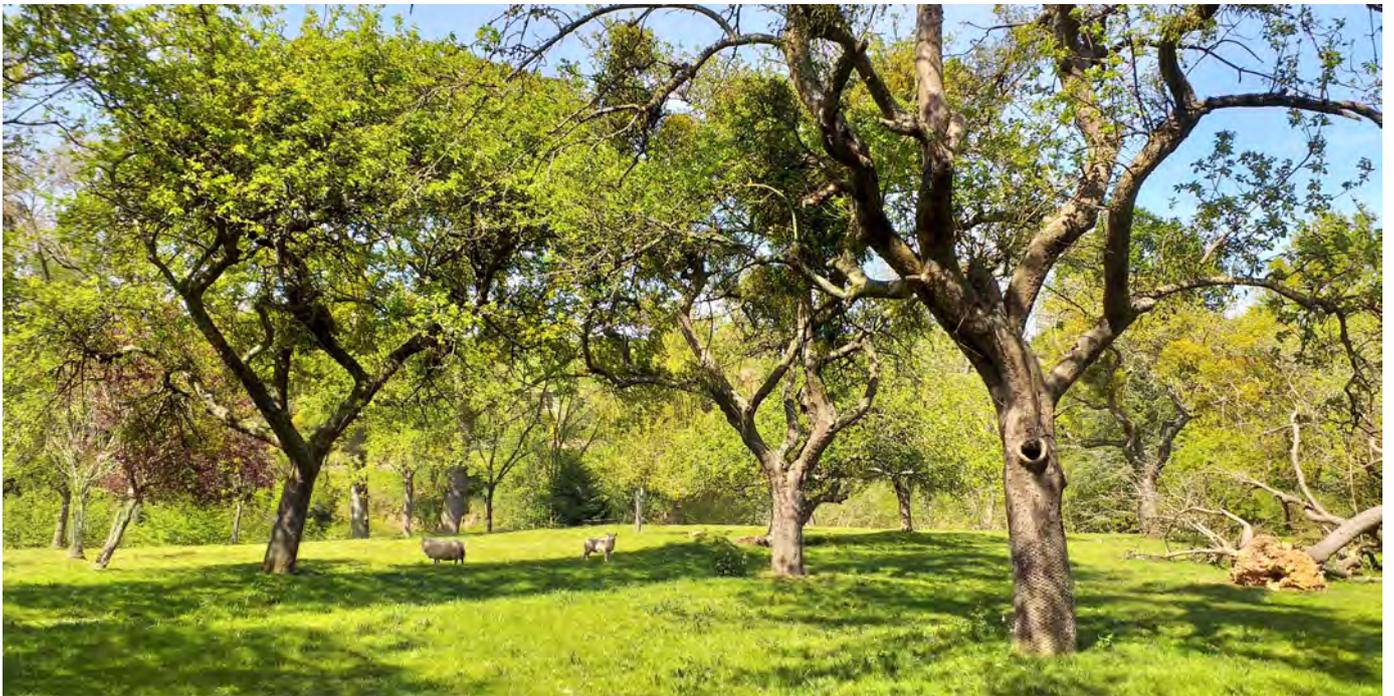


# Apples & Pears

The Marcher Apple Network

Autumn 2024



**Marcher  
Apple  
Network**

# Notice of the AGM

Notice is hereby given that the 29th ANNUAL GENERAL MEETING will be held at the Kemp Room, Mascall Centre, Lower Galdeford, Ludlow, Shropshire, SY8 1RZ. **on Saturday 9th November at 11:00** [Accommodation and Meeting Rooms in Ludlow, Shropshire \(ludlowmascallcentre.co.uk\)](#).

You can locate this at grid reference SO 51538 74659 or <https://what3words.com/grinders.flap.ridge>  
Parking is available there or at the large public car park about 100 m to the east. The Mascall Centre is about 10 minutes walking from Ludlow railway station. The Kemp Room is on the ground floor, and is accessible to wheel chairs. We selected Ludlow as there are now more active members in South Shropshire than elsewhere. Coffee will be available from 10:30.

Members are welcome to attend the AGM online. **For those wishing to join the meeting remotely please email the secretary at [secretary@marcherapple.net](mailto:secretary@marcherapple.net) in order to be sent a Teams / Zoom invite.**

## AGENDA

- Apologies for absence
- To receive and approve the Minutes of the 28th AGM held on Saturday 2<sup>nd</sup> December 2023
- Matters arising
- To receive and approve the Trustees' Annual Report 2023-24
- To receive and adopt the Annual Accounts 2023-24
- Election of Directors
- To determine to appoint Examiners for Accounts 2024-25
- Open Forum where Trustees will be available to answer questions
- Any other business

Our visiting speaker at around 12.15pm will be David Lindgren, chair of the Trustees of Gloucestershire Orchard Trust. David will tell us how the Trust has been managing its own orchards and encouraging local communities to have their own orchards.

Directors and Trustees are Andy Pillow, Phil Chadwick, James Nason, Stephen Ainsleigh Rice and David Smith. Phil Bustin, Andy Pillow and Steven Richards-Price are standing for election.

If you are willing to serve, please contact any Trustee or the secretary at [secretary@marcherapple.net](mailto:secretary@marcherapple.net)

Andy Pillow  
Company Secretary  
Brock House, Pelham Road, Upton Magna, Shropshire SY4 4UA

## Proxy voting

If you are not able to attend the AGM but would like to vote on any motions, you may do so by exercising a proxy vote. A form is available from the Membership Secretary [membsec@marcherapple.net](mailto:membsec@marcherapple.net) which has to be signed and returned to him.



©DESIGNALIKIE

Cover photo: Beautiful traditional orchard in Worcestershire's Teme valley belonging to a M A N member.

# Chairman's inches

## New Secretary sought

Our existing secretary Wade Muggleton has announced his intention to stand down from the secretary role at the AGM, he took up the role in 2017 and so has done a good stint. We are currently looking for a new volunteer to take on the role.

It need not be arduous and involves monitoring the MAN inbox for question and enquiries, you are not obliged to answer all these yourself and can farm questions out to other MAN Trustees or members who may be able to help.

Sending out book orders from the shop page of the website. This is done jointly with David Smith. Orders are paid for by Paypal so once orders are made the secretary gets an email and you just need to package up and send out either by printing postage labels or taking to a Post office. Postage costs are then reimbursed by the Treasurer of MAN.

Taking minutes at meetings and assisting in the organisation of the AGM. MAN Trustees and active volunteers only meet a few times a year and largely online, so this is not an arduous task.

If you can spare a few hours a month and would consider being the secretary of The Marcher Apple Network contact Wade who will happily talk it through with anyone interested. [secretary@marcherapple.net](mailto:secretary@marcherapple.net)

One idea we have mooted is rather than have a single secretary job we split it into several smaller, specific roles so we could have a

- Minutes and meetings secretary
- Newsletter compiler / editor
- Web site overseer
- Archivist / librarian
- Social media lead (this might be the same as website overseer.)

If one, or any of these interest you again contact the secretary

## Trustees

The current Directors/Trustees are: Phil Chadwick, James Nason (co-opted 12Jan24), Andrew Pillow (co-opted 2 Dec23), Stephen Ainsleigh Rice (chairman) and David Smith.

Steven Richards-Price and Phil Bustin have kindly indicated a willingness to become Trustees during 2024.

Please join in thanking them for enabling MAN to function and build towards the future.

## AGM

For this year's AGM in November (see opposite) we have moved the venue to Ludlow for a change and as a reflection of the fact that there seem to be a nucleus of active members in South Shropshire.

Just a reminder the membership fee is now £20 a year payable 1<sup>st</sup> August and we have moved bank from Barclays to Lloyds all details are at Payment – Marcher Apple Network so if you are still paying the old £10 or need to set up a new standing order with Lloyds can we please ask that you address the matter? And if you haven't yet paid for the year 2024/25, would you please do so as soon as possible.

## MAN Library

Sheila Leitch held MAN's library of about 120 books for many years. There's a listing of them on our website [Library - Marcher Apple Network](#). Sadly Sheila died last year and we have now recovered the library from her family.

## Lloyds and Virgin Money

The new Lloyds account is running OK, thankfully. We're now making changes to the signatories to reflect change of Trustees and their wishes. We also have a Virgin Money account and we've started a similar process. How we're looking forward to completing them!



# Paramor Orchard

Work continues on re-arranging the collection at Paramor now that cordons at Ty Glyn and F P Matthews provide a back-up. Six new standard trees grafted by Paul Davis were planted including second trees of 'Yellow Ingestrie' and 'Golden Harvey' for replacing the slow growers we have already, an 'Eggleton Styre' to replace the incorrect one we had from Tasmania, a 'Cummy Norman' from Paul Davis that replaces a rogue 'Yarlington Mill' supplied in error years ago, and a 'Dymock Red' to replace an erroneous one that somehow came to us from the Gloucestershire Orchard Trust. In readiness for more planting 14 trees on standard rootstock were removed. Progressively the Nursery area will be converted to having standard trees of good and/or important heritage varieties, for starting the process 22 trees were removed and as back-up trees are planted elsewhere more will be removed. My thanks to David Bussel for helping with the work.

Fruit set looks to have been rather poor; wet cool windy days are not the sort to encourage pollinators out. It doesn't encourage the orchard manager to be out and about, either.

For sometime we've been considering how to manage grass at Paramor, either graze with sheep or convert as wildflower meadow and harvest. Several members have started wildflower meadows and this is encouraging interest for Paramor. Do you have a wildflower meadow and what equipment do you have or use and, if borrowed, from which organisations? Please would you let us know? Contact the secretary at [secretary@marcherapple.net](mailto:secretary@marcherapple.net)

We had an open day at Paramor on 12<sup>th</sup> May. We'd hoped there would have been some blossom to enjoy but it was really only the 'Chatley Kernel' trees that obliged.

We had about a 100 visitors, including quite a number of youngsters who we hope one day will eat 'Chatley Kernel' apples and want to look after the Orchard. The local Wildlife Trust came and also Bee-keepers, thank you to them. A side benefit of the picnic was that many of the tree labels have been replaced with hand engraved name tags.

And two bumble bees from Louby-lous were very busy entertaining the children ... and quite a lot of adults too.



Then on 19<sup>th</sup> July a group of members kindly pruned 114 of the standard trees. We concentrated on these younger trees for ensuring that structure and shape continued to develop tidily. The opportunity was taken to shorten overlong spindly structural branches and clear out crossing small branches. Older large trees in the first three rows did not really need much attention this year (Tom Adams did a super job last year). Trees in the nