Zelkova serrata. Seen to the right are *Picea pungens* 'Glauca' and *Abies concolor*.

Little Friars Arboretum

MERELENE DAVIS writes about the accidental creation of her arboretum in the Chiltern Hills of Buckinghamshire, north of London.

When I wrote "The Renovation of an Arboretum" for the *IDS Yearbook 1987* I hardly thought one day I would writing about starting one of my own and accidentally too! Priestfield had been brought to my attention when in 1980 the late great dendrologist Alan Mitchell, knowing that I was involved with a local tree group asked me if I could help him find an old arboretum in the Chilterns where he had measured the trees about 20 years previously. When we did find this five acre site about a year later, the collection was quite derelict with just 97 specimens remaining and as described in the article, the owners sought my help to renovate it and named it Priestfield. When I finally stepped down as Hon Curator in 2005 there were over 200 specimens and a group of volunteers, the Friends of Priestfield Arboretum, who still look after it.

Little Friars began for me in 1992 when there was a threat of development opposite our home, so like other neighbours I bought a hectare (2.4 acres) of land to protect the outlook and planted the majority of it with Christmas fir trees, to recoup the cost. Meanwhile, when I was obtaining trees for Priestfield, in an impromptu moment I would often buy another one for myself and then sometimes found I could not find a suitable spot in our garden and so it ended up where a Christmas tree had been sold! On a visit to New England in 2004, we visited Christmas tree plantations. Like us, they sold direct to the public

and encouraged people to select and tag their trees early (usually over the Thanksgiving holiday) then collect a few days before Christmas. We noticed that their spacing between rows of trees was more than double ours. In our case the fact that we are in a narrow lane with no car parking facilities, this select (from September onwards) and tag method, helped relieve soil compaction from so many feet in more adverse winter conditions as well as the sales pressure of the busy weekends in December. Thus I felt the wider row spacing we had seen in America would encourage more people to do this and resolved not to replant alternate rows and so eventually widen the space between rows. Another advantage I hoped, that this would encourage more field biodiversity and so help combat the aphid problem. In 2009, the Christmas tree venture showed an overall profit (apart from the value of our labour!) so we held a sale of trees in the alternate rows, and after Christmas finally brought in contractors to remove the stumps. Customers remarked upon the specimen trees which had become more evident, and in counting them I found there were more than 100 different taxa. A local magazine wrote an article entitled "The Accidental Arboretum" and it was listed on the website

Andrew and Merelene Davis with *Wollemia nobilis* (*left*) and *Cedrus brevifolia* (*right*).

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of 'Special Trees and Woodlands of the Chilterns, under this title too.

The soil is an unenviable mix of clay with flints laid down in the Cretaceous Period and occasional chalk pockets are encountered on this north facing slope of a valley that runs west to east so it is rather a wind tunnel for the prevailing wind. Unlike Priestfield, only about five miles away, it is unsheltered which did not matter when growing just Christmas trees but in 2012 when we had a -19.6 °C frost, my *Wollemia nobilis* died but that at Priestfield survived. Rather belatedly I am putting in some trees for shelter but I am constrained in that I do not want to plant tall growing trees in front of neighbours' homes so that side of the plot remains Christmas trees and income from sales can contribute to the maintenance costs. It is actually the top southern boundary where drying summer winds come that I feel do the most damage—sometimes deposits of Saharan sand reach here in the Chilterns and since I began looking after trees, I have noticed, on average, the decline in summer rainfall. In these somewhat Spartan conditions at Little Friars, the trees that have surprised me with their

List of taxa grown at Little Friars

Abies balsamea var. *phanerolepis*
Abies balsamea var. *fraseri*
Abies balsamea var. *koreana*
Abies balsamea var. *lasiocarpa*
Abies balsamea var. *nordmanniana*
Acer cappadocicum 'Aureum'
Acer davidii
Acer griseum
Acer negundo variegatum
Acer palmatum 'Inaba Shidare'
Aesculus × *carnea* 'Briotii'
Amelanchier lamarckii
Aralia elata
Araucaria araucana
Arbutus unedo
Aristotelia chilensis
Athrotaxis laxifolia
Betula albo-sinensis alleghanienis (*B. lutea*)
Betula albo-sinensis ermanii
Betula albo-sinensis utilis
Betula albo-sinensis yunnanensis
Buxus sempervirens
Buxus sempervirens 'Elegantissima'
Calocedrus decurrens 'Aureovariegata'
Catalpa bignonioides 'Aurea'
Cedrus brevifolia
Cedrus deodara
Celtis australis
Cephalotaxus harringtonia
Cephalotaxus harringtonia 'Fastigata'
Cercidiphyllum japonicum
Cercis canadensis 'Forest Pansy'
Chamaecyparis lawsoniana 'Pearly Swirls'
Chamaecyparis nootkatensis 'Jubilee'
Chamaecyparis pisifera 'Filifera Aurea'
Chionanthus virginicus
Choisya ternata
Cladrastis kentukea (*C. lutea*)
Cornus kousa chinensis
Cornus mas
Corylus avellana 'Contorta'
Cotoneaster salicifolia 'Rothschildianus'
Crataegus monogyna
Crataegus prunifolia
Cryptomeria japonica
Cryptomeria japonica japonica 'Rasen-sugi'
Cryptomeria japonica japonica 'Sekkan-sugi'
Cunninghamia lanceolata
Cydonia oblonga
Daphniphyllum himalayense subsp. *macropodum*
Davidia involucrata
Decaisnea fargesii
Diospyros lotus
Drimys winteri
Elaeagnus × *ebbingei*
Elaeagnus × *ebbingei* 'Limelight'
Elaeagnus pungens
Elaeagnus pungens 'Hosuba-fukurin'
Eucommia ulmoides
Eucryphia × *nymansensis* 'Nymansay'
Euonymous hamiltonianus
Euptelea polyandra
Exochorda serratifolia 'Snow White'
Fagus sylvatica
Fagus sylvatica 'Dawyck Gold'
Garrya elliptica
Ginkgo biloba
Gleditsia tricanthos 'Sunburst'
Gymnocladus dioica
Hoheria sexstylosa 'Stardust'
Hovenia dulcis
Idesia polycarpa
Ilex crenata var. *fukasawana*
Ilex aquifolium
Ilex aquifolium 'J. C. van Tol'
Ilex aquifolium 'Madame Briot'
Juniperus communis Suecica Group
Juniperus recurva var. *coxii*

vigour are *Malus hupehensis*, the *Prunus* species generally, *Parrotia persica*, *Phellodendron chinense* and particularly *Phellodendron amurense* var. *sachalinense* and a now magnificent *Zelkova serrata*, which in the early days had to be propped against the prevailing wind. The *Zelkova*, from the same source and planted at the same time at the sheltered site at Priestfield is a miserable thing and its *Phellodendron* only a little better. In contrast, the *Pseudolarix amabilis* and the *Diospyros lotus* thrive there but not here, at Little Friars. *Betula ermanii*, I expected to stand up to the prevailing wind and has not disappointed whilst maintaining a graceful shape.

With a pH just acid side of neutral I have been able to get away with planting trees like *Nyssa sylvatica*, *N. sinensis* and *Stewartia pseudocamellia* as well as conifers like *Sciadopitys verticillata* with an annual application of acid plant fertilizer and sometimes iron sequestrene and of course, 20 years of Christmas tree growing had acidified the soil to some extent so we have even had fungi like the attractive fly agaric, *Amanita muscaria*, appearing. As

sabina 'Tamariscifolia'
Koelreuteria paniculata
Laburnum alpinum
Larix kaempferi
Ligustrum japonicum
'Rotundifolium'
Ligustrtum lucidum
Liquidambar formosana
Liriodendron chinense
Liriodendron tulipifera
'Fastigiatum'
Magnolia stellata
Malus hupehensis
Mespilus germanica
Metasequoia
glyptostroboides
Microbiota decussata
Microbiota decussata
'Gold Spot'
Morus alba
Morus nigra
Nyssa sinensis
Nyssa sylvatica
Osmanthus delavayi
Osmanthus yunnanensis
Parrotia persica
Phellodendron amurense
Phellodendron chinense
Phillyrea latifolia
Photinia × *fraseri*
Phyllocladus trichomanoides
var. *alpinus*
Picea abies
breweriana
omorika
pungens Glauca Group
Pinus cembra
koraiensis
pinea
sylvestris
wallichiana
Platycladus orientalis
Podocarpus cunninghamii
(*P. hallii*)
Podocarpus salignus
Populus alba
nigra var. *betulifolia*
tremula
Prunus
lusitanica
lusitanica 'Variegata'
'Okamé'
'Pandora'
sargentii
× *subhirtella*
'Autumnalis Rosea'
'Taihaku'
Pseudolarix amabilis
Pseudotsuga menziesii
Ptelea trifoliata 'Aurea'
Pterostyrax hispida
Quercus frainetto
ilex
rubra
suber
Ruscus aculeatus
Salix babylonica 'Tortuosa'
Sarcococca hookeriana
var. *digyna*
Saxegothea conspicua
Sciadopitys verticillata
Sequoia sempervirens
Sorbus
alnifolia
cashmiriana
commixta 'Embley'
'Joseph Rock'
Stewartia pseudocamellia
Taxodium distichum
'Peve Minaret'
Taxus baccata
Taxus brevifolia
Tetradium daniellii
(syn. *Euodia daniellii*)
Tetracentron sinense
Thuja koraiensis
Thuja plicata
Thujopsis dolobrata 'Aurea'
Tilia henryana
Torreya nucifera
Trochodendron aralioides
Tsuga heterophylla
Wollemia nobilis
Zelkova serrata

Plus 33 British Native Trees

the site is small, this is never going to be a beautiful, grand collection but I am content in collecting as interesting a range of genera of trees as possible which often means they are smaller and slower growing ones too. As we have groups visiting who are not always keen dendrologists, I like to have trees with an interesting background or story attached, such as *Prunus* 'Tai Haku' and I recently acquired *Celtis australis* which delightfully is the lotus tree of

Exochorda serratifolia 'Snow White' in front of *Abies nordmanniana*.

Homer who described in *The Odyssey* how those who eat the fruits, forgot their longing to return home. For such groups, I ask for a donation and they bring a cheque made out to whatever charity I've decided to support that year.

I have found it is good to encourage visitors as it is an incentive to me to remember what each tree is—an increasing problem for those of us growing older. I often hear myself saying "Oh I used to know that!" Also, one learns from others with similar interests as when the Bucks Trees Club visited this year, a member reassured me not to worry about red needle blight on my stone pine, *Pinus pinea*, spreading to my Arolla, Bhutan or Korean pines, *Pinus cembra*, *P. wallichiana*, *P. koraienis*, as the disease only affects two-needle pines. So many tree interest groups, like many other local societies in recent decades, have folded being replaced by huge charities with links to big businesses, in addition to receiving grants and more able to benefit from 20% Gift Aid on donations. More pests and diseases of trees have entered Britain since the start of the Millennium than in the whole of the previous century! If there was better public awareness of this then people might question more.

At the time I first purchased the plot, my sons were still involved with the Scouts so I was often asked to test Cubs and Scouts on identifying native trees and it is difficult to find all the basic 33 native trees to collect foliage and twig samples when you want them! So I planted a hedge of native trees and now Little Friars could be useful to anyone wanting to learn the basics of tree identification and so appreciate the wonderful heritage of exotic trees found in our towns and cities and perhaps this might encourage more planting to replace the legacy left by earlier generations.

Management of any collection has restrictions and mine at Little Friars is size and need for low maintenance, which working with nature helps to achieve. I also restrict planting to the old Christmas tree rows so as to make mowing operations easy. Surprisingly, the specimen trees really do not look regimented. The biodiversity strips, as I call unmown ribbons between the rows, have already proved their worth with a wider range of plants, including wild orchids, and insects to be seen. Some visiting naturalist groups have urged more nettles, bramble and thorns in these strips but it is important to focus on their purpose here and the practicality that I don't like getting stung or scratched. Fortunately I obtained some advice from an expert who advocated leaving the biodiversity strips uncut far longer than if we were managing them for wild flowers, in fact, the best thing he said was to mow them alternate years, and I think it be can be fairly said that the greater insect diversity does help control aphids.

Recently I have become interested in developing Little Friars more as an ecological unit as trees like company; in the natural state, they would not just be with other trees but shrubs with herb and field layers too. Trying to create such a healthy habitat involves nurturing the whole ecosystem, including that below ground. Up until recently I have planted specimens at four-metre

Left, *Stewartia pseudocamellia* and right, *Cercis canadensis* 'Forest Pansy'.

spacings (I know it is too close but thinning will take place—either naturally or by intervention as time goes by) and used the space in between for Christmas trees. Now I hope to change this understorey by using shrubs to add more interest as well as shelter. The tree collection is on the eastern side of the plot whilst the west side continues to grow Christmas trees with the idea that sales can help pay for maintenance—particularly important as both my husband and I grow older and to secure the future for Little Friars Arboretum. It is probably optimistic and sounds pretentious but I think one of the aims of any project should be self-financing and where possible, create employment opportunities too. The rabbit proof fencing put in for the Christmas trees was a boon when planting specimen trees, although it now needs frequent repairs. However I discovered deer are great dendrologists as they seem to find the rarest of trees to munch upon so now the rabbit fencing has been topped with electrified fencing rope. This was used instead of wire because of the habit of deer to inspect barriers which therefore should be easily seen and the deer then remembers it has a sting so they stay clear, even though they could in fact leap the height.

Little Friars has proved an interesting open air classroom for me in so many ways and developing the tree collection is really fascinating and although it will soon run out of space, I hope there will always be enough room for that really special tree I cannot resist.