

Trees, timber and... apple pie

Wasting vital resources and opportunities, playing meaningless games

The Forestry Commission is restoring ancient fruit trees and pressing apples for juice in Wyre Forest.

Not wild crab apple trees in the actual woodland you understand, but erstwhile commercial fruit trees in old tumbledown orchards on farms within the local authority area, also called Wyre Forest, which includes Bewdley, Kidderminster and Stourport-on-Severn. Now, I am all in favour of boosting home-grown fruit production with new varieties and even preserving old varieties for posterity, but is it really the job of the Forestry Commission?

The last three decades have seen UK horticultural research sliced to the bone with hundreds of dedicated pomologists thrown on the scrap heap. Remember Long Ashton Research Station at Bristol – one of the world's top fruit research and development centres going under the bulldozer with fertile land, fruit orchards and expertise?

Recall how the UK National Fruit Collection at Brogdale in Kent, with 30 acres of orchard holding 3500 varieties and the biggest collection (2300) of apple varieties in the world, nearly became test tubes of germplasm in a cryogenics laboratory?

The latest is the decision to close HRI (Horticulture and Research International) Wellesbourne just down the road from Wyre Forest in Warwickshire. This internationally renowned centre of research develops leading-edge technologies for managing insect pests and diseases of apples and detection of contaminants in freshly pressed fruit juice.

Back to the future

Orchards around Bewdley in Wyre Forest, spanning three centuries, were famous in the 1920s and 1930s but now require tender loving care afforded by government foresters. For years private owners have not been able to maintain these orchards as going concerns, which is hardly surprising since old varieties yield low and succumb to pests and diseases unless plastered with pesticide.

Bringing Bewdley's orchards 'back to the future' is part of the 'Grow with Wyre Community Project', a Landscape Partnership

Scheme funded to the tune of £4m with a £2m Heritage Lottery Grant, £370,000 and £73,000 respectively from Grantscape and SITA Trust, and additional funding from half a dozen partners with the Forestry Commission leading the way, closely followed by Natural England.

Programme manager Bob Griffiths, from the Forestry Commission, praises the flavour of old varieties but acknowledges their poor yield. This means the realistic aim of the project is to help owners to get a return, rather than make a substantial profit. Work is not restricted to apples and pears (top fruits) because stone fruit (cherries, damson and plum) were even more important to this area 100 years ago. Some orchards have already been returned to use but others are too far gone.

"People had stopped planting these trees because there was no longer a market for them," Bob Griffiths told *The Daily Telegraph*. "The orchards were being lost, sometimes chopped up for firewood [sounds like a good idea – author's comment] or simply used as paddocks for horses. Working with owners to bring them back is not only good for biodiversity, but maintains the area's traditions."

Hang on Bob. I don't necessarily buy the whole 'biodiversity package' because isn't there a danger of diluting even further what little wild crab apple, wild pear and wild *Prunus* germplasm that remains in the woods and hedgerows.

A 'Tree Rescue Training' event took place in February 2009, to show people how to look after their fruit trees, take cuttings to graft trees of the future and make their fruit trees and orchards a great home for wildlife. Project managers talk enthusiastically about enticing two million people from the Birmingham catchment area as potential visitors, which sounds like a 'runner' provided they put a bit more 'fizz' in the apple juice.

Seriously though, wider community involvement is clearly crucial to the long-term success of this initiative, but I am not so sure that Saturday-night lottery punters (and taxpayers) would view it as a Forestry Commission priority. And



Trained foresters are restoring 100-year-old fruit trees while professional top fruit growers are constrained from planting new varieties.

especially as their money would be used to help landowners produce low yields of 'moth (codling) eaten' apples and then charge them to come and see noble chafer beetles on their old apple trees.

Most, like me, would probably prefer to see the Commission planting and harvesting conifers for home-grown timber and woodfuel supplies to help make the UK less dependent on imports, like illegal tropical hardwood from South East Asia used to make garden furniture. Now that would be a real boost for biodiversity in Indonesia.

Part of the FC-project remit is developing small localised markets using the 'fruits of their labour', which includes a proposal to supply fruit juice to Wyre Forest schools. There is the Commission's Annual Autumn Festival at the Wyre Forest Visitor Centre, near Bewdley, to interest people from all over the county of Worcestershire and beyond. The range of activities includes fruit pressing for juice, oak stake making, pole lathe turning, charcoal-making, horse logging and chainsaw carving demonstrations.

Liz Bunney, at FC in the West Midlands, says, "Wyre Forest is one of the largest areas of ancient semi-natural oak woodland and orchards in Britain, so the Autumn Festival is a great way for people to find out about how they can do their bit for the natural environment, learn more about this special landscape and have lots of fun at the same time."

Many households in Wyre Forest have apparently got more basic things to worry about because, according to Wyre Forest District Council, 15% per cent of their households are in 'fuel poverty', rising to 27% in the most deprived wards. Households in 'fuel poverty' are forced to spend over 10% of their income to achieve an adequate

level of warmth in the house.

National media coverage

'Grow with Wyre' is publicised on the FC and Natural England websites and recently gained national coverage in an enthusiastic *Daily Telegraph* article written by Jack Watkins and published in October 2009. He claimed something was lost when the Forestry Commission 'moved in' last century and turned much of the area over to coniferous monoculture, although he acknowledged 'the move' provided plenty of local employment.

Hang on a minute Jack. Don't you go and underestimate; conifer and softwood created employment including growing, harvesting and processing in local sawmills. Have you seen recent unemployment figures for the Wyre Forest area? According to *The Kidderminster Shuttle*, the local newspaper, the claimant count for Kidderminster in September 2009 was 1,725 (6.1 per cent), almost double the figure a year earlier.

