



One of the 12 pools created by damming two small spring-fed streams, creates a peaceful setting for the rich collection of trees at Bodenham, a farm in Worcestershire.

Four tree collections in Middle England

The arboreta described below by JOHN BULMER are the work of individuals or families with an aesthetic or scientific interest in trees. They are all in the English Midlands and all have similar altitude and climate. They have been created in recent decades by enthusiastic owners, three of whom are IDS members.

Bluebell Arboretum

The arboretum was started in 1992 to demonstrate some of the plants available in the very well known Bluebell Nursery at Smisby just over ten miles south of Derby. In addition it acts as a propagation resource and is a beautiful place to visit.

The Vernon family have built up a most interesting collection of rare genera and cultivars. An extension was planted in 2003 making a total area of five hectares. The soil is clay with a pH of 6.8. The rainfall is 600mm. Ponds were created from a small stream, ditches were cleared and land drains inserted. The arboretum is only 170m above sea level but it is windy and therefore hedges were planted and native trees added to give internal shelter to the specimen trees. The planting was into meadow grass but herbicides were used and stable manure added. Most of the trees were small and staking was not a routine. Mown rides allow visitor access to the specimens. Labelling and records are essential and GPS plotting is being done. There are collections



Quercus ellipsoidalis 'Hemelrijk' displaying particularly good autumn colour is a selection of the northern pin oak one of the many rare and unusual species grown in the Bluebell Arboretum and supplied by the nursery.

of *Liquidambar*, *Liriodendron*, *Sequoiadendron*, *Tilia*, *Quercus* and *Betula*.

A good arboretum can be built up quite quickly when standard forestry practice is employed especially if one has such a good source of trees. Both Robert and Suzette trained in horticulture and at Hillier's but have, in addition, experience in forestry and entomology respectively. Their son Robert, and his wife both have degrees in horticulture. Grafting is a very important part of the business and is now being done by the younger generation following experience in Holland.

Bodenham Arboretum and farm

In 1973 David Binnian and his family bought a small Worcestershire farm in a quiet part of the Midlands. There were two small spring fed streams on this undulating site. After earthmoving and damming 12 pools were created; the largest being one hectare in size. The soil is mostly rich red loam over sandstone with a pH between 5 and 7 and a rainfall of 690mm. The altitude is 60 to 130mm.

A poplar grove was planted in the early days followed by ten plots of different commercial timber species, which have now been thinned. Ornamental tree planting was done within a matrix of expendable trees including ash, oak, sweet chestnut and Norway spruce. Planting was done in rows to facilitate maintenance but this rectilinear pattern is not seen after removal of the nurse trees. Christmas trees were sold and also firewood. All newly planted trees were guarded with tubes or spirals and spot spraying with glyphosate was done for three years. A bark mulch is used.

The planted area is now 28 hectares and the stock pasture is 34 hectares. The two areas interdigitate but are separate. There are now over 2000 taxa in the collection with varieties of oak, maple, alder and holly.

In the mid 1990s it was decided to open to the public. A new access road of 1.3km was built and a semi-underground visitor centre and restaurant was constructed. This energy efficient building, overlooking the big lake, was opened in 1998 by dendrologist and radio astronomer Sir Bernard Lovell.

Provisional heritage status was granted in 1995. Since then the Royal Botanic Gardens, Kew and Wakehurst and the Forestry Commission at Bedgebury and Westonbirt have donated many rare tree species. Labelling is well done and all records are on computer. The owner and his son James aided by four workers manage the arboretum.

The new landscape is very varied and people like to see cattle, sheep, donkeys, ducks, geese and poultry as well as trees. There are many footpaths and quiet areas to sit. Currently there are 60,000 visitors per year.

Evenley Wood Garden

Since 1981 Tim Whiteley has transformed a Northamptonshire spruce, oak and ash wood into a notable woodland garden. Selective felling has been done to create rides, glades and curved paths. An avenue of *Prunus avium* 'Plena' leads from the new entrance to the timber frame building. There are 4km of mown rides.

The wood covers 24 hectares. There is a slope down to a stream near the western margin. Much of the soil is clay but there is a 4-hectare band of very acid soil. The pH range is from 4.5 to 8 and the rainfall 700mm per annum. Some stumps have been buried with excellent wildflowers on the resulting poor soil. A magnolia trial is being conducted on soil of varied pH.

Labelling is very good and the plant list contains over 3000 taxa as well as

bryophytes, birds, bats, butterflies, dragonflies and moths. There are collections of *Quercus*, *Magnolia*, *Prunus*, *Pyrus*, *Juglans* and a huge number of *Euonymus* species and cultivars. There are many shrubs, climbers and bulbs. There are some open days for snowdrops, spring bulbs, lilies and autumn colour. The lily collection is remarkable both in variety and in height, with some reaching over 2.5m.

Two new tree cultivars have been named—*Acer campestre* 'Evenley Red' and *Quercus rubra* 'Evenley Gold'.

Tim and Jane are ably assisted by head gardener Mike Fisher and two or three part-timers. They have created a forest garden, under mature oak and ash trees, which gets better and better with the passing years.

The Hollies, Soulton, Wem

This is a small organic Shropshire farm of 16 hectares, which has been converted to Agroforestry by owner Peter Aspin since 2001. Beef cattle are grazed on 20m-wide strips of permanent clover-rich sward between rows of trees. The trees are protected by electric fences but the cattle can eat the foliage, as the trees get taller.

The owner is a farmer but he is also a propagator of rare species. The trees are planted at 5m intervals often in groups of the same species. There is a very wide range of species from *Araucaria* to *Zelkova* but with special collections of nut and fruit tree cultivars. The trees are planted when small (300 to 600mm) without herbicides or mulch mats. Tree shelters are used. Slurry is the only fertilizer. The pasture strips are aligned north south and are 400m in length. The soil is light loam with a pH of 6.5. The rainfall is 700mm per annum. The cattle graze for nine to ten months but silage is made for winter-feed.

The experiment in Silvopasture is intended to reduce costs and energy input but also to provide better soil structure, better meat flavour and a more natural way of life for the cattle with shade and shelter provided by the trees. The 20 varieties of walnuts deter flies but do not provide good browsing for the cattle. There are ginkgos, hazels and hickories, 15 different sweet chestnut and almonds, as well as many fruit trees to sample.

This tree collection is not an orthodox arboretum but the very diverse tree content makes it of interest to dendrologists. It will become even more interesting in a few years time as it develops into a form of parkland, with a rich flora and fauna just like the cork oak forests of southern Portugal and Spain which are also grazed by cattle, sheep and pigs and inspired Peter Aspin.

Comment

Former land use In the majority of examples the planting was into farm meadows but at Evenley clearings were created in a mixed wood to allow the planting of specimen trees. Woodland planting provides shelter for young

photograph © John Bulmer



A particularly fine *Acer palmatum* 'Osakazuki' in Tim Whiteley's woodland garden at Evenley in Northamptonshire. This cultivar of Japanese maples has the most regular autumn colour but is not always the easiest one to establish.

trees but the ground is likely to harbour harmful fungi.

Pre-planting Landscaping, dam building and road building are done first. Soil testing, drainage and sub-soiling may also be needed before any planting begins.

Shelterbelts Young trees benefit from wind protection by a hedge or thicker marginal belt if space allows. Dense planting followed later by thinning can provide internal shelter. Group planting of specimen trees is expensive but instead nurse trees can be used as at Bodenham. Thinning can provide poles, firewood and Christmas trees. As in commercial forestry up to 90% of planted trees are removed during the successive thinning.

Planting technique Most owners prefer bare rooted trees of 1 to 2 m in height but unusual trees may not be available and so bigger potted trees may have to be used. Survival rates are better if grass and weeds are suppressed by spot treatment with glyphosate or other herbicide for the first three years after planting. Mulching is also helpful in suppressing weeds and conserving moisture. Plastic mulch mats were not much used though the benefits are nearly as great as those with herbicides. The Hollies is an organic farm and

photograph © Peter Aspin



At the Hollies, a small organic farm in Staffordshire, trees are grown in open pastureland; here cattle are grazing alongside ash and zelkovas.

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chemicals are not used and the small trees are planted directly into the clover-rich sward. Some losses will occur if there is a drought before the trees are fully established. Larger specimens need staking and all trees need rabbit proof guards. Squirrel control is usually required once the trees reach the age of 15 years.

Animals Bodenham is a stocked farm as well as an arboretum but fencing separates these areas. At The Hollies the animals are encouraged to eat tree foliage but electric fences protect the trunks.

Purpose Bluebell is attached to the nursery and functions as a showroom and stock-bed. Bodenham was started because of the owner's interest in trees and forestry but opened to the public in 1995. The Hollies is a small commercial farm. Evenley Wood is open for special days when the trees and bulbs are their best. All the owners have invaluable experience in farming, forestry or horticulture and they all keep records and label all the trees well.

More information is available from the following websites: www.bluebellnursery.com; www.bodenham-arboretum.co.uk; www.evenleywood.co.uk; www.silvaspin.org.uk