# Attending The Dynamic Vision Symposium, exploring BUGA '23 and a visit to Hermannshof Garden

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# Introduction

I am a horticulturist working in Lady Anne's Garden at RHS Garden Rosemoor, North Devon. I help to maintain and develop the woodland walk garden and various other areas in Lady Anne's original garden at Rosemoor. I'm particularly interested in herbaceous/grass dominant naturalistic planting, but not at the expense of also having woody plants.

Along with a fellow gardener for the National Trust at Woolbeding, Bridget Daniels, we decided it would be a rewarding experience to attend The Dynamic Vision symposium, a two day series of talks featuring many horticultural experts. The symposium took place in Mannheim, where the German national garden show (known as 'BUGA') was also taking place. Hermannshof, a world famous experimental show garden, we

decided was nearby enough to include in our trip.

## **Aims and Objectives**

- 1. Learn more about growing, maintaining and designing with perennial plants, and how we can implement these practices in our respective workplaces.
- 2. Influence our curatorial teams to adopt more of a cultural shift towards more naturalistic gardening, helping to reduce inputs of herbicides, labour, watering and mulching.
- 3. Assess plant choices of the gardens in light of their local climate, soil type and management and use this learning to renovate beds with input-heavy needs into plantings that have full season interest.



### BUGA 2023

For those that haven't heard of 'BUGA' (short for "Bundesgartenschau") it is the annual, national garden show in Germany, open to visitors from 14th April to 8th October 2023.

The show is located in the grounds of Spinelli park, a former US military base, and extends into Luisenpark, the location of the 1975 national garden show. The show is unique in that each year the show takes place in a different German city, the planting is permanent and it remains in place following the end of the show. The area the show encompasses is huge, we made our best effort to see as much as we could, but still felt like we'd not totally covered everything on offer.

### Attending the Dynamic Vision Symposium.

We arrived at Luisenpark early in the morning of the 24th August, a steady queue already forming in front of the park gates. We walked through some of the perennial beds that had been planted as part of BUGA. The first day of the Symposium we were welcomed by Folko Kullman, Bettina Jaugstetter and Anna Lisa of Atelier Za'atar. We've written a summary of each speakers' talk, below, outlining their opinions, observations and experience.

### Noel Kingsbury Climate Change Future Nature - Future Gardens

Speaking with urgency, climate change was at the forefront of Noel's talk, highlighting the looming catastrophe and its impact on future generations, such as coastal flooding and new areas of urbanisation ultimately meaning even less space for nature. Action needs to be taken to ensure urban areas prioritise spaces for nature, integrating the interplay between human and non-human habitats.

Landscapers should consider high density plantings and environmental amelioration measures such as sustainable drainage systems (SUDs), planting for air quality, shade and reducing the urban heat island effect all whilst aiming to conserve plant and animal species.

The emphasis for designers should be on natural and ecological planting design incorporating dense plant communities that compete and embrace the ecological processes of life, death and natural regeneration. Horticulturists need to resist the urge to cut back senescing plants, as leaving them to decay over winter encourages habitat creation and room for self-seeding plants to fill gaps. This lighter touch requires skilled, trained horticulturalists work with a detail-orientated approach to recognise when species are dominating and intervene, particularly identifying plants in their seedling stages.

A shift in perspective is needed to recognise ecological horticulture as the management of the process of garden creation and not about achieving results that may not offer long term sympathetic stewardship. There isn't an ultimate destination in this approach and management should be seen as an ongoing design process. Landscape architects do not often enough consider the longevity of plantings; planning with a long term approach should be the default for horticulturalists and designers alike.



Ecological plant processes include plant density, which adds tremendous value to increasing biodiversity. The current trends are for us to see plants as a painting palette and that we can override their biological process so long as we create a colouristic pleasing result. Understanding the limits and natural systems of plants means that as designers we need to recognise the limits and how far we can stretch plants' abilities.

Aesthetically pleasing planting is undoubtedly a priority when creating and maintaining green spaces. Noel emphasised the need for the structure of a visual life cycle of interest throughout the year not just at peak

performance or the height of summer. Incorporating woody species into the spatial distribution of plantings and maintaining the original species list is a pragmatic way to boost biodiversity and pleasing aesthetics.