The one in five young people who can't find a job have more pressing things to do than to watch full-blown foresters on the government payroll squeezing apples until 'the pips squeak'. And apple sauce could be next on the menu with rare-breed pigs let loose on an area of overgrown high wood to test their suitability for woodland restoration.

So how does this square with the real UK apple industry. Thanks to exceptionally high yielding modern varieties, UK apple production has risen quite remarkably over the last five years and now accounts for 35% of dessert apples eaten, even though the area planted has fallen. 'Gala' is now the top English apple with the newest varieties, 'Jazz' and 'Rubens', coming up fast, but low prices linked to the recession have

put grower expansion plans on hold.

"There has been a renaissance in the English apple industry," said Adrian Barlow, chief executive of English Apples and Pears, at the 2009 National Fruit Show. "We all recognise the opportunity to double our existing production of English apples, but it will only occur if returns to growers justify necessary investments."

No apparent problems like this at 'Grow with Wyre' which is planting new trees, albeit using old varieties. Think about it, professional apple growers can't afford to plant the latest varieties, while other land owners are subsidised to plant apple varieties that were probably around when Anne Boleyn lost her head.

Easy sell

This particular project is easy to sell to the public at large.

'Wyre Forest' conjures up idyllic scenes of rosy-cheeked children in period dress plucking rosy-red apples from trees in the woods. There is a species of wild apple in our woods, but, contrary to popular belief, *Malus sylvestris* (the bitter crab apple) played only a minor role in the development of today's commercial apple (*Malus domestica*).

Only one wild apple species has genetic sequences common to all commercial varieties irrespective of origin. That is *Malus sieversii*, a sweet red apple growing wild in the forests of the Tien Shan mountain range in Kazakhstan.

Moreover, most UK crab apple trees are not truly wild but descend-

ed from garden escapees, more pink in the blossom showing increased closeness to *Malus domestica*. The whiter the blossom is, the wilder the trees, which will almost certainly have some thorns.

The Forestry Commission describes Wyre Forest as one of the three most important areas of ancient woodland in England. As such it could clearly make an important contribution to the country's timber and woodfuel needs. Its 2500 hectares are 50% broadleaf and 50% conifer, but this will change, says the Forestry Commission, as they continue to cut down conifers and revert to 85% native broadleaf for 'more biodiversity'.

But thanks to the hazel dormouse (*Muscardinus avellanarius* L.), a British biodiversity icon, this strategy could have already stalled. Hazel dormouse, as the name suggests, is traditionally associated with broadleaf woodlands featuring hazel coppice, but recent studies show this tiny retiring rodent may inhabit a much wider variety of habitats than first thought, including conifer plantations.

The Commission is now concerned that accelerated clearance of conifers may disrupt the hazel dormouse in established stable environments and is carrying out a conifer removal experiment to find out more.

The Forestry Commission and Natural England are clearly worried, and understandably so, since the species is protected by no less than five pieces of legislation, both UK and European.

Rose-tinted spectacles

Those attempting to reconnect with the woodland's past should understand that the Wyre Forest was perhaps not always all that it is thought to have been. Clearance of wild wood province for agriculture in Wyre Forest started in earnest around 2000 BC (Bronze Age) and continued apace, so that by Roman times the area of woodland left was probably not much greater than today.

Sharp population falls at the end of the Roman period caused corresponding falls in the area of land cultivated, leading to recolonisation by trees and development of secondary woodland. Today's actual Wyre Forest is probably that mentioned in an 8th century Worcestershire Anglo-Saxon charter as 'Weogorena Leage' (the wood of the Weogoran) west of the Severn. As such, Wyre Forest has survived charcoal burning for the industrial revolution and the 20th century planting and harvesting of conifers for softwood timber.

It was Oliver Rackham who showed there was no correlation between exploitation of wood for local industry and survival of medieval woodland, whether you look at The Forest of Dean, Wyre Forest or anywhere else. Those areas which did lose their medieval woods quickly and 'completely' were the more intensive farming regions like Norfolk which lost 75% of its medieval woods between 1600 and 1790.

This is logical because those who use wood generally manage their

woodland resources in a sustainable way – it makes no sense to do otherwise. Coppicing broadleaves is the classic example of good practice, but the same concept and ethos is followed for clearfell conifer plantations established and replanted in temporal sequence that ensures unbroken supplies of timber for local sawmills.

Jack Watkins' article in *The Daily Telegraph* rejoiced in how employment of FC personnel on this project shows that an increasing part of the FC remit is as much about education, conservation and community engagement as it is about timber extraction. FC is still engaged in timber extraction, which in this case is softwood and not sustainable, because they have no intention of replanting.

They are probably doing a 'good job' in the orchards but the real question is, should they be doing it at all? In the light of serious looming problems on the bigger national screen you couldn't make it up if you tried.

The government is champing at the bit to begin the biggest house-building programme since the 1960s, while the country teeters on the brink of an energy catastrophe. Both situations would benefit from careful and planned exploitation of the country's wood resources and the country waits...

while those funded by the taxpayer to plant and manage trees and produce usable wood 'make apple pie'.

Dr Terry Mabbett



(Left) Wild crab apple (*Malus sylvestris*) never featured prominently in commercial apple breeding. (Centre) Conifer plantations are felled and not replanted. (Right) Trained foresters have funds to restore 100-year-old fruit trees while professional top fruit growers can't afford to plant new varieties – modern apple varieties in Kent shown here.