NEWSLETTER

No 94 April 2021

EXECUTIVE COMMITTEE

Please note that in this list, and the rest of this archived version of the Newsletter, contact details have been removed for data protection.

OFFICERS
Chairman: Hilary Dodson
Treasurer: Peter Robinson

MEMBERS
Membership: Sharan Packer
Minutes: Peter Nichol,
Newsletter: Jean Richards
Apple Events: Margaret Drury
Rachel Benson
Jo Murphy
Philip Rainford
Chris Simmonds

LOCAL CONTACTS

Local contacts are an informal network of volunteer members who may offer a range of services from organising occasional events in their area, to swapping seedlings, or simply providing information to visitors and newcomers.

In this issue we welcome a new local contact, Jeanie Jones from South Scotland.

- James Ellson: Hayfield (and area) (SK22 2LJ), Bridget Evans: South Yorks,
- Melanie Fryer: Skipton/Gisburn
- Ken Haigh: Darlington,

- Ann Hindley: Crowle, Scunthorpe
- Jo Murphy: York area
- Peter Nichol: Manchester area
- Philip Rainford: Cumbria & North West
- Chris Simmonds: Ryedale & North York Moors,

If you have a fruit growing query which you think the Group might be able to help you with, please don’t hesitate to get in touch, but try your local contact first, if you have one: they are much more likely to know, for example, what will grow, or not, in your area. And if they can’t help, they will try to put you in touch with someone who can.

As you can see, the contacts list isn't complete, so if your area isn’t included, would you like to volunteer? Simply get your name and contact details in the Newsletter, and you take it from there, doing as much or as little as you wish.

EDITORIAL

When I wrote the Editorial for the April issue last year, I was confidently expecting that it would be the first and last written in lockdown. How wrong can you be? What a strange year this has been, but at least we now appreciate our orchards, gardens and allotments all the more. What would this year have been like without them?

So to this current issue, and the hope that it really will be the last in lockdown. Group activities can't start up again just yet; please keep an eye on our website and Facebook page for up-to-date news as the situation develops.

May I remind you yet again to renew your membership for 2021 if you haven't already done so: if you don't, this will be the last Newsletter that you receive (now there's a threat!).

In last July's Newsletter, I gave a recipe for an avocado dessert. I did so more for fun (who's ever heard of such a thing?) than information, but I can now report that, having got two small out-of-season avocados from our Community Fridge, I made the dessert and it was dead easy and *delicious*.

If you haven't come across the Community (or Free) Fridge movement, look out for one near you as they spread across the country. Did you know that the average family of four wastes £720 of food a year? The Fridges take unwanted food, mainly but not exclusively perishables, from both shops and individuals, and give it away for the simple purpose of keeping it out of landfill: something to bear in mind if your fruit trees produce more than you can consume. You can find more information, and look out for a Fridge near you on this website: https://www.hubbub.org.uk/the-community-fridge. Ours here in Kirkbymoorside opened a couple of months ago, and we've been having a bit of fun seeing what we could cook from an assorted collection of items, and posting pictures on line of our successes. Even the local scout troupe joined in.

While we are on the subject of waste, apparently horrible things happen to overripe bananas, as you can find out from an article we pinched (with permission) from the Friends of the National Railway Museum of all things. All our regulars are in good form: Stuart Denton continues with the war effort, James Ellson has a mulberry tree for his birthday and Anne Lee is exploring orchards in Bradford. Goji berries (held over from the last issue) are back, along with rose hips and juniper berries (this last being close to your Editor's heart, for reasons that will become clear). A member moving to Spain needs help and another explains how to find old orchards on maps. There's an item too difficult for me to understand on honey bee decline, and the usual serving of the slightly more silly.

So read on. Lockdown is almost over, and hopefully you will find something of interest to get you through the last few weeks.

GROUP NEWS FROM OUR CHAIRMAN

Shows

One year on, some levels of uncertainty still remain. However some things are likely to go ahead even if they have to be in a modified form.

The **Show at Harrogate** has been renamed as Spring Essentials and will take place from 20th to 23rd May. This is one month later than normal. It will be at the usual place, the Great Yorkshire Show Ground, but the whole event will be outside. Hopefully the weather will be kind in May.

As we are outside I have volunteered to do a garden in the Square Yard category. The size that I have in mind is two yards by two yards. Once again the theme will be "My BackYard" and the plants will be in household containers. Thus, once again, we need dustbins, dolly tubs, metal watering cans, mop buckets etc.. I hope to have some apple trees in flower and other fruit plants in leaf, but to get good colour we need some flowers, probably pansies and primulas will be available. Please do your bit by growing some of these. At present I do not know when set up will be, but is most likely to be from the Monday of that week.

Unfortunately the **Heritage Plant Fair at Harlow Carr** on the 1st and 2nd of May has been cancelled.

Looking forward to July, we are hopeful that there will still be both a **Great Yorkshire Show** and the **RHS Tatton Park Show**. At present there are no details so I will be calling for help when we know.

Meetings and courses are still not allowed, but they will resume as soon as possible.

Please check the website and Facebook for details.

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Teaching Gardens

We are continuing to maintain the teaching gardens, a few of us working at social distance. Most of the pruning was completed in the late autumn, but scion wood was collected earlier in the year in the vain hope that grafting courses could be run. Regretfully it is now too late as the buds are bursting. As expected the weeds have been growing and the grass is starting to elongate.

The order from F. P. Matthews arrived earlier in the year than we expected, on a particularly grim day. It was windy with many wintery showers, and we ended up rather cold and wet. Thanks to Robin and his wife, the order was sorted and people were asked to collect their trees from the Otley Teaching Garden. That task is now almost completed. Perhaps this is a good time to remind people that if you especially want something, the time to order it will be August.

At Otley the free standing trees are now all planted and an enclosure for step-overs has been made. We are about to eat the last of our stored squash and the greens have been very useful, but are now nearly finished. There are still plenty of dried beans available. It will soon be time to start sowing seeds, we just have to decide what to grow.

Trees grafted two years ago have now been sold, and many of the one year olds have gone. Strawberry plants will be available for sale, with many being potted up for sale at Harrogate. There are also gooseberry and blackcurrant bushes looking for good homes.

If you have not seen the Teaching Gardens for some time, perhaps you could pay a visit when we are allowed to go out again. Then (but not before!) please phone me to check when the gardens will be open, and to get directions if you have not been before.

Hilary Dodson

CONFESSIONS OF A FRUIT NOVICE

In this household, there are two red letter days in the apple cycle each year, both an occasion for modest celebration.

The first occurs, of course, in late summer when the Very First specimen from the new crop reaches the table. A bit small, a bit tart, still with a few white pips, picked a little too early because we can't wait any longer to congratulate ourselves (and Mother Nature) on another successful year. Money saved (that's the Constant Gardener, aka the Husband, Yorkshire to his fingertips), no air miles, no emissions (me), tree to table in ten minutes, and a wonderful taste. Well, a bit tart, but a taste of things to come.

The other, celebrated by me more than the CG, is the day when he comes from the cellar bearing a small withered brownish object, still edible but only just, and declares it to be The Very Last of the season. No more of our own apples until the late summer (see above). Is it unkind of me, I wonder annually, to mutter a silent prayer of thanks? Now I can go to the greengrocer with a clear conscience and buy some pears, a few mandarin oranges, maybe a small melon…

I do go to the greengrocer, and there on the fruit counter is a box of Coxs, claiming to be English, and in such fine condition that they don't look real. What do they do to them to make them last so long? I dread to think. And I don't want to eat them. I ignore my conscience in favour of my stomach, decide to overlook the matter of air miles, and buy a small melon. Lovely!

FOLLOWING UP…

HOW TO STORE YOUR APPLES

And following on from the Fruit Novice's thoughts, the long running saga of how best to store your apple crop drew this comment from our Membership Secretary:

Over the years I have tried various methods for storing apples and my current favoured solution is wrapping individually in newspaper and then packing them in the drawers of an old upright freezer in the garage.

The garage is partially below ground level at the back where the freezer is located. The freezer obviously is not switched on. Because the seal is good on it the apples stay at a fairly constant temperature. I find that condensation does build up in the freezer during storage which makes the newspaper a little damp and keeps the apples from drying out. The newspaper stops the rot in any of the apples from transferring to adjacent apples. I have found that there can be a completely rotten apple in the middle of others that are completely free of any rot. For the eating apples that I store, I usually wrap them in the newspaper and then in Lakeland keep fresh bags before putting them in the freezer. This seems to keep them fresher for longer.

At the time of writing I still have plenty of fresh Bramley, Lane's Prince Albert and Edward VII in the freezer The Bramleys are ripening up though so I am starting to use them as eating apples because they are now quite sweet (at least I think they are), and the texture is good.

Sharan Packer

BACK TO BASICS

And continuing with the apple theme..

Over the last couple of years a number of common questions about growing fruit have been asked, so for our 'back to basics' feature I thought it might be useful to revisit these questions.

What do you mean by "apples don't grow true from seed"?

If you plant an apple pip, it might grow into an apple tree (eventually) but the fruit on it will not be the same as the apple that supplied the pips. This is because the pip is a seed which contains the fertilized ovum of the apple tree. The pollen which fertilized the ovum will have come from a different apple tree so the resulting seed will contain genetic material from both parent trees. Therefore the tree that grows from that seed will have characteristics from both parents. There is no way of knowing in advance exactly which characteristics will be inherited and individual flowers on a single tree might have received pollen from lots of different apple trees.

If the flowers have to be fertilized by pollen from a different apple tree, and each flower might have received different pollen, why are the apples on the tree all the same?

This is a common question and source of confusion. The pollination process allows development of a seed, which contains the genetic material from both parent trees, therefore every seed could be genetically different. The fruit that we know as an apple is merely a casing, a method for the tree to protect and disperse its fertilized seeds and is a product of the tree that bears those fruits in the same way that the flowers and leaves are a product of that tree.

Why do the apples on my tree look very different this year?

Although the specific cultivar of the tree dictates how the fruit will look and taste, this can still be affected by a number of factors such as weather and growing conditions. In some very hot and sunny years we see apples getting 'sunburned', literally. They develop more red colouring on the fruits which are more exposed to the sun. A lack of, or excess of, water can also affect the look and taste of the fruit. Last year we noticed the early apples in this area didn't have much flavour and were low in sugar, probably because of the cold, dull summer, but with a burst of autumn sunshine the later fruits improved. Disease can also affect the appearance of fruit. Sometimes an entire limb of the tree can start producing fruit with a slightly different flavour or appearance, this is thought to be caused by a random mutation in the genetic code and may often produce desirable characteristics. Scions can then be grafted from this limb to produce trees with these new characteristics.

I have seen some apple trees advertised as 'self-fertile'; does this mean I don't need another tree for pollination and does it mean that I can grow more trees from the pips?

There are a few so called self-fertile apple trees and yes, this means that technically you can get fruit from them without the need for pollen from another tree….but. There is always a 'but', as they say. In ideal conditions it will all work fine but, as is the case with many self fertile plants, they always seem to do better if there is another source of pollen. This is because when you are relying on a single tree to produce both the pollen and the ovum, in good condition, at exactly the right time and for that pollen to reach the ovum efficiently there is a lot of scope for things to go wrong. There is also the problem of lack of genetic diversity; the resulting seeds from a self pollinated tree will have the same genetics as the parent tree therefore the same weaknesses and vulnerability to disease. Having another apple tree nearby to provide an

alternative source of pollen makes the whole fertilization and hence fruit producing process more reliable. If the tree really has been self pollinated (difficult to be certain unless in controlled conditions) then yes, the seeds should grow true but may not be very vigorous for the reasons above.

What is rootstock?

Root stock is the stump of a related species which already has an established, healthy root system, and to which material from another tree is joined by grafting or budding. We use rootstock for a number of reasons including to manage the growth habit, size and vigour of the resulting tree and to produce fruit in a shorter time. Most of the rootstock we now use has been bred specifically for certain characteristics such as size or disease resistance but grafting and budding of fruit trees has been carried out for hundreds of years, certainly long before modern plant breeding research was established. The original rootstocks would have been plants such wild crab apples or existing fruit trees. Today it is still quite common to graft pears, quince or medlar on to hawthorn hedges (*Crataegus monogyna*) to make an interesting mixed hedge though it tends to be enjoyed more by the birds than by man!

Why do I have to use rootstock?

As explained above, apples do not grow true from pips so the only way to increase your stock of a specific cultivar is to take a cutting from the parent tree but, with a small number of exceptions, apples do not root easily from cuttings therefore a scion (dormant cutting) or bud is normally grafted onto an existing plant (rootstock) to produce the new tree. However, it is possible to root apple cuttings, just not very reliable or quick. I recently found out that an elderly uncle has spent the past 20 years or so perfecting the technique of growing apple trees from cuttings. He tells me that he learned some of the secrets from ‘the old guys’ but since he is 87 heaven knows how old they were! He tells me it takes patience, skill and a lot of luck and you have to be prepared for failure. Unfortunately he lives in Norfolk so I haven’t been able to go down and see the results of his efforts or learn his secrets.

Does rootstock produce fruit?

If left to grow then the rootstocks will eventually produce fruit. The apples produced by rootstock are not very inspiring, at best they are like a cider apple but all too often just small and green though I am reliably informed that pigs will eat them. However the St Julien rootstock we use for stone fruit is another matter. The fruit is a small green plum, very

much like a greengage, and quite delicious. In fact it might be worth leaving a couple of spares to grow on just for the fruit.

What happens if I don't use my rootstock one year?

This is not a problem. Just make sure it is in soil, whether that is in a pot, heeled in or planted out in the garden. It can then grow on for another year and be used for grafting the following year. If you have bits that you cut off your rootstock (when trimming them down before grafting) you can push these into the soil and they will develop roots and begin to grow as new rootstock. It is usually best to leave them for 2 years to grow and develop a good root before using them.

Chris Simmonds

UNUSUAL EDIBLE BERRIES:

Goji Berries

This, the last item in a three part series, was carried over from the January Newsletter due to lack of space.

The goji berry (*Lycium barbarum* or *L. chinense*), also called the wolfberry, is a bright orange-red berry that comes from a shrub that is native to China. The two are closely related species of boxthorn in the nightshade family, Solanaceae; fruits are similar but can be distinguished by differences in taste and sugar content. Both species are native to Asia, and have been long used in traditional Asian cuisine.

The fruit has also been an ingredient in traditional Chinese, Korean, Vietnamese, and Japanese medicine, since at least the 3rd century AD. In Asia, goji berries have been eaten for generations in the belief that they prolong life. Over time, people have used goji berries to try to treat many common health problems like diabetes, high blood pressure, fever, and age-related eye problems.

Since about 2000, goji berry and derived products have become common in developed countries as health foods or alternative medicine remedies, often with exaggerated and unproven claims about their health benefits. As with many other novel "health" foods and supplements, the lack of clinical evidence and poor quality control in the manufacture of

consumer products prevent goji from being clinically recommended or applied.

Goji are best planted in moist, well-drained soil, and trained into a fan shape against a wall or fence. Plants sucker freely. The small berries are held like droplets along the stem, watch out for thorns while harvesting.

Although not the tastiest of fruits, goji berries can be eaten raw, cooked, or dried (like raisins) and are used in herbal teas, juices, wines, and medicines.

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Rosehips

Thanks to Lisa Cuncliffe, a wild food expert and forager based in Leeds, for permission to quote from her website 'edulis wild food'.

The hedgerows seem to be heaving with rosehips this year! (2020)

These under-appreciated red beauties are abundant, native, free, and packed with goodness including more nearly 9 times as much vitamin C by weight as oranges (oranges 53mg per 100g versus rosehips 426mg per 100g!) so it's utterly crazy that we don't utilise this incredible resource more than we do. Roses are related to apples and so the hips are fruity and naturally sweet when ripe.

The rosehips need to be fully red, but you don't have to wait until after the first frosts to use them for a traditional-style ketchup or a syrup. You can freeze them if you like, to break down the cell walls and/or to do your processing at a later date, but I used fresh rosehips for my recipes, and they were bright red and firm but not rock hard, they did give a teensy bit when squeezed. If you're going to cook them anyway, this is just perfect as they're dry and easy to pick, no mess, and they keep a few days in the fridge until you have time to process them. For wild rose hips, don't pull them off the stems, snap them off sideways, it's much quicker and easier. Watch the thorns, especially on the Japanese or beach roses, they have way more than the wild rose.

Rosehip varieties

All rose hips are safe to eat, however certain species produce more useable hips than others:

- I mostly use the UK-native wild rose or dog rose (*Rosa canina*) with small slender oval fruits between 1-2cm long, they have great flavour, colour and a natural sweetness, the petals smell nice too,

usually in pale pink, they're thorny on the main briars but not on the stalk of the hip

- Another good species for foraging is the beach rose or Japanese rose (*Rosa rugosa*) which has huge, cherry-tomato-like hips with lots of sweet flesh on and incredibly fragrant petals as well, usually in shocking pink or white, all stems are covered in tons of fine densely-packed spines so be careful.

- I also use burnet rose (e.g. *Rosa pimpinellifolia*) which usually have black hips! These make a fabulously dark vodka if infused, or an interesting syrup, the petals are typically white and slightly fragrant, stems are incredibly spiky so go slow or use gloves.

For more information, useful pictures for identification, and recipes, visit: www.eduliswildfood.co.uk

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Juniper Berries

Juniper berries should perhaps not be included under this heading because they are not edible (as in eaten by people) but they are an essential ingredient of something we consume (at least in the Editor's household): gin. So we are sad to report that a fungus-like disease, *Phytophthora austrocedri,* has been found spreading through juniper, one of our rarest native trees, causing dieback and tree death.

Juniper is essential to the production of gin, and is mainly found in Scotland, where 70% of the UK's gin output is produced. It is also a key food plant for a wide range of invertebrates and birds, and it has a unique and specialised group of associated insects, fungi and lichens.

In Scotland, significant outbreaks have occurred in the Cairngorms National Park and a Site of Special Scientific Interest at Glen Artney, Perthshire. There are smaller outbreaks elsewhere, including southern Scotland. In England, outbreaks have occurred in the north at the Upper Teesdale National Nature Reserve and at various sites in the Lake District in Cumbria. A smaller number of cases have been confirmed in southern England.

Research has shown that the pathogen spreads in water; by movement of infected plant material; and by movements of contaminated soil such as soil sticking to footwear, walking poles, camping equipment and vehicle wheels. The fact that it can be spread by water makes it

particularly difficult to control. Visitors to juniper forests are being encouraged to clean soil from their boots, bikes tyres and dog paws before and after their visit, to help prevent spreading the disease.

BOOK REVIEW:
"Orchard, A Year in England's Eden"

From member Peter Dale:

Though we live in Stockport (and so qualify as members of the Northern Fruit Group), my partner is a key worker in Hereford. We spend, when allowed, much time exploring that county with its many apple and pear orchards, and enjoying the 'fruits' of the many cider and perry makers. (Did you know that the only cider museum in the world is in Hereford?)

Last year a wonderfully comprehensive, well reviewed and readable book was published about the natural history of a mature apple orchard in Herefordshire: *Orchard, A Year in England's Eden* by MacDonald and Gates. We don't always think about the benefits to nature of an orchard. I strongly recommend this book.

Amazon has this to say about the book:

England's ancient orchards, collaborations between people and nature, are sources of hope for the future. Protecting them promises a far richer England for the centuries to come, for wildlife and for us.

As the seasons turn, a wealth of animals and plants are revealed: Bumble and solitary bees apartment-hunting in April; spotted flycatchers migrating in May; redstarts, hedgehogs and owls nesting in June; an explosion of life in the summer and the harvest and homespun cider-making in the autumn. And all throughout the year, the orchard's human and animal inhabitants work together, creating one of the richest ecosystems left in Britain.

Explore this unique habitat throughout the course of a year, and marvel at the beauty and strength of nature.

Published October 2020 and available from Amazon in hardback (£13.98), paperback (£8.19) and Kindle (£8.99) formats, prices may have reduced by the time you read this.

The Cider Museum is of course closed at the moment, but if you are heading west when restrictions are lifted, you will find it at the aptly named Pomona Place, Hereford HR4 0EF. Meanwhile you can explore the delights of their website (cidermuseum.co.uk) including some recipes from Mary Berry, including this one:

Herefordshire Cider Cake: a spicy cake that the family will love
Ingredients:
1 orange
Sweet cider
4 oz (100 g) margarine
6 oz (175 g) caster sugar
2 eggs
8 oz (225 g) self-raising flour
½ level teaspoon each of mixed spice and cinnamon
8 oz (220 g) currants

Oven at 350°F (180°C), Mark 4. 7-inch cake tin, lined and greased.

Method
Grate the orange rind and squeeze out the juice. Make juice up to ¼ pint with cider.
Cream the margarine and sugar in a bowl with the orange rind until light and fluffy. Beat in the eggs one at a time.
Sift the flour and spices together. Stir into the mixture with the currants and cider until mixed to a dropping consistency.
Turn into the tin, smooth the top and bake in the oven for about 1 hour or until the cake feels firm to the touch and a warmed skewer inserted in the centre comes out clean.
Leave to cool in the tin for about 10 minutes before turning out. Remove the paper and leave to finish cooling on a wire rack.

From 'Cider for All Seasons' by Mary Berry, published in association with H P Bulmer Limited (1977), now out of print but widely available second-hand.

A FRUIT GROWERS DIARY

Stuart Denton continues his series of extracts from the Diaries of Raymond Bush, published in the quarterly 'Countryman' Magazine', which he inherited, sadly incomplete, from his father. The interest lies in the insights into many aspects of fruit during WWII, and afterwards, in the equally austere period of the late 1940s; as well as in Raymond's customary unquenchable curiosity and good humour.

We are now into 1942 and Russians seem to be all the news, for a variety of reasons. And more vagaries of the weather.

Jan. 1. Raspberry-growers may be in for a good time. It seems that there is a commercial demand (from expectant mothers) for 'raspberry-leaf tea'. (*Traditional lore suggests it aids in delivery.) (I'm told you need be careful with the dose, or you could have a surprise! Ed*)

Jan. 15. Left home long before dawn in a temperature 21 degrees (Fahrenheit) below freezing, to travel three hours and watch a new spraying-machine being tested. Though many gallons of water left its nozzles none returned to earth save as minute drifting ice crystals. (*Had the same effect at home today with steam from our central heating boiler. Oh, the 2021 winter.)*

Here, alas, we fall into a gap in the series, emerging in the autumn.

Oct. 17. There is a great variation in the size of sweet chestnuts. This is not necessarily due to season or locality but to most chestnuts being chance seedlings and not grafted from specimens of known performance.

Oct. 24. Still squashing caterpillars in the brussels-sprout tops. Failing derris, we badly need new insecticides. In 1916 the Russians used a decoction of tomato leaves and stems, and next season I shall try one of yew and laurel clippings, since, what the alkaloid poison toxin misses, the prussic acid from the laurel may hit. (*When it comes to killing insects the human mind is at its most inventive.)*

Oct. 30. We are now trying to grow dandelions of Russian extraction for the production of synthetic rubber.

Nov. 4. In Surrey picking with the aid of a flash-lamp, I gathered armfuls of outdoor chrysanthemums in some twenty varieties and filled every copper and bucket I could find. (*Was this legal, I wonder*.)

Nov. 20. A friend was told by Russians at Murmansk that they always scraped the cosmogene (grease) from lease-lend consignments and spread it on bread in place of butter. (*They should have tried the recipe from July 9th, below.)*

Nov. 30. Opening up an apple that was a genuine Siamese twin complete with two eyes, found in the two cores only seven plump and fertile pips. The full complement of a single apple is ten pips.

Dec. 9. A West Midland fruit-grower showed me a patch of standard plums which had been given to his father 'for consolation' by a nurseryman who had sold him, at a high price, because of their extra fat buds, some black-currant bushes suffering from a severe infestation of big-bud mite.

Dec. 14. Lunched with a man who, in the last war, trained Russians to fly dirigible balloons. One of his pupils, seven feet tall, was so tough that in an emergency he would console himself with half a pint of petrol in cold tea. (*Why bother with the tea?*)

Dec. 27. Near Stratford-on-Avon recently, on a wettish day, one man not only picked ninety-seven nets (of sprouts) - over seventeen hundred-weight - but carried out, weighed, tied and loaded them as well.

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Jan. 14. Amateurs should know that tar-oil spraying in winter can quadruple the black-currant crop where bushes are free from reversion. (*And far more than quadruple the damage done to human health.)*

Jan. 16. Already in the Vale of Evesham spring cabbages are in cut. Immaturity often pays; one grower told me his father made a fortune from flat pea-pods and two-leaved cabbages.

Jan. 27. Black marketeers find it worth while to spend £4 on a ticket to Penzance and bring back 100 lbs of 'personal baggage' in the shape of daffodils and anemones.

Jan. 29. A subscriber tells me that from a plot of garlic 6 ft by 9 ft he harvested 18 lbs, and sold at 10s a lb, £9 for the lot. This works out at £7,260 an acre, suggesting that this breath of the Mediterranean can be profitable as well as pungent.

Feb, 2. Ye Olde Fancy Herbe Businesse is an even better racket than garlic. Take two small fir cones. Heat in the oven till the scales open. Dip in oil of cloves, tint with pretty paint, suspend with a ha'porth of ribbon and sell for half a crown.

Feb. 7. Having recently published a book on soft fruit growing, I received from my daughter-in-law a greetings telegram, 'Congratulations and thanks for hints on how to raise young Bush's'.

Feb. 10. Yellow streams of the new D.N.C. wash drift over the orchards and the men in the village pubs of an evening are yellower than any Chinese.

Feb. 11. Passed a corner where three roads join, on the map Three Chimneys. Frenchmen from the Napoleonic wars, imprisoned at Sissinghurst Castle, named it les trois chemins. The rustic did the rest.

Feb. 24. Was told that the Land Army girls, trained to spray with the new big mobile spray outfits, are using twenty per cent more wash that the grower's spray gangs reckon to need. Research workers expect a far better control as a result of better work.

Mar. 15. Am assured that if flax be sown on bracken-infested land it will grow and flourish. The bracken will come up but will die. Worth a trial?

Mar. 20. After a broadcast on sunflower seeds for hens I went to buy a packet. There was a long queue already outside the shop, all waiting to do the same.

April 1. Now an intelligent Russian has crossed wheat and rye with couch grass to evolve profitable perennials. The trouble will be to get rid of them once they are planted.

April 14. Temperature at noon was 78 deg. in the shade.

April 16. Maximum day shade temp 86 deg.

May 1. In poor weather bumble bees are infinitely more useful than hive bees, since even rain does not deter them; but, according to all the laws which govern the design of aeroplanes, the bumble bee is inherently unstable and cannot even fly. Surprising how Nature survives such errors.

May 10. With rain driving horizontally before a fifty-mile-an-hour blast, and clad in my warmest winter woolies, I left home for a week of orchard walking in Kent.

May 14. Walking orchards near Rochester at 86.5 F in the shade I cursed all winter underwear.

May 20. Rhubarb fanciers may be glad to know that at the last R.H.S. Show a Russian rhubarb called Tobolsk was voted the best flavoured.

May 29. Hot in the sun and the cleg flies biting viciously. Puzzled at the way they can bite without warning of their presence, I watched one settle on my hand and drive its lancet in. Until the skin was pierced I could not feel anything, yet the nerves immediately take notice of a crawling ant. (*As a fellow sufferer I am equally baffled... and infuriated*.)

June 2. Tramping through a wood deep in garlic I was reminded that the ideal spot to plant ash is where garlic grows well.

June 10. At supper an old labourer called in to ask my host to let him have a few old potatoes 'seein' as I'm expecting company and don't mean 'em to gobble up all my new uns'.

June 14. Bank holiday, so thinned plums off the Victorias all day. Already branches are breaking with the weight. Picked the first real dish of rasps, the earliest ever.

July 9. To make the butter go twice as far, try mixing a quarter pound of butter with a quarter pound of best margarine, add a tablespoonful of dried egg powder and stir in slowly a teacupful of milk.

July 18. In India a so-called cider is being made from tea, sugar and yeast. (*Ah, necessity...*)

We hope you are not feeling too queasy! More from Stuart and Raymond Bush in the next Newsletter.

FREIGHTING BANANAS

The next time you pop to Tesco for a bunch of bananas, spare a thought for the process by which it reached the shelves. This is how it all began…

Great Western Railway (GWR), along with the other 'big four' railway companies, played a major part in peacetime and wartime in helping to feed the nation. Each company had its it specialisms, and for GWR that was massive loads of perishables, including bananas.

The annual import of bananas into Britain in 1884 was 10,000 bunches. The popularity of the fruit grew towards the end of the Victorian era, and from 1901 the port of Avonmouth (Bristol) was handling considerably larger cargoes in most months.

Bananas in transit required special treatment and were sent from docks to principal markets by rail, using ventilated wagons. At first the bananas were stowed in vans on beds of straw and had to be kept at an even temperature of 56 degrees F. The first GWR vans specifically designed for bananas appeared in 1905, featuring adjustable shuttered louvres which could be opened or closed depending on external temperature. In 1907, the first 10-ton banana vans with steam heating appeared, and further developments improved steam heating and ventilation.

Bananas in transit were treated as 'passenger-rated traffic', classed as perishable, suitable for carriage by passenger trains and included as passenger revenue. The banana vans with vacuum brakes and heating connections were permitted to run at actual, or near, passenger train speeds. Regular trainload services ran to London and South East, the South West, Birmingham and the Midlands, South and West Wales, and the East Coast and Hull for onward destinations via continental ferries.

A new dock at Avonmouth, opened in the early 20th century, helped to cater for the Elder Dempster Line (later Elders & Fyffes) steamers which sailed to and from the West Indies and brought back limited numbers of passengers and large cargoes of banana stems along with cases of oranges, grapefruit, pineapples, coffee, cocoa and coconuts. Even before wagons were steam heated, the GWR was keen to show how it could competently handle the growing banana traffic. In October 1905 a publicised demonstration was staged. The day before, the freighter SS Chickahominy had docked at Avonmouth and had discharged 14,000 large stems of bananas from Jamaica. These were loaded into two vacuum-braked special banana trains which were run overnight 'at full ordinary express speed' to arrive at Paddington before

6.00a.m. The two arrival platforms 8 and 9 on either side of the central carriageway were reserved for these two specials. On arrival, a hundred railway carts were backed up to the opened wagon doors and 300 staff unloaded the bananas quickly to avoid them getting chilled. The bananas were then covered with straw and blankets, and the carts left Paddington station in a half-mile long procession heading for the four main central London markets.

In 1906, rising consumption of bananas led the Metropolitan & District Railway to announce that they would be putting stalls for the sale of fruit and flowers on their station premises. However, they would not allow bananas or oranges to be stocked because of the dangers presented by discarded peel and skins!

By 1910, Elders & Fyffes Ltd were importing more than 200,000 stems of their 'Blue Label' brand bananas a week. Avonmouth docks received much of this traffic and as many as 400 to 500 vans were required for a single ship's cargo. Unloading from ships was arduous work and in 1911 GWR dock employees at Avonmouth went on strike for an immediate increase in pay of 2/- a week with a further increase of 1/- a week the year after.

In 1913, 2,385,759 stems of bananas had been unloaded at Avonmouth. Ten years later the figure had risen to 3,901,600. While this was the principal fruit traffic, the docks of Bristol further up the River Avon were also receiving considerable amounts of cases of oranges and lemons which were also distributed by rail from around 1907. In 1913 over 300,000 cases were handled and by 1923 this had risen to 425,000 cases.

Banana handling at Avonmouth docks increased in sophistication with electrically-powered vertical mechanical conveyor belts using canvas pockets to raise the stems of bananas from ships' holds. Horizontal conveyor belts from a turntable then took the stems to specific rail wagons for loading. The stems were counted by a checker at the door of each wagon while two men inside loaded around 200 stems weighing a total of around three tons onto clean straw.

There were occasional glitches. Bananas had to arrive in this country green so that ripening could be completed here. Occasionally, ships were delayed at sea having to ride out Atlantic gales, or equipment on the ship to keep the cargo in good condition had broken down. Therefore, when the holds were opened bananas were occasionally found to be overripe and rotten. Anything that was fit for human consumption was taken quickly to local hospitals. Sometimes rotting cargoes were dumped at sea or taken to the Bristol Corporation tip. On at least one occasion after overripe fruit had been loaded in Jamaica

followed by a delayed voyage, the GWR had to take away fourteen open wagonloads piled high with over 16 million black rotting bananas from Avonmouth. The dockside and railway track were reported to be ankle-deep in crushed bananas, staff were slipping and sliding on the mess and a sickly stench hung over the area.

This may have been the same load that in November 1947 was dumped in the railway triangle at Hatton in Warwickshire and then covered with earth. The rotting fruit fermented and spontaneous combustion occurred so that the dump smoked, steamed and emitted foul smells for several years. It occasionally needed the services of the local fire brigade to damp it down. The trade at Avonmouth continue until 1976 and bananas continued to be received by the Gel company across the River Severn at Barry docks until the early 1980s.

Abridged, with thanks, from an article by Mike Peart in the Autumn 2020 edition of The National Railway Museum Review, the Journal of the Friends of the National Railway Museum.

The Museum is located in York and is normally (ie in non-Covid times) open seven days a week, free of charge. Membership of the Friends is open to anyone interested in railways, subscriptions from £22p.a.

BRADFORD APPLE DAY COMES OF AGE
The Story of Bowling Park Community Orchard

...where for me the apple tree do lean down low...

The ‘dark satanic mills’ no longer dominate Bradford, nevertheless it is still a surprise to find an established orchard in an urban setting within a ten minute walk of the city centre and with a factory opposite the entrance.

In early 2000 Trevor Rogers, chair of our Northern Fruit Group (NFG), addressed a Woodland Conference organised by the Bradford Environmental Action Trust’s *Forest in Bradford* (FOB) project and the Bradford Environmental Education Service (BEES). Trevor spoke on the subject of *Orchards in the Landscape* (the theme of the previous year’s York Conference). His audience of environmentalists were people enthusiastic about ‘greening’ the city by planting trees and creating

nature reserves, prepared to volunteer time and energy to enhancement and conservation projects. Trevor inspired them with the idea of developing a community orchard, not only for food-growing, but as a place for ecological biodiversity.

Conception to reality was fraught with enormous difficulty – they had no land, no money and only a handful of people viewed the project as feasible. They also had no concept of the amount of work it would involve.

BEES and FOB spread the word and, with the aim of attracting more support, they decided to hold an Apple Day. Nobody had a clue what the public response in Bradford might be – Apple Days tend to be held in rural areas.

They hired a hall, publicised the event and the local media expressed interest in a story with a new angle. Lots of apple-themed attractions were planned, such as savoury and sweet apple recipes in the cafe; sale of fruit trees from a local nursery (Beardsworth's); advice stall; art exhibition; apple pie contest; the longest peel competition; children's fun activities and woodland crafts. The various stalls included home-made cakes and produce to raise funds. A big problem was how to obtain apples for a central display. There was no point in trying to promote local growing of apples with a show of imported fruit from the supermarket. Step in the NFG's Margaret Drury (1).

The NFG also had another input: Ernest ('Prof Apple') Oddy ran the identification stall, with my not very able assistance. I could not imagine that anybody would be growing apples in a city and thought we'd have no customers. Wrong. Before the Industrial Revolution, Bradford was a scatter of rural villages with fruit grown in cottage gardens, and when the city's population grew, its markets were supplied with locally grown produce. Historic varieties, such as Alfriston, Scotch Bridget, Improved Cockpit, Red Victoria, Tom Putt, Loddington and 'Fred's Apple' are some of the surprises that have been brought in to Apple Days.

One of the stalls, staffed by the National Trust's East Riddlesden Hall, had mounted a large banner that proclaimed: CAN YOU HELP US? They were asking if anybody could identify the apples that were set out on their stall. I said to Ernest, "East Riddlesden Hall's got an orchard and they don't know what their apples are, can you go and help them?" He cracked out laughing: "They're my apples!" Some years previously he had raised the trees to introduce a collection of heritage Yorkshire varieties into the walled garden (2). Their planting plan was lost, the labels attached to the trees had faded and were illegible and they hadn't a clue what their apples were. He went across to talk to them – and for the first time he left me to do identification on my own.

Bradford Apple Day organisers need not have worried, the event was a huge success. It became established annually and has been held in the orchard since 2006.

The search for land was resolved in 2002 when the council's Allotment Service offered the tenancy of a batch of six vacant plots on the far side of the Bowling Allotments (3). The allotment site is bounded by high walls with a high spiked metal gate, which is kept locked, so is reasonably secure. The orchard is bordered by the trees on the north. It looked an ideal situation, but the area had been neglected for years, was overgrown with brambles, thistles and rosebay willowherb and used as a rubbish dump. Nevertheless, it had once been cultivated, so under the rubble and broken glass they could expect to find topsoil. The council provided skips for the debris clearance, but the work all had to be done by the volunteer team, assisted by Community Service. Local schools were also involved from the start – a learning experience.

The NFG was consulted about what to plant and its booklet, *Suitable Fruit Cultivars for the North* also gave advice on planting (4). In 2002 a grant from Bradford's Neighbourhood Renewal Fund and other sponsorship went towards purchase of 40 trees – 34 apples, 3 pears and 3 plums from R V Roger's nursery (5). The local school children helped to plant them in 2003. Some are half-standards; while others, on dwarfing rootstocks, are trained as bushes, cordons and espaliers.

The group decided that cultivation must be organic if possible. Fortunately the Garden Organic charity had just published *Organic Apple Production*, which, although aimed at commercial growers, proved a helpful guide to pest and disease management (6). Nobody wants maggot-infested and black-blotched scabby fruit, so if no chemical pesticides are used to control them, the ground under the trees needs to be raked clean and cankered wood cut out at pruning. The varieties they found to be most susceptible to disease were Fiesta and Lane's Prince Albert.

With a view to the future, a 'Friends of Bowling Park Orchard' collective was initiated in 2005. All decisions are arrived at by consensus and 'sort of pulled together' by Julia of of BEES. A working party is organised on the third Saturday of each month. The records reveal that a considerable amount of maintenance work has been undertaken. The old bricks were retained to construct compost bins. A fence, hedge, gate, notice board, shed and an apple store have been erected and paths laid. Each free-standing tree needed to be staked and structures built for the trained trees. The labels are painted in white handwriting on slates, which have proved to be surprisingly durable. Soft fruit is grown among vegetables on part of the site and the beds were constructed out of

heavy railway sleepers. Onions and garlic deter the insect pests that attack soft fruits. They also grow herbs. Orchards are also important as a space for relaxation so they constructed a shelter and rustic benches.

Since its inception the orchard has expanded to enclose three more plots and more trees. That sounds like unremitting hard work and conveys no impression of the team spirit, fun and friendship.

The trees are fed a dressing of seaweed, charcoal and compost, then mulched with straw (from the bales used as seating the previous Apple Day). The results are good crops of unblemished healthy fruit, proving that quality fruit can be grown organically. (That said, there was hardly any in 2020, owing to the frost that wiped out the crop in so many northern orchards.) A record of the harvest weights is kept. The most prolific varieties appear to be Katy, Pitmaston Pineapple and Belle de Boskoop, but the winner by weight is Bramley's Seedling.

The question remains of what to do with the surplus harvest, after the BPCO collective have taken what they want. It needs to be marketed to bring in an income towards paying the rent and expenses. Some of the fruit is sold fresh and the rest made into jam, chutney and dried apple crisps. Katy is the main juicing apple and juice is pasteurised. Honey from a local bee-keeper is popular. In addition to sales on Apple Day, the group runs stalls at events such as Shipley Alternative.

The BCPO team aim to make the orchard wildlife-friendly, while being aware of the need to attract pollinators and helpful predators. Bees require nectar-producing flowers, not just during apple blossom time, so a native-species wild flower meadow was planted, which also encourages butterflies and other insects. Comfrey is grown for the bees and its composting properties. A pond provides a habitat for amphibians. Bats are catered for with roost boxes. Bird nesting boxes have been mounted and a mixed hedgerow to attract them – but not all are welcome, for instance bullfinches eat fruit buds and pigeons are regarded as a pest. Some of the grass is deliberately left long and allowed to seed, but the problem then is that ground elder encroaches. Where the grass is mown, they prefer to cut in the traditional way with scythes and sickles, as motorised strimmers use fossil fuel.

In 2016 the BCPO group got a shock when they were served with a notice that their tenancy had been terminated. Some of the allotment holders had complained about the neglect of the site. This illustrates a conflict of interests: for instance, a conservationist might consider wild flowers desirable, but they are weeds to gardeners. Butterflies look pretty, but vegetable growers don't want caterpillars. Fortunately it was resolved, but the group is now conscious of the necessity to keep the orchard looking less neglected.

Apple Day takes a lot of preparation – it is an event that attracts hundreds. Before and on the day, a large group of volunteers is involved. Arrangements have to be made, people contacted and advance publicity issued. As it is an outdoor event marquees and toilets need to be hired; gazebos and tables erected. Fruit needs to be harvested for sales, for use in the cafe and for juicing. Entry is free, but there is a bucket for donations towards the costs. My stall is in the belvedere (a decoratively tree-fretted wooden gazebo) under which I mount an apple reference collection and identification stall. Several years ago I discovered that its nickname is 'The Oracle'. (In 2019 that display went to Bracken Hall Outdoor Education Centre Apple Day the following week and the week after that to Cliffe Castle, Keighley.)

Delicious veggie food is prepared in the Appley Cafe, under its temporary kitchen shelter. Wrapture's falapple wraps (a barbecued apple and falafel burger with a dressed apple salad, served in a wrap) are utterly scrumptious and also warm your hands if the weather's a bit nippy. I love blue cheese and apple flan; apfelkuchen (which is like a Bakewell tart with overlapping thinly sliced apples around the rim); plum and almond cake, and pear upside-down cake. Ginger and apple cake is my very favourite. They also do a curry served with crusty bread, but I did not have the courage to try parsnip and apple. People can eat their lunch, have hot drinks or freshly pressed apple juice, while sitting on straw bales and listening to the band.

Supervised fun activities are provided for children, such as apple bobbing; pin the maggot on the apple; scratting apples and pressing them for juice and making crafts from natural materials – it is recognised that they are going to be the orchard volunteers of the future. Unlike Ripon Walled Garden's Apple Day, the trees are not completely stripped in advance; families can enjoy the sight of apples on the trees and help to harvest, so children learn that fruit does not originate in plastic bags from a supermarket.

Each of the several Apple Days I attend to do identification has a different ethos. In contrast to Harlow Carr's or Newby Hall's, Bradford's is a workers' celebration of the fruit of their collective labours.

[For more information see Bowling Park Community Orchard website on www.bees-ymca.org.uk.

The Google satellite image was taken at blossom time and Grow Bradford filmed a brief clip, Bradford Apple Day 2016, which is on YouTube. Neither of them really do justice to the orchard. An extensive picture gallery on the website shows historic photographs of the orchard's development.

There is normally no public access except at events or by appointment. It is well used as a resource by school and community groups. Bradford Apple Day is held on the second or third Sunday in October.

In compiling this article I have consulted the excellent Orchard Management Plan compiled by Julia Pearson of BEES; also the 'diary' record of the work undertaken, both of which are on the website. Records of the harvest list the varieties planted and the heaviness of each crop. Alison Ridler was kind enough to read and give me her feedback.

Thank you to all in the BCPO team for creating an environment that others can enjoy.]

Anne Lee

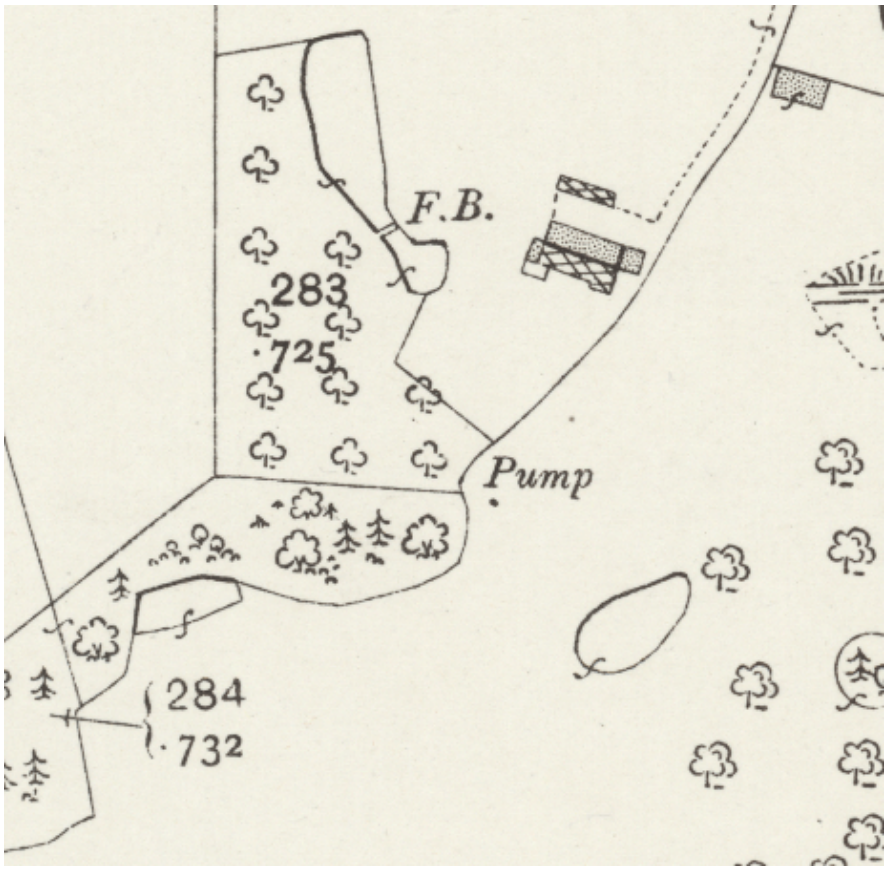
1. Our newer members may not appreciate that most of the apples displayed at the Harlow Carr Apple Festival have been harvested personally by Margaret and Terry. For over 20 years they have gone round orchards including Beningbrough Hall, Clumber Park, Ripon Walled Garden and Newby Hall. They now know exactly which trees will give them the best fruit and at what stage of the season to pick them.
2. The following Monday I thought I would like to see Ernest's collection at East Riddlesden Hall. When I arrived I spotted a familiar orange Beetle in the car park.
3. Allotments in places like Bradford were often provided under the patronage of mill owners; not for philanthropic reasons, but 'to keep the working man out of the public house'. The Bowling Allotments are late C19th.
4. I checked the NFG website to confirm that Brian Gable, then the NFG's Secretary, was the author, but discovered no publications listed. I recollect that another was Fruit Gardens in the North. Should we consider producing updated editions?
5. I've just discovered that the list includes Hunthouse! I wonder if it's Ernest's. I'll have to search for it next time I visit this orchard.
6. Updated in 2009 as *Organic Fruit Production and Viticulture*

MAPPING ORCHARDS

From Alan at Fruit Works, a social enterprise helping communities in Leeds and Bradford to plant and maintain fruit trees.

I've been playing around with the National Library of Scotland online archive of maps: https://maps.nls.uk/geo/explore/.

There's lots of elements to it, which means it is complicated and takes a bit of getting used to. One thing that it can be used for is finding the "orchard" symbol that was on old maps, which looks a bit like a clover leaf. It seems to be on the Ordnance Survey maps in the early twentieth century so choose "OS 25 Inch, 1892-1914" from the drop-down menu on the left.



In the attached example you can see the old orchard I found in NE Leeds, which I've compared to the satellite image, and it might still be there!

Members will be interested to look around the area: contact Alan via the Fruit Works website for more information.

BITS AND PIECES

Member Philip Rainford brings us up-to-date with some recent issues concerning apples and pears

DNA Sampling

The South Lakeland Orchard Group sent a large number of apple and pear leaf samples for DNA testing in 2020 and once again results were revealing.

(i) Apples

Anne Lee has carried out much research into the apple and pear varieties planted within the walled garden at The Old Swan Hotel,

Harrogate and an unidentified apple was DNA'd as Melba. This variety was raised in Canada in the 1890's. Linda Blenkinship mentions that Simon Clark's favourite apple was Red Melba, a sport of Melba. At some stage Anne would like to verify the identity of "Ten Commandments" also found in the Old Swan garden. Another mystery apple from Fred Hirst's orchard turned out to be Lady of the Wemyss. We were aware of an identical apple to Fred's in the Huddersfield area. Of Scottish origin, Lady of the Wemyss is an infrequent planting in the north of England - there is an aged specimen in a derelict orchard near Arnside railway station close to the Kent estuary. Elsewhere a Newby Hall apple submission turned out to be DNA unique and will be given a temporary name, "Lucinda's Pearmain" until (optimistically!) its true identity is established.

(ii) Pears

To the North of Cannon Hall a crumbling wall is to be seen in a Capability Brown designed landscape within the demolished estate of Whitley Beaumont. Against this wall five or six old pear trees cling to life. After visiting the spot in 2018 to collect scionwood, leaf samples from two grafted specimens were sent for DNA testing last year, with one subsequently ID'd as Autumn Nelis, the other unknown. I think that Hilary Dodson grafted from all of these old trees after our initial visit. With thanks to The Friends of Cannon Hall Walled Garden for providing information about Whitley Beaumont. The alleged Black Achan pear variety (Achan in Hogg) has been identified (again!) in a hamlet near Nantwich, Cheshire. The tree in question had been given the name "Toadback" by the late Tony Gentil, retired Reaseheath lecturer who researched and grafted local Cheshire apple and pear varieties. Although not in the NFC the pear seems to be widespread in the British Isles. Of likely Scottish origin, in the north it has been encountered in Yorkshire, Cumbria (Lyth Valley; Ulverston area), Lancashire (Eccleston) and Cheshire. Hilary is investigating! Missing Cheshire pear variety Aston Town may well have been re-discovered by Tony - DNA testing of a likely specimen showed it to be "unique". Hogg describes Aston Town as having an untidy growth habit -"as a standard the branches have a tendency to twist and become entangled, which must therefore be prevented by a timely attention to pruning." I will watch carefully to see if my budded specimen manifests these beastly traits! A clue to identification?

National Plant Collections

Following on from James Ellson's informative account about the ethos of National Plant Collections in the last Newsletter, I can say that

our South Lakeland Orchard Group has a registered collection of northern apple varieties at a SLOG allotment in Kendal, in the form of cordons. The collection will be expanded to include “unknown” apples grafted from old NW trees over the past few years. Some unidentified pear varieties found in the north have also been planted. One advantage of having this communal space is that the trees can be maintained by members at appropriate times of the year. Hopefully they will be conserved in situ for many years to come. In Lancashire, our South Ribble Orchard location contains more than 300 “heritage” apple and pear varieties, but we have not yet decided how best to preserve the fruit collection at this site.

Keddlestone Pippin

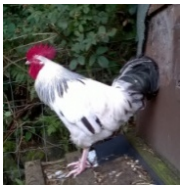
This may not be too helpful James, but I do have some limited information about Keddlestone Pippin. I have documentation of C19 and early C20 New Zealand nursery catalogues and the apple appears on the lists of nurseryman G. Ward in 1910. A large number of apple varieties found their way to the country in the early pioneering days and today like-minded enthusiasts in South Island are grafting and conserving these old fruits. Identification of the many “rescued” apples from these very old N.Z. orchards is proving to be a difficult task - tantalisingly many of the apples on the old fruiterers lists are now lost in their country of origin. The National Apple Register records that Keddlestone Pippin was still around in the U.K. in 1916, so there is still a chance that a specimen may be found. Just for the record I am trying to track down many missing NW apple varieties, including Archimedes, Lady Pilkington, Sugar and Brandy and Pomeroy of Lancashire.

Hunthouse

Anne Lee informs me that Yorkshire apple Hunthouse has been de-accessed from the National Fruit Collection. In 2007 Ian Purves wrote to Simon Clark about the location of a likely Hunthouse apple tree in the grounds of a former guest house close to the North Yorkshire Moors railway line in the Goathland area. At the time, the NFG had access to the tree for grafting material although there was “competition for the fruit from a local winemaker!” I wonder whether the Goathland apple is the same as the one offered by Rogers. The specimen we have over here is a large, fine looking, much ribbed apple with red stripes. Willison’s Whitby catalogue of 1834 lists both “Hunthouse” and “Summer, or large Hunthouse.” I am sure that Anne will be able to shed more light on the variety.

A Smallholder Writes . . . No 20

NFG member James Ellson runs a smallholding in Hayfield, Derbyshire. He gives tours, runs courses, and gives talks on self-sufficiency and apples (**ellson3@hotmail.com**).