Furthermore woody species heighten structure, frame landscapes and allow for the interplay between light and shade as well as allow for bulb establishment opportunities. Noel underlined the need for imaginative, immersive and playful public green spaces where people can forage for edibles in an urban setting, creation of edible meadows and increased opportunities for communities to come together and experience this.

Some parting thoughts from Noel - the approach of public authorities should be to prioritise projects aimed at changing public perceptions on the neatness of gardens and green spaces, reassessing what is beautiful and appreciating the unexpected wow factor of a newly planted area that has skilled horticulturalists and a comprehensive management plan to take it forward. Noel touched upon the management of Oakwood

at RHS Garden Wisley which has been managed on ecological lines for the past one hundred years. Woody species, planted perennials, natives and non-natives all competing together to coexist. His final thought was how can we approach planting as nature conservation and the collective responsibility this calls for, what is it that we want to conserve?

#### Nigel Dunnett - Resilience, persistence, loss and gain in dynamic public plantings: lessons from experience

Ecologist and landscape architect Professor Nigel Dunnett introduced the idea that dynamic landscapes and plantings should be centred on change, which is essential if they are to be more ecologically focused.

Nigel highlighted how colour is fundamental to the design process, it is powerful and emotive and can cause deep emotional responses in people as seen at the Tower of London and its 2022 'Designed Superbloom'. These mass flowering extravaganzas are memorable and immersive experiences - transformational natural spectacles. The effect these spaces have on people should therefore not be underestimated.

There should be a people first approach to making nature in cities, triggering a social consciousness of public natural spaces. Mounting evidence shows that environmental quality has a direct impact on the health and wellbeing of people in urban areas. One problem that he highlighted for public planting projects is that a healthy cash flow is needed for the initiation of a project, the maintenance budget is often limited, and that the skillset of gardeners is typically inadequate.

Nigel proposed that whilst superficially all planting schemes should be filled with native species (to counterbalance the loss of native species habitat elsewhere), in an urban setting this isn't a workable solution. Such vegetation would not meet the purpose and expectations required of certain sites. As in the case of increasing amounts of drought, more tolerant species often found in southern Europe should be used as UK summers become drier and warmer. Britain has a limited native flora and this may also be a factor as to why non-native species are used in naturalistic plant communities.

#### Mariana Siqueira - Plant hunting and gardening in the Brazilian savanna

Mariana Siqueira is a Landscape Architect from Brazil, she shared her fascinating and essential work in raising awareness of the destruction of the Cerrado - the world's most biodiverse savannah biome. Mariana found herself living in the centre of the Cerrado and learned it was rapidly vanishing, with little notice paid by authorities or the public.

Most environmental conservation efforts and attention in Brazil is directed towards the destruction of the Amazon rainforest and its deforestation. Mariana's work and goal is of vital importance for Brazil's watersheds, for global biodiversity, and is an important but undervalued carbon stock. When a new client asked her to design a "Cerrado garden" she realised not a single nursery stocked these native grasses and shrubs that dominate the Cerrado biome, instead focusing their efforts on exotic plants.

The Cerrado covers two million square metres and is argued to be the most ancient biome in the world, notes Siqueira. It's being threatened not only by agriculture, mining and cattle, but another big threat is people that want to plant trees everywhere, as if only trees and forests were the absolute expression of nature. Such a serious scientific oversight is understandable, when the dry, scrubby Cerrado is compared to its neighbour - the majestic Amazon rainforest.

Upon moving to Brasilia, Mariana was tasked with making a garden full of Cerrado natives but was told this was impossible. Spurring her curiosity and not wanting to be defeated she spoke with ecologists in the area who were creating communities of grasses, herbs, shrubs and trees, all introduced by direct sowing. Realising if it is possible to restore these habitats, it is also possible to make a garden.

Mariana expressed that making gardens with native plants has a number of advantages: they do not require excessive practices of soil alteration and irrigation, they support urban fauna and can lead to the ex-situ conservation of species.

It was an inspiring and uplifting talk with the main takeaway being that the great importance of making gardens with native plants is in presenting the aesthetic and ecological qualities of natural biomes, and, with this, helping to create effective ties between urban humans and nature.

### John Little - Chaos, Brownfield and Bison - Learning from the biodiversity big hitters

John Little talked about projects he's been involved with, with increasing biodiversity in creative ways being the main driver for the way he operates. He explained a huge range of things that can be done - and be kept in mind - when building gardens, such as experimenting with different substrates coming from waste materials such as ceramics. He advocated using naturally sterile substrates when creating gardens - they come from manufacturing or waste management processes and thus rarely contain unwanted seeds. They allow for much easier direct sowing, saving costs relative to buying plants in 2L pots that require more watering after planting. When he replaced some of his own topsoil with sand, there was a 70% increase in the bee and wasp population.

The idea of 'chaos' in spaces is important as this introduces the maximum potential for niches and varying habitats to allow for maximum biodiversity on a site. Gardeners are the principle 'disturbance agents' in a garden, in place of beavers, boar and large herbivores such as the bison of the American prairies.

Brownfield sites are a rich source of inspiration for how to garden more sustainably they're often low fertility areas due to previous buildings etc and so this encourages a high diversity of plant life adapted to harsh conditions. This is totally at odds with high-fertility heavily managed herbaceous borders or bedding schemes. Many SSSI's are former brownfield sites, such as quarries. The high population pressure and relative lack of space in the UK requires that gardeners and designers cram in as much variety in habitat in every type of environment.

There's an increasingly dogmatic divide between ecologists and horticulturists, particularly with the 'native/non-native' topic. Horticulturists need to act as activists in showing our crafts ecological value. We should be partnering with entomologists and other ecologists to allow for nature driven design, with maintenance plans informed by their analysis and recommendations. In a human-dominated world, we humans are (or should act as) the keystone species - we need to step up and act accordingly.

#### Roy Diblik - Perennial Plant Communities "The Know Maintenance Approach"

Roy Diblik is a gardener and nurseryman based in Wisconsin, USA. He designs with and installs mainly herbaceous and graminoid plants, specialising in naturalistic groundcovering New Perennial style plantings. He learned from the ecologist Gerry Wilhelm and Jens Jenson - the "prairie whisperer". He is heavily influenced by North American prairies, which can have a species density of 12-20 spp/m2 (for context, the Boreal forest floor has around 15 spp/m2).

The selection of plants and their placement initiates the dynamics of how they grow together and make the space feel. He recommends matching plants together that have similar growth rates, accounting for when they're young and mature plantings. The growth rate of each plant is assessed each year after planting, and 'edits' are made to reduce overbearing or overplanted species. An annual assessment of the site also allows for adding or replacing plants that haven't performed as expected.

Roy advocates for thinking efficiently - plantings should form a weed suppressing ground cover as soon as possible, and using a Dutch push-pull hoe to cover large areas in the meantime, as hand weeding is too slow and back-breaking. He also talked about how the language should be changed within horticulture, particularly that the word 'maintenance' should be replaced with 'stewardship'. This language change reflects how gardeners should view their vocation and market themselves to the world outside of horticulture. Fair pay for gardeners is also really needed. Garden designers must appreciate the workability of their designs for the gardeners.

At the appropriate time when the plantings have offered a long season of winter interest (seed heads, dead plant material) this growth gets mowed or cut down and left on the beds to be used as mulch. This reduces the need for importing mulch, thus reducing effort and cost. He believes that using chipped wood is not ideal for mulch, as it's never found naturally occurring, and doesn't allow for good water infiltration, also it reduces creativity in planting designs. Plants should be mulched much more as they are in nature, with their own dead matter and a 'living mulch' - that of other plants growing in close proximity.



Cassian Schmidt - Nature as ecological palette

Cassian describes his work as "naturalistic and habitat based planting with an emphasis on 'dynamic' planting, informed by ecological processes". He was influenced by his time as an intern at Weihenstephan garden, an important and influential experimental garden near Munich. He said that gardeners too often focus on the top half of the plant, and not below ground. More emphasis and acceptance of including shrubby vegetation and accepting of a brown and yellow colour palette would be an improvement, in general.

Cassian mainly talked about different

landscapes in places he's visited that have helped to inform and inspire him, then to imitate or learn from. The following are some highlights and observations of various landscapes, with the intention of showing how these wild spaces can inform how we garden.

**Pannonian steppe -** Grassland/savannahs in and around Austria, there's plenty of good seasonal structure of plantings here, with varying proportions and heights. The emphasis here is more on structure and form than colour, though a planting inspired by this landscape could have more colourful plants mixed in. Notable plants found here include: Stipa capillata, Allium spp, Echinops ritro and Sesseli osseum.

**Open sand vegetation** Euphorbia seguieriana is dominant here, the product of stress, low nutrients and aridity. Sand makes for low maintenance gardening as it's a good substrate for established plants but not ideal for germination of weed seeds.

**Open savanna** observed in Austria - typically containing Quercus spp and Populus alba - open woodland, with shrubs and rushes. Mosaic landscapes, mixed gradients with more woody vegetation in the depressions.

When managing a site similar to this biome, there's a need to slow down succession - use it, but slow it down so we can edit plants and allow for good stewardship of the land to encourage the more floriferous aspects of the planting. In nature, grasses are dominant so editing of the grasses will help maintain the floral profile. Sub shrubs could also be integrated, such as Chaemaecytisus.

Plants mentioned are: Iris sambucina, Melica ciliata, Stipa pulcherrina, Campanula, Trillium pannoniculum, Iridium silafolium, Tulipa clusiana, Bromus erectus, Eryngium campestre, Chrysopogon gryllus and hemiparasitic plants Melampyrum arvense and Rhinanthus alectoropholus

**Central Asian steppe** - Structural elements dominating over colour, Steppe plantings have good 'bones' and keep their structure in dry periods. The horizontal forms of Achillea flowerheads contrast well with the spires of salvias, providing structure for a long season.

It's important to observe that much of this landscape is managed by human activity, so it looks and behaves differently as a result, mimicking this in the garden would help when managing similar plantings. These landscapes host ruderal species also, as they're ploughed or otherwise disturbed on occasion, with grazing pressure having an impact. Profuse floral presence in the steppe is a sign of disturbance, in these areas grasses aren't yet dominant, however after four years the landscape then changes so that grasses such as Stipa are once more dominant again. The emphasis on manipulating this plantscape again is on succession - resetting areas to knock back the dominance of grasses.

Other plants mentioned here include:

Salvia deserta, Achillea asiatica, Galium verum, Ligularia macrophylla, Phlomoides spp, Salvia sclarea, Elymus spp, Malus sieversii.

Garrigue (western mediterranean scrub vegetation) and Phrygana (eastern



mediterranean scrub vegetation). These are both degraded agricultural landscapes what plants remain are extremely drought tolerant. Cassian suggested that it would be interesting to try merging steppe and mediterranean plant combinations, for example, Ephedra and Artemisia. He also talked about this biome consisting more of sub-shrubs, so using plants of that growth habit would give that Mediterranean 'feel' desired.

North American Prairie - plants are generally taller, with extensive root systems, giving them great drought resilience. Steppe vegetation is dormant in summer, whereas prairies typically aren't they peak in high summer (important points to remember when planning a border).

Tom Stuart-Smith - Learning how to look after things

Tom's talk described the initial set up of the prairie garden at his home and garden, Serge Hill. The premise of the talk was to share both successes and failures along the way, a common theme that all the speakers reiterated. "If we aren't to share the problems encountered there's limited means for people to learn from these experiences and find alternatives and opportunities", Tom reminded us.

We were introduced to the Serge Hill project with background on the site based in Abbots Langley. Concentrating on the prairie planting project, maintenance is much less than other planted areas of the garden, but considerably more intensive than the native meadow. The site of the prairie project was initially sprayed off with Glyphosate, something that was essential in establishing a sterile site for sowing. A practice Tom doesn't condone generally but in certain circumstances is essential to create a sterile site for desired plants to establish. The pernicious weeds were docks and buttercup. Following the spray, a 4 inch layer of sand was laid down. Jute then covered the sand with a target of 100 seedlings/m2 increasing competition and making it difficult for further weeds to establish. Initial problems were with worm casts which brought up ranunculus seeds indicating the original substrate that was brought in wasn't sterile with further discovery of Salix seeds.

As the project has developed lessons were learned, primarily that more understanding is needed of this type of gardening, which initially needs heavy intervention in the inaugural years. Whilst the initial seed cost was £6,000, this approach of sowing directly is clearly more economically viable than buying in plants.

Strains have been a consistent mollusc problem and the grass sown into pathways which is a balance in stopping its spread into the borders themselves. Symphyotrichum oblongifolius is a dominant weed which was sown initially and is now being removed by hand. Echinacea purpurea has almost disappeared after twelve years. Solidago species rapidly bulk up and are removed every three years which is preferable as it isn't ideal to have anything too dominant, especially as self-seeding also occurs.

There's an orderly approach to monitoring the species present in the prairie using multiple categories to ascertain levels of invasiveness, if a plant is present, it is classed as stable, reduced or gradually increasing. Prevalent weeds are noted and dealt with. The bonus of such a garden of course is the long season of interest and its longevity in offering interest when the rest of the garden has died down for the winter. Typically, management happens in spurts (occasional removal of Solidago, for instance) and the prairie is mostly untouched throughout the year.

### Giacomo Guzzon and Ton Muller - Perspectives on creating and guiding longlasting plantings in urban environments

Giacomo and Ton talked us through a huge range of their public and domestic planting projects, many of which are in very urban, challenging environments where aftercare is unreliable and minimal. These stressful conditions for plants mean that they have to put considerable thought and expertise into plant choices, their relative placement and how each plant will behave and cope with its environment. These plantings are often in sites

heavily shaded by tall buildings, so plants must be more densely planted initially to account for slower growth. However, they have found that shady areas are more stable and easier to maintain when these plantings are established - for example, a ground cover of a mat-forming Carex species will persist for decades once established.

They also posited that perhaps more focus should go into meadow creation rather than creating meadow style plantings of perennials, as this is simpler, cheaper and more easily managed for less skilled land managers. Another point made was that the use of shrubs - a strangely neglected plant type in modern gardening trends - should be incorporated much more often into plantings.



# Schau und Sichtungsgarten Hermannshof, Weinheim

Cassian Schmidt kindly gave a tour of the garden for attendees of the symposium, significantly it was his last tour as a result of recently being dismissed by the gardens board of directors. Throughout the garden's history it has been a worldrenowned centre for research and experimentation in garden design. Cassian has carried on with the experimental ethos, promoting the 'New German Style' - a combination of ecological principles and contemporary design. The garden clearly shows

similarities in style to Weihenstephan, with intricate species-rich plantings based on various landscapes (such as prairie, mediterranean, wetland, woodland, dry meadow).

The mixed borders at Hermannshof are most input heavy, whereas the meadow, mixed plantings and shade plantings are the least labour intensive, most niches for 'weeds' being occupied by plants. The garden was overwhelming in terms of what plant communities there were and how much thought and complexity has obviously gone into their creation. It was refreshing to see the impact and beauty that a thorough understanding of high-density, high-diversity plantings can have, when compared to more 'blocky' simplistic gardening style.



### Conclusions

Visiting the BUGA and attending the Dynamic Vision was an extremely inspiring and rewarding experience. Witnessing the gardens, learning of the experimental designs and being part of a wider discussion with an international crowd as well as encountering what a garden show should be, have left lasting impressions on us both and we will take these experiences forward into our current roles as Gardeners for the National Trust and the RHS.We feel we have met our stated aims and objectives, and also plan to give a presentation to staff at Rosemoor this December 2023. Future plans stemming from this trip are to possibly attend

another similar symposium, and visit other gardens and projects related to what we've learned about, such as a visit to Weihenstephan, and also the Knepp walled garden (which Tom Stuart Smith talked about).

Our overall takeaways we have from the trip are:

- A better understanding of plant communities and ecological processes, and how that makes for better gardeners.
- We've witnessed inventive examples of long seasonal interest in border design.
- Absorbing discussions on the establishment and maintenance of public plantings and how we can be inspired by natural landscapes.
- We learned more about the thought processes behind planning and planting herbaceous areas and how they can be sustainable in terms of their management and resource use.
- Our convictions about densely planted herbaceous/meadow style borders were backed up, seeing how low maintenance and attractive they are, particularly at Hermannshof.
- We observed and recorded plants new to us that we intend to use in future plantings, were appropriate. We thoroughly enjoyed being amongst so many professionals in our industry, something very healthy in an often isolated job.

Thank you for reading our report.

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