



With over 2500 taxa there's something to see throughout the year. The front garden In May, with clematis and roses.

## Gardening on heavy clay

**Keith and Lorna Ferguson** tell us how they worked the soil, and the plants that now thrive in it.



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Fig. 1 Our garden is in a picturesque valley bottom immediately west of May Hill, at 860ft the highest point in Gloucestershire west of the River Severn. It's half a mile up a single-track lane from the main road and our nearest neighbours are the original farming family who live across the lane in a modern bungalow near the farmyard.

In February 1996 we left behind about a  $\frac{1}{3}$ -acre garden of light Bagshot sand with 2 small islets of clay, soil not dissimilar to that at the RHS Garden at Wisley some 2 miles away, and moved to north west Gloucestershire, to an 1850s Victorian farmhouse with 4.5 acres (fig. 1).

About a  $\frac{1}{2}$  acre of original garden lay to the front of the south-facing house; it had been used as a market garden after World War II. By the time we arrived, a large area had been grassed over, but a vegetable plot, some shrub and herbaceous borders, and 60-year-old apple trees remained. The soil in this Old Garden has been cultivated over many years and is much more easily worked than that elsewhere. Behind the house was a 2-acre plum, perry pear and cider apple orchard and further

acres of grazing with 7 large 150-year-old perry pear trees.

We set about making a new garden of about an acre, first removing, with the aid of our farming neighbours' JCB, 20 old Blaisdon plum trees (the local Gloucestershire plum), many already fallen over. We applied glyphosate to an area of grass which was later ploughed to make a new vegetable plot and edged with an L-shaped 50ft x 50ft yew hedge raised from cuttings; this hedge is now 8ft tall and provides invaluable shelter (fig. 2).

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And the front garden in September.

We double dug and incorporated a lot of very strawy manure, and heavily mulched with good leaf mould every autumn. This has broken down the clay and given an excellent growing medium for Asian and North American woodland/shade plants.

The nettles and brambles and overgrown hazels lining the east bank of the stream were cleared, and we hastily dug two beds on the flat land above the stream to accommodate some of the shade plants we had brought with us. The first was in deep, heavy clay, and the second was even more of a challenge as rubble and hard core had been dumped, presumably to improve the drainage. However, we double dug and incorporated a lot of very strawy manure, available in abundance from the farm

across the lane, and got planting. The second bed (fig. 3), a little better drained but still with some stones remaining, became the home

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Fig. 2 Yew hedges give invaluable shelter to the New Garden vegetable plot.

**Woodland/shade plants include:**

*Polygonatum* species & cvs  
*Maianthemum racemosum*  
*Leucojum aestivum* 'Gravetye Giant'  
*Cardamine (Dentaria)* species  
*Prosartes* (syn. *Disporum*) *smithii*  
*Arisarum proboscideum*  
*Helleborus x hybridus* & *H. cyclophyllus*  
*Erythronium californicum* 'White Beauty',  
 EE. 'Pagoda', *revolutum* and *tuolumnense*  
*Trillium kurabayashii*, *TT. albidum*, *rugelii*,  
*discolor*, *erectum* and *cuneatum*  
*Convallaria* cvs

*Epimedium* species & cvs  
*Jeffersonia diphylla*  
*Vancouveria*, epimediums  
*Fritillaria meleagris*  
*Tulipa sprengeri*  
*Primula* in variety  
*Hosta* cvs  
*Tellima grandiflorum*  
*Tiarella cordifolia*  
*Aruncus dioicus*  
*Cimicifuga*  
*Galanthus* cvs



Fig. 3 Shady border with *Trillium kurabayashii* & *T. albidum*, and *Fritillaria meleagris*.

for our woodland/shade plants including our then very modest collection of snowdrops, erythroniums, trilliums and doronicums. All have flourished and been added to. The species *Crocus* we'd brought were devoured by endless numbers of field mice and voles which are still a problem. *Crocus tommasinianus* escaped the rodents' attention and has seeded itself widely in the grass and even out into the orchard. The two beds are cut down every autumn and heavily mulched with good leaf mould which has given an excellent growing medium for Asian and North American woodland/shade plants which have thrived over the 18 years, *Tulipa sprengeri* and *Fritillaria* seeding freely out into the grass.

However, in 1996 we still had many of the 900 items that we had brought with us to get into the ground before the summer season. We turned our attention back to the Old Garden, making a

new herbaceous border in the grass adjacent to an existing border but separated by one of the two concrete paths. The

**Double-dug clay enriched with well-rotted manure also suits many hardy herbaceous plants including:**

Anthemis  
 Phloxes  
 Heleniums  
 Aconitums  
 Oriental poppies  
 Asters  
 Veratrums  
 Ligularias  
 Podophyllums  
 Arisaemas  
 Clematis  
 Rodgersias  
 Aralias  
 Alliums

existing borders in the old garden were choked with the ubiquitous Ground Elder of gardens of this age. It was eventually eliminated by clearing and hand-digging and -picking rhizomes. The new border was double dug in late

March when it was relatively dry, and plenty of well-rotted manure worked in, and here we planted many of the hardy herbaceous plants including our good clone of *Veratrum nigrum*, *VV. album* 'Lorna's Green' and *album* 'Auvergne White'. The veratrums thrived and have been divided and are now a feature throughout the garden.

A delight of this part of Gloucestershire is the wild daffodils (*Narcissus pseudonarcissus*). Some were scattered in the orchard and pasture along with clumps of cultivars planted by the previous owners. In our first year we marked all the 'wild' daffodils on our property and replanted them in late summer on an area of about 1/8 acre heavily shaded with native deciduous trees – ash, oak, alder and hazel – on heavy, wet clay but with a layer of leaf mould from years of leaf drop. The narcissus have multiplied and self-seeded freely and make a fine 'wild daffodil meadow' (fig. 4)



Fig. 4 Our 'wild daffodil meadow'.



Fig. 5 *Rodgersia palmata*, *Actaea rubra* and Ostrich Fern on the stream bank.



Fig. 6 *Glucidium palmatum* – a choice woodlander.

to which we have added some clumps of deciduous native ferns for summer and autumn interest. Maintenance is minimum, with one cutting a year. The cultivated varieties have been lined out as a cutting border elsewhere.

Over the years, as we've acquired new plants, we've constructed two big borders on 'promontories' into the stream and developed the stream banks where the soil has been lightened with much

leaf mould and strawy manure. We've found we can grow *Cardiocrinum* with some success and they are sheltered from the wind by alders on the opposite farmland bank; *CC. cathayanum*, *giganteum* (cover) and *cordatum* have all produced flowers and we have now some dozens raised from seed and hope to get more than one or two flowering stems in a season.

*Chrysosplenium davidianum* makes a good ground cover and the cardiocrinums push through. As the ground has become more worked with leaf mould we find that trilliums flourish, as do astilbes, *Disporum*, *Tellima*, *Tiarella*, *Aruncus dioicus* and *Cimicifuga* species. Just recently *Cypripedium formosanum* has started to increase. We've found that a splendid plant for rich moisture-retentive clay is the eastern USA form of *Trautvetteria carolinensis* – that from eastern Asia, more common in the trade, is a miserable plant in comparison. Candelabra primulas self-sow and persist and we have had seriously to control the Ostrich Fern, *Matteucia struthiopteris*, which seems to enjoy the wet clay. (Figs 5, 6 & 7) On the sloping stream banks we have a number of spectacular species of *Ligularia* including LL. 'Zepter' (fig. 8), *vorobievii. japonica* 'Rising Sun' and *fischeri*. L. 'Britt Marie Crawford' is in one of the

island beds of the New Garden and its striking purple foliage contrasts well with surrounding perennials. We have found them slug-resistant and rabbit-proof. *Rodgersia* likewise, with *R. pinnata* 'Crug Cardinal' being an especially reliable flowerer. The different foliage shapes and colours of *RR. pinnata*, *podophylla* and *aesculifolia* provide interest throughout the summer. The North American woodland *Diphylleia cymosa* has made a splendid clump and its dark blue berries on red pedicels are very striking in autumn. *Podophyllum peltatum* is slowly creeping while its Asian cousins *PP. hexandrum*, *versipelle* and *P. v.* 'Spotty Dotty' have striking fruit. All the Butcher's Broom, *Ruscus* species, have grown well but our favourite *R. aculeatus* hermaphrodite form is a steady grower making some 4 x 3ft in 10 years. Its berries well and surpasses *R. a.* 'John Redmond' with us. *Danae racemosa*, much loved by flower arrangers, flourishes and provides interest through the year. Herbaceous aralias do well, especially *A. continentalis*, making 10–12ft in height with racemes of white flowers followed by black berries. *A. cordata* is smaller but grows well in partial shade. *A. californica* we suspect needs more acid soil and *A. cachemirica*, having grown well for many years, left us in the very cold winter



Fig. 7 *Rheum palmatum* 'Ferguson's Red' grows big in moist, heavy soil.

of 2011. We've underplanted them with snowdrops which delight in the heavy clay with a little modification. In an area of stream not shaded by trees we have established *Iris pseudacorus* crosses as for example var. 'Bastardii', 'Roy Davidson', 'Tiger Brother', *Iris ensata* cvs and here *Veratrum californicum* and some of the older varieties of tall astilbes, *AA. Lilli Goos*', 'Jo Ophurst' and 'Salland' grow well.

