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Herbaceous perennials – how to make them shine

Lucy Bell & Maija Ross

Heleopsis ‘Summer Nights’ at Hermannshof. (This *heleopsis* also features in the Broad Walk.)

This article focuses on what we learned about different approaches to maintaining herbaceous perennial plantings during our study tour to Germany and the Netherlands in September 2017, and how some of these methods have worked at the Royal Botanic Gardens, Kew.

The show must go on

Hermannshof Demonstration and Trial Garden is in an important wine-growing area along the Rhine Valley, one of the warmest regions in Germany. Despite these conditions, there is minimal staking of plants. To prevent flopping, plants such as *Achillea* spp., *Aster* spp. and *Veronicastrum* spp. are cut back around midsummer.

In 2018 at the Broad Walk Borders at RBG, Kew, we reduced the amount of irrigation and mulch applied. We also increased

the amount of mid-season cutting back and dead-heading to great effect. This approach has hugely reduced plants’ flopping. The flowers are slightly smaller in some cases and the plants are shorter, but they stand upright through the season, flower prolifically and for longer, and far less staking is required. We do use hazel

cages to stake some large plants when they’re still only a few inches into growth. This technique worked particularly well on *Euphorbia palustris*: it reached over 1m in height and spread. We put low hazel or cornus fencing around other plants which tend to slump: some *Salvia* spp. and *Helenium* spp. benefit from this.



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North American prairie planting at Hermannshof



The rock garden at Weihestephan

Mulch

Interestingly, no manure is added to mulches in any of the gardens we visited in Germany or the Netherlands. The favoured mulches are either mineral or organic, such as bark chips. At Hermannshof they prefer mineral mulches, pumice in particular; they

believe that with such mulches plants grow better, weed growth is virtually eliminated, and moisture is preserved in the soil. They recommend a depth of no less than 7–8cm.

At Hummelo, Piet Oudolf often uses small pine chips but says “mulch can be anything” and, where

appropriate, chopped plants can be left on the surface where they fall.

On the Broad Walk we normally use a rich mixture of soft green waste with horse manure at a 50:50 ratio, at a depth of about 6–7cm. In 2018 we laid it to a depth of 2–3cm and not at all on some areas (e.g. grasses and plants suited to drier conditions). In future years we’d like to experiment further, reducing manure in the mix, or eliminating it altogether, and trying other mulches.

Irrigation

At Weihestephan, near Munich, they have been using drip irrigation for 15 years with no problems. Prof. Dr Bernd Hertle, Head of Academic Management, took us on an all-day tour of the Trial Garden. He told us that the system they use is “not too expensive” and they don’t



Seedheads are left through the autumn and winter. Here, *Dipsacus* spp. at Amstelveen and *Eryngium* spp. at Hummelo

suffer damage from squirrels (or any other animals). The only negative, easily avoided, is that the pipes are ugly if exposed. The advantage is that there is no overhead watering leading to crushed or damaged plants, or mildew, and the water gets down to the roots of all the plants.

Piet Oudoulf's experimental garden at Hummelo has no irrigation, and at Hermannshof irrigation is tailored to meet the needs of the different plantings.

On the Broad Walk we have a Rain Bird overhead irrigation system which we programme to come on at specified times on given days. Last year we set the system to water for longer periods (typically 30 mins) per bed, but much less often than in previous years. The aim was to soak the beds, getting the water through the canopy and down to the roots.

No to chemicals

In Germany and the Netherlands, it is illegal to use herbicides in public horticulture. Instead of chemicals, hot water and burning are the methods used to rid the paths of weeds. Many of the gardens we visited remove only large weeds and make plantings dense, which significantly limits weed growth.

There are a lot of pests and diseases but no chemicals are used. Plant trials at Weihenstephan indicate which cultivars are resistant.



Stone paths leading through beds at Hummelo



Bernd with the weeding machine used on hard standing & paths

In Amstelveen, near Amsterdam, an 'ecological' tonic is used to bolster some plants, but chemicals are never used; the natural peat in the parks is rich in nutrients and relatively weed free.

Our aim is to keep the Broad Walk Borders free of chemicals as far as possible, but in some cases fungicides have been used. *Rosa* Kew Gardens, *R. Mortimer Sackler* and

Aster spp. are treated with fungicides; SB Invigorator, 'an environmentally friendly pesticide and tonic', is used on a few plants to help them deal with black fly. However, we largely leave plants alone and have had relatively few P&D problems. Increasingly, we see birds and insects and their larvae controlling infestations of black fly and aphids, and Powdery Mildew is dealt with by good plant hygiene and irrigation.



Lucy & Maija with Piet Oudolf in his garden

The cut down

At Weinstephan, much of the cutting back is carried out when the gardens are closed to the public (November–March). In summer at Hermannshof they carry out a selective cut-back of plants that will flower again in the season; then in late autumn the borders are tidied and plants are left over the winter providing good structure. The North American borders and perennial borders are cut back in late spring using mowers and trimmers. The debris is removed from the beds to keep fertility down. At Hummelo and Amstelveen the gardens are cut back, using scythes, once a year in early spring. Grasses, seed- and

flowerheads are left standing until that point.

In the first two seasons on the Broad Walk Borders, we dead-headed and cut back throughout the year as the plants became established. Through the 2017–18 winter, galvanised by the approach to cutting back we observed on our trip, we left most of the grasses and perennials standing, removing only unsightly plant debris to keep the borders looking tidy and attractive. This approach extended the season of interest leaving seedheads and dried flowerheads and grasses among the late and long-flowering perennials, provided food and shelter for the garden wildlife,

and gave some protection from the winter weather. Starting in late January, we used hedge trimmers in the main to cut the borders down. Teams of staff and volunteers followed with shears and secateurs and raked away the debris.

Conclusions

It was a revelation to see how complex theoretical approaches to design and planting translate into beautiful, harmonious borders, and the continuous experimentation that is carried out at all the gardens we saw was inspiring. We returned from our study tour with belief in our systems, and greater knowledge and confidence to maintain and develop the Broad Walk Borders in coming years.

The Broad Walk team has been in place since October 2015 and we have closely monitored the borders through three growing seasons. At Hummelo, Piet Oudolf told us that the development and success of a garden is entirely dependent on the knowledge and expertise of the gardeners who maintain it. This message was repeated throughout our tour and confirmed to us that our role on the Broad Walk Borders is key to their success. 🌿

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