

Saved by microclimates

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Here in Norfolk and Suffolk the rolling, park-like landscape belies the geology beneath the verdant sward and frothy woodland. Natural processes, latterly combined with the influences of humankind, have produced our topography over many thousands of years. Underlying the region is a band of chalk; alluvially deposited sands and clays were washed into these shallow seas in a north–south pattern. Later, scarifying by ice sheets during the Ice Ages produced East Anglia’s varying soil conditions as we know them.

As a boy at school I well remember the rural science teacher introduced us to the notion of soil being something special. As in all counties of England there is a dialectic name for most things. Here in Norfolk a film was a ‘fil-um’, guttering was ‘trorfun’ and earth was ‘muck’. I remember our teacher’s insistence that we referred to ‘muck’ as soil, and to what lengths he went to explain why. In hindsight I can fully appreciate his perseverance – soil is the substrate which makes each area unique and gives us local growing conditions and thus preferred crops, which in this neck of the woods are mainly cereals and sugar beet. Agriculture in turn has created our local landscape of rolling acres which turn from green to gold as the seasons progress.



Fig. 1 I love *Lamprocapnos spectabilis*, previously *Dicentra* which was much easier to say – in fact I could be called a *Lamprocapnos spectabilis* bore, as when it’s in flower I insist on demonstrating to all and sundry why it is referred to as Lady-in-the-Bath! In the wet garden it just grew, in the dry garden it struggled and got scorched and didn’t flower for long. In the loam garden it does OK with plenty of mulch.



Fig. 2 Despite our range of soil types, despite the vagaries of our climate, it is still possible to grow a range of plants – including the ones that don't always suit our local soil.

My last three gardens, all within a radius of around ten miles, have given me experience of various East Anglian soils. The wet garden in Suffolk, on the coast near Lowestoft, was heavy clay and used to flood. The dry garden, inland at Ditchingham, was virtually pure sand. My present garden, in Beccles, is free-draining loam and therefore a lot more manageable; even so, we still have a brown lawn during the summer months!

The dry garden has much influenced my gardening practice in my present loam-based garden. The problems I faced over a 17-year period caused me to reformulate my understanding of plants and gardening – it was a steep learning curve. Importantly, I found that the performance of each soil type is greatly affected by the forces of nature such as wind and rain: rain filtering through the soil not only giveth but also taketh away. Understanding this cycle of events and how it affects our gardens enables us to succeed, by whatever means, with whatever we grow.

It is frequently said, and I've found it true, that gardeners – especially members of the HPS, because we are genuinely interested in plants – always yearn to grow that which for some reason doesn't thrive in our local conditions. Noticeably, some of the more traditional gardeners hereabouts will list the plants that they can't grow: "They just don't like my soil" they say. That's like a red rag to a bull to me, so I battle on, and like others of the same ilk, attempt to grow what I yearn for, no matter how unsuited it is to my garden conditions.

In my dry garden of extremely free-draining, somewhat acid sand, I battled summer drought for 17 years. "Perfect rhodo country" a local nurserywoman declared. She was referring to rhododendrons. Fine, good advice for her end of the village but not so good at the other end where I lived. Taking her advice because it suited my desires, rather than using common sense, needless to say I indulged myself in rhodos! Free-draining soil, however, does exactly what it says on the tin, so no matter how much organic matter I dug in, or how much water I poured



Fig. 3 *Erythronium tuolumnense* grew under an upturned tree-root for several years. Pigeons seemed to like it too, as in some years they just nipped off the flower heads and scattered them about.



Fig. 4 *Pittosporum* 'Garnettii'



Fig. 5 *Rosa* 'Adelaïde d'Orleans' perfumed the garden



Fig. 6 *Linaria purpurea* 'Canon Went' was easily satisfied



Fig. 7 *Oenothera stricta* loved the terrain

in, the rhodos shrivelled, withered, and eventually died – or were pulled out as they looked so dismal!

The challenge was the constant need for water. For several years now the Norfolk and Suffolk Group of the HPS has been compiling measurements of the rainfall in our area (archived on our website, www.hps-norfolkandsuffolk.org.uk). Here on the eastern side of England gardeners are only too aware of our almost desert conditions – our rainfall is only 10–12cm above the calibrated line that defines a desert. In my dry garden even drought-tolerant plants needed copious watering and, as death by dessication seemed imminent, they had short flowering-seasons to produce seed as quickly as possible. However, I finally learnt lessons and changed the way I garden and think about plants after I read Vita Sackville-West's comment that she didn't consider herself a gardener but more of an observer. It is clear from her writing that she gained her inspiration from whatever she saw around her. So it was at this point in this man v. the elements saga that I started looking around me, not only at the plants that grew in my local soil but also at the varying environments that provided great diversity. In other words, I had discovered micro-climates – I had probably been working towards it for years, but I'd only then realised it. It has become the first principle of my approach to plants and gardening.

My clay garden was wet, and at most times of the year working in it was



Fig. 8 *Nerine bowdenii* grew profusely in the driest places

a struggle. But moving to the dry garden was a major challenge to my gardening repertoire. The local dairy, which owned the field over the hedge at the bottom of the garden, put tons of manure on the field every autumn (usually spreading it when we had friends visiting, naturally) and still the sweetcorn was stunted – it contributed little to the structure of the soil as the organic matter either dessicated and blew away, or the nutrients leached through the soil when rain came.

In the sandy garden ornamental features were vital, and not purely for ornament: they provided a much-valued cool, moist root-run. Ornamental logs, paving slabs, gravel, tree roots and huge flints were used for this purpose. Planting holes were filled with organic matter in an attempt to retain some moisture around the root system. Shade offered by buildings, hedges and trees were all used to advantage.

My first success in the dry garden was to establish a clump of *Erythronium tuolumnense* (fig. 3) under an ornamental log, where it flowered happily for quite a few years. So far so good, but the downside of providing such environments is that other members of the ‘garden fraternity’ were drawn like a magnet to any improvements. Organic material = improved moisture retention = more worms = more moles, so every downside has an upside, or vice-versa if you are a pessimist. Insects also appreciate this sort of cover and where I had been growing plants under flints their root systems were destroyed by nesting ants. It also meant that we received frequent visits from the good old Norfolk yaffle, the stunningly-coloured green woodpecker who would poke in and around the flints to feast on the ants and, on being discovered, would take to wing, his



Figs 9 & 10 Evergreen *Clematis armandii* and *Trachelospermum jasminoides* 'Variegatum' thrived.

dipping flight across the fields accompanied by his piercing cackle as strident in pitch as his feathering was in green.

I was always amazed when a plant did well, as the growing conditions were severe. But once established, certain plants did more than just hang in there, they actually thrived, as long as some care was administered at the right time. Phormiums shot up their spiked leaves. *Physocarpus opulifolius* 'Diabolo' filled out and didn't mind the sun and wind, though its cousin *P. o.* 'Dart's Gold' limped along, hating any dry spells and definitely scorching in the sun. *Pittosporum* 'Garnettii' (fig. 4) lived up to its name and, in cold winters, rimed the edge of each leaf in rich red. Sacred bamboo, *Nandina domestica*, actually sent out runners. Roses *R.* 'Albertine' and *R.* 'Adelaïde d'Orleans' (fig. 5) perfumed the garden – Adelaïde just romped away. Shrubby *Lonicera tatarica* 'Hack's Red' formed a huge bush, as did winter-flowering *Lonicera x purpusii* which gave us winter perfume when the slightly gnarled stems were cut and brought indoors. *Linaria purpurea*, especially 'Canon Went' (fig. 6), was a delight in that it seeded around and was so easily satisfied, loving as it did the gravel in the drive. The somewhat tortured stems of *Oenothera stricta* (fig. 7), with its warm-perfumed, melted-butter-coloured, cup-shaped flowers also loved this terrain. The Chusan fan palm, *Trachycarpus fortunei*, went from a tiny plant to almost a palm tree and I was even considering stripping the stem to enhance its shabby-chic stature. *Nerine bowdenii* (fig. 8) grew in profusion in the driest of dry places, the south-facing beds under the eaves of the house the rain hardly reached. Evergreen *Clematis armandii* (fig. 9) thrived here as well, and on a similar wall so too did *Trachelospermum jasminoides* (fig. 10). Noticing harebells (*Campanula rotundifolia*) growing on a nearby heath I planted some in the garden and near them a group of wild primroses (*Primula vulgaris*) which, to my surprise, also flourished, but



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Figs 11 & 12 Surprisingly, harebells and primroses also flourished discreetly.

as a small, discreet clump – none of the riotous behaviour associated with the colonies one sees in ditches where they have virtually taken over the steep banks.

I arrived at my present loam-based garden mentally armed, although I'd only travelled about six miles. I looked at it with new eyes in search of the nooks and crannies and any other areas that could provide the micro-climates I'd learnt to cherish.

So despite the variety of soil types in East Anglia, by searching out favourable growing conditions and manipulating others, and choosing the right plants, one can have success. If I had not taken chances with plants, allowing my planting to be governed solely by the soil conditions, then my gardening thinking and practice would not have changed. It is this constant challenge, rather than complacency, that to my mind defines gardening in Norfolk and Suffolk as more of a sport than a leisure activity! 🐾

Andrew Lawes has lived in Norfolk and Suffolk for most of his life and continues to learn how to garden in challenging conditions. Andrew edits the Norfolk and Suffolk HPS Newsletter.

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