The heavy clay soil means there is usually a 2-3 year wait until shrubs settle in and then they grow exceptionally rapidly.

After a few years we found we needed more planting space and extended further into the orchard, and in the open area we made five island beds which are mostly planted as shrub borders. *Ferula communis*, the giant fennel,



Fig. 8 Ligularias enjoy the clay. Here *L. 'Zepter'*-

produces flowering stems occasionally and we have had a splendid clump of *Amicia zygomeris* which flowered well in September until the cold of the recent winters has sadly reduced it. *Daphnes* seem very happy throughout both gardens: *DD. odora*, *tangutica*, *bholua* 'Jacqueline Postill', deciduous *mezereum*, green-flowered *laureola*, *pontica*, and Pyrenean *laureola* subsp. *philippii* as well as the lovely



Fig. 9 *Camellia japonica* 'Adolphe Audusson' is the only camellia to survive of more than 6 cultivars tried.

selection *laureola* 'Margaret Mathew'. *DD. cneorum* and *tangutica* Retusa Group grow well in a more sheltered "scree" bed near the house. *Calycanthus floridus* raised from seed collected in the eastern USA make nice neat shrubs and the Asian *Sinocalycanthus* has made good growth. The recently planted hybrid x *Sinocalycanthus raulstonii* 'Hartlage Wine' is settling in. A great favourite is *Hydrangea quercifolia* which colours so well through autumn and winter to snowdrop time. *H. paniculata* 'Limelight' makes a fine feature and is pruned hard each winter. All the *Rosaceae* seem to do well: ornamental cherries, crab apples and hawthorns (notably *Crataegus tanacetifolia*). The remarkable Andean *Polylepis australis*, with such lovely peeling bark, has made 8 feet in 10 years on the most inhospitable and unmodified heavy clay. However, the heavy clay soil



Fig. 10 The rose garden, underplanted with *Nepeta*, *Alchemilla mollis* and lilies.

means there is usually a 2-3 year wait until shrubs settle in and then they grow exceptionally rapidly. Virtually all the *Ericaceae* have been found to be intolerant of the neutral heavy clay and rhododendrons especially do not thrive. However, *Arbutus unedo* has made a 20ft tree after a slow start. Much the same can be said for most of the well known acid lovers such as *Eucryphia*, though *E. x nymansensis* has made a 15ft tree and is clothed with white cuplike flowers in August, and *Camellia japonica* 'Adolphe Audusson' (fig. 9) is happy while other cultivars of the genus did not survive. All the species of *Berberis* we have attempted have done well and we have a much admired specimen of *B. jamesiana* with lemon yellow flowers followed by oblong translucent pink-blushed fruit finally turning red. The Patagonian *B. valdiviana* with evergreen foliage and sprays of orange flowers in spring is a

striking plant and not as widely grown as it might be.

We put in a formal paved rose garden (fig. 10) planted with largely old shrub roses including 'Constance Spry', John Clare, 'Rosaie de l' Hay' and 'Penelope'.

Turning to the herbaceous plants that we grow mainly in the Old Garden, we first must mention two plants we found in the garden that are special. There is a row of *Zantedeschia aethiopica* across the vegetable patch some 45ft long producing a mass of flowers from June onwards and occasional blooms on into autumn. We described this and gave it the cultivar name 'Glencoe' after the house (*The Hardy Plant* Vol. 30 No.1). It loves the deep moisture-retentive soil and has been hardy through the recent winters and known in this garden for 50 years. A clump of low growing *Acanthus spinosus* was spotted by Bob Brown some years ago as it was totally mildew free when



Fig. 11 *Acanthus spinosus* Ferguson's form.

mildew was rife in the neighbouring borders where another clone of the same plant had foliage white with mildew. This has proved a good clone and has been named 'Ferguson's form' (fig. 11). We also found a number of *Paeonia lactiflora* hybrids flowering well, two of which have been identified as 'Marie Crousse' and 'Felix Crousse' and we have added a number more, notably 'Duchesse de Nemours', 'Festiva Maxima' and 'Madame Gaudichau'; they make a magnificent show in early summer and increase steadily. *P. mlkosewitschii* is exceptionally vigorous and seeds itself around if left. *P.* 'Avant Garde' is a delight and is worth growing for its foliage, while *P. tenuifolia* with its rich red flowers has steadily increased. Some of the Mediterranean species are less happy in the heavy cold clay,

but some clones of *P. mascula* have grown well and flowered regularly, while *P. cambessedesii* enjoys the protection and warmth of the wall of the house.

The two main borders (fig. 12) are underplanted with *Allium hollandicum* 'Purple Sensation' and *A. giganteum*, which multiply well and make an early show followed by aquilegias and oriental poppies – *PP. o.* 'Beauty of Livermere', 'Fatima', 'Prinz Eugen' and 'Effendi' among others. We tolerate 'May Queen' for the wonderful orange "tennis ball" effect. The season continues with *Phlox paniculata* cvs, the arching *Sanguisorba tenuifolia* var. *alba* and its pink variant. Herbaceous *Clematis heracleifolia* 'Cassandra' is a finer form than *C. tubulosa* 'Wyevale' which we still find room for. *Hemerocallis* 'Corky' and *H.* 'Golden Chimes' make

good reliable border plants and *Lychnis* 'Hill Grounds' has been reliable, hardy in winter wet and cold.

*Arisaema candidissimum* and *A. consanguineum* are very happy in the most inhospitable soil. On the edges of the concrete paths where there is some warmth, Pacific or Californian irises prosper. A great surprise is the way that dieramas, from the 12ft arching stems of *D. pulcherrimum* (fig. 13) hybrids to the more diminutive, red-flowered *D. igneum*, flourish and seed themselves freely.

*Clematis* in general all flourish on the heavy clay soil, from the vigorous autumn-flowering *CC. rehderiana* and 'Bill MacKenzie' to the large-flowered hybrids which with *viticella* cvs scramble over shrubs or on the boundary wall. *C.* 'Praecox' covers our large oil tank and is cut back very hard each winter. In the early summer a fine form of *C. koreana*, raised from seed, is a delight scrambling through roses.

To the north of the house there is a 90 x 60ft area of 'car park' made up of a 12 inch or more deep layer of stone scalplings laid down by the previous owners for standing for heavy vehicles. Here we have made holes in the stones around the edge, filled the holes with leaf mould and planted a variety of shrubs and edged the planted area with clumps of *Anthemis punctata* subsp. *cupaniana* and

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Fig. 12 Alliums, oriental poppies, aquilegias and *Geranium sylvaticum* in the Old Garden

*Eriophyllum lanatum*. The stone surface has gradually greened over with self-sown grasses and here hollyhocks self-seed freely.

For autumn, colchicums are exceptionally successful with great patches of *C. speciosum* naturalised in the grass of the new garden to many species and cultivars grown under a dessert pear cordon in the Old

Garden where the spring foliage does not intrude. *C. agrippinum*, a raffle prize won at the Surrey group HPS nearly 40 years ago, makes a splendid display under a specimen of *Syringa vulgaris* 'Madame Lemoine' in the Old Garden. Also giving good autumn interest are asters, that wonderful *Solidago rugosa* 'Fireworks', crocosmias from

Ballyrogan Nurseries in Co. Down, for example CC. 'Fugue' and *x crocosmiiflora* 'Mephistopheles', and clumps of different clones of *Nerine bowdenii*. Nerines thrive in soil that has been slightly lightened with grit and *N.* 'Zeal Giant' is increasing well.

Vegetables do extremely well in the rich soil; few can be direct sown into the heavy clay but they're easily established when started in modules or pots. Brassicas and root vegetables, notably celeriac, are especially easy, but outdoor tomatoes rarely thrive.

We are enthusiastic about plants: a recent count took us to over 2500 taxa and there is always some interest throughout the year. The garden rarely looks manicured but in this heavy clay a lot of plants grow well without attention. 🌱



Fig. 13 A *Dierama pulcherrimum* seedling.

**Keith and Lorna Ferguson** are retired professional botanists and life-long gardeners who have developed this new garden in west Gloucestershire over the past 18 years. The garden is open to HPS Members by appointment and to Gardening Groups by arrangement. See [www.ebotany.co.uk](http://www.ebotany.co.uk)