Dendrology Society Yearbook*, a poster on *Picea* at the Eurogard VII congress in Paris, and several other publications in the *Yearbook of the Belgian Dendrology Society*. The Arboretum Wespelaar Year Report has become an interesting document over time and we have made it available on our website since 2013.

Another great success this year was the number of **students and trainees** working at, with or for the Arboretum for a short or longer period of time. Five students and trainees have been very active in 2015 and we wish to thank them for their help and assistance and for bringing new ideas and youthful vivacity to the Arboretum. Two of the students were Belgians (one from the Walloon and one from the Flemish region), two from the U.K. and one student, Giulio Veronese, came from Italy and has in the

meantime found a job as head gardener in Japan.

Administration and contact with authorities

There were three major developments on the administrative level in 2015:

- The **forest management plan** which describes the do's and don'ts regarding the management of the estate grounds (especially the thinning, cutting and planting of trees) over a period of 20 years has been approved by the official authorities. About $\frac{3}{4}$ of the Arboretum was already legally assigned, classified and managed as a park landscape and now the remaining $\frac{1}{4}$ of the Arboretum has been regularised and can now also be managed and developed as such.
- This important step resulted in a considerable **increase in surface** of the Arboretum as we have now become proprietor of this final $\frac{1}{4}$ of the Arboretum thanks to the generous donation by its founder, Philippe de Spoelberch. The total surface of the Arboretum now totals up to 20 ha which is an important size in the heavily populated Flemish part of Belgium, especially as we are located relatively near the capital Brussels.
- The forest management plan deals with all the wooded areas on the estate but some other **spatial planning** is needed (e.g. to create the possibility for the construction of a future pavilion) and the local authorities have started with a so-called spatial realisation plan which will help us with the future management and developments at the Arboretum and the surrounding estates. We hope the draft of this plan will make important progress in 2016.

The Board of Directors of the Foundation welcomed two new members in 2015: Bruno Mariens and Johan Van Biesbroeck.

Services to third parties

Acquiring, compiling and sharing dendrological knowledge and expertise is one of the main goals in the mission statement of Foundation Arboretum Wespelaar. One of our important partners in achieving this objective is the **Belgian Dendrological Society (BDB)** and following was realized in 2015: the director of the Arboretum became member of the Board of the BDB and continues as member of the reading committee of the BDB Yearbook, we organized the study weekend on the lepidote *Rhododendrons*, and the secretariat of the BDB remains one of our tasks. Arboretum Wespelaar also remains the driving force behind the database of **Trees of Belgium (BELTREES)**. This database contains now well over 28.000 living measured trees with 1.232 new accessions or updates in 2015. This year we organized for a second time three meetings (region of Flanders, Wallonia and Brussels) with several of the most important contributors to the database in order to encourage and increase the number of yearly measurements. This will be necessary as plans are being made for the publication of a book on the 50 most important dendrological collections in Belgium.

Another database which is managed and maintained by the Arboretum Wespelaar team is that of the dendrological collections of the private estate **Hemelrijk** at Essen, the property of the de Belder family. In 2014 we have started, with the kind assistance of volunteer Gerlinde Vanderauwera, with a new inventory round of the Hemelrijk collection of woody plants in order to have the main trees and shrubs, if possible, accessed in the database and labelled in the field. This effort will continue in the years to come and we feel privileged to help keep this most important and valuable collection up-to-date and well labelled for the future generations.

The Director of the Arboretum continues his function of secretary of the **Belgian Association of Botanical Gardens and Arboreta** (V.B.T.A.) and of the scientific committee of Foundation Franklinia. He is also active in the follow-up of the projects sponsored by the Arboretum. The Director became member of HORTAX, the Cultivated Plant Taxonomy Group, and participated in the European Plant Taxonomists Forum which

was held in April of this year at the Royal Horticultural Society Garden Wisley, UK.

It is crucial that the Arboretum keeps good and solid contacts with the **local community**. It is therefore with pleasure that we continue to advice the local authority on the management, reconstruction and plantings of the public park in Haacht.



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