Here We Go Round The Mulberry Tree

Since my last column I've had a big birthday. People tell me it's not the big one, the next one's the big one. However, the last one also felt big.

My favourite present (my wife claims it was her idea) was a mulberry tree, *Morus nigra*.

Not only does the mulberry have a rich and often confusing history, but reminds me of being at university where I met my wife and, dare I say it, never looked back.

It is difficult even to determine the number of species in the genus M*orus* – the mulberry. Between 50 and 200. They include the most familiar three: *Morus rubra* (red), *Morus alba* (white) and *Morus nigra* (black).

White mulberry is native to north, east and central Asia, and used to feed silkworms. Black mulberry is native to southwest Asia and grown for its fruit. Red mulberry is native to east North America. The colour of the fruit does not help to determine the species. *Morus alba* and *Morus rubra* can both produce black fruit. The berries of *Morus nigra,* however, tend to be the largest and juiciest.

Confusion over the colour of mulberry fruit is sometimes attributed to Greek legend. In Book IV of Metamorphoses, Ovid relates the tale of two lovers Pyramus and Thisbe who were forbidden to marry. One day they decide to elope and meet under a mulberry tree with white fruit. Thisbe arrives first but is scared off by a lion with a bloody mouth from a recent kill. Thisbe drops her veil which is chewed by the lion. When Pyramus arrives, he finds Thisbe's blood-stained veil and assumes she's been killed. In his grief Pyramus falls on his sword, and as he lies dying, his blood splashes on the white fruit. Thisbe returns to find Pyramus. Heartbroken, she

stabs herself with Pyramus's sword. Before she dies she beseeches the gods to change the white fruit to red in order to honour their forbidden love.

A better way to distinguish the trees is to examine the leaves. *Morus nigra* have a hairy lower leaf surface. The upper leaf surfaces of *Morus rubra* are rough. Conversely, the upper leaf surfaces of *Morus alba* are smooth and glossy. And it is these leaves of the white mulberry that produce a finer silk. The silkworms eat the leaves, spin a cocoon of silk threads around themselves, and turn into moths.

Confused? You're in good company – so were James 1st and his advisors in the 17th century.

The king wanted to emulate the successful silk industries in France and Italy so he ordered 10,000 mulberry trees to be planted. Silk was a valuable commodity. However, *Morus nigra* trees were mistakenly planted and the new silk industry did not flourish. An alternative historical interpretation is that James 1st knew that *Morus nigra* trees would fare better than *Morus alba* because of the UK's cool damp climate. Either way, the wide scale planting left a legacy of black mulberry trees across the UK, many of which survive today.

Another misconception is that trees planted at the behest of James 1st were the first mulberries grown in Britain They were not. Mulberry seeds have been found in excavations of Roman settlements in London suggesting they grew in England as early as the 6th century. In addition mulberry trees were grown in the gardens of medieval monasteries and the fruit eaten at Tudor banquets.

One of the trees planted for James's attempt at sericulture was a mulberry at Christ's College in Cambridge – where my wife and I studied.

It grows at the far end of the fellows' garden, and has become the UK's most famous mulberry and known as Milton's Mulberry. It was planted in 1609 a year after the poet's birth and occasionally and erroneously attributed to his patronage. Many people also like to think he sat under its leafy shade and wrote Paradise Lost.

A second mulberry grows nearby, thought to have rooted from the first. Both trees currently grow from mounds about a metre high

– these are recent additions to help propagation (by mound layering).

In the summer the sticky windfall of fruit is a wonder. The gardeners collect the berries and the college kitchens make jam – for the fellows, not the undergraduates (and certainly not a geographer).

Mulberries can also be used to make wine, teas and cordials, and in pies and tarts. Or simply eaten raw, spread over cereal or as a dessert or snack. Their taste can be sweet but also tart, and one website commentator has described them as ‘fireworks in the mouth’!

And there we have it once more, the story of a fruit tree as a springboard to history and literature and gastronomy. To political zipwiring and spindoctoring. And also to memories of a kindling love, and how a young man became an old man (albeit younger than my wife, but I guess you knew that).

James Ellson

His debut novel *The Trail* was published in February 2020, and is available on Amazon in paperback and digital. *“A pacy and intelligent thriller”* (Paula Hawkins)

Happy birthday James!

Many years ago, I visited a friend in Johannesburg in the late summer. She had a glorious mulberry tree in her garden, laden with fruit. One day she said to me “Get your swim suit on, we’re going to pick the mulberries”. I failed to see any connection between the two, and said so. “It’s hot work”, she said, “but more importantly you should see the mess mulberry juice makes of your clothes”. Sadly I’m not sure it ever gets hot enough in England for James to follow this useful piece of advice. Ed

PARASITE HIJACKS IRON IN HONEY BEES

Thanks to member Peter Nicol for bringing this to our attention

An Agricultural Research Service entomologist in the USA has discovered the *Nosema ceranae* parasite that causes major problems and death in honey bees works by hijacking its host's iron for itself.

N. ceranea is one of the major parasite problems causing beekeepers' colony losses today. It is a microsporidia, a member of a group of single-celled parasites closely related to fungi. Originally, *N. ceranae* was a parasite only of Asian honey bees (*Apis cerana*), but in the late 1990s, it jumped species to European honey bees (*Apis mellifera*).

Iron is as essential a micronutrient for honey bees as it is for people. Honey bees usually get enough to meet their needs from their flower pollen diet. They use iron in their immune system and for reproduction and development. As does *Nosema ceranae*.

In a number of mammal species, there is an iron tug-of-war between host and pathogen that is part of the central battlefield that determines the outcome of an infection. But this has not been explored before in honey bees and not with *Nosema*.

Tracking the iron in *N. ceranae*-infected honey bees showed that iron is also a part of the honey bee's physiological struggle with the parasite, as it is in the mammalian system.

If honey bees lose the battle of infection with *N. ceranae*, the gut parasite begins to hijack the iron in the flower pollen that the honey bee has eaten before the bee can absorb it, diverting the iron into its own spore reproduction.

How the *N. ceranae* does that involves a protein called transferrin and a process likely to be too complicated to interest the non-entomologist, but if you wish to have a go, the full article can be found on line at https://content.govdelivery.com/accounts/USDAARS/bulletins/2c255bf.

Since there is no truly effective treatment for *N. ceranae*, this study suggests a welcome possibility for a new treatment that might be based on regulating iron or the synthesis of transferrin, which will be of interest for beekeepers, researchers, and policymakers worldwide.

Abridged from research originally published in Plos Pathogen.

WHAT WILL GROW IN SPAIN?

From member David Walland:

I am, I must admit, committing the sin of moving south - not just south as in southern England but *SOUTH* as in southern Spain. Having seen the reported issue of fruit growing in Italy, I wondered if anyone knows of varieties and rootstocks which are more tolerant of the conditions on my little 3 acre (1.26 ha) site than the standard northern Europe types.

My land is very rocky with large chunks of limestone, very sandy (much too free-draining), alkaline and at about 2000 feet ASL (632 m). It's very dry but some autumns it is like a monsoon. I have non-potable irrigation water on-site (and very cheap) and will also be saving as much grey water as possible. Currently a lot of the site is planted to almonds and olives.

If anyone has any ideas to share with me, I'll be grateful. Once I have enough Spanish, I'll try and get information in Spain but my attempts so far haven't been successful - no-one has even replied to me!

AND FINALLY…

…. there is no more space!

My thanks to all contributors for their help in preparing this edition of the Newsletter. Ed

The next Newsletter will be circulated in early July 2021. All contributions welcome, to the Editor please by June 10.

Illustrations need to be suitable for printing in black and white.

If you would like to receive your Newsletter in electronic rather than paper form, please tell the Membership Secretary. Please also contact her, and not the Editor, about changes to, or problems with addresses and distribution.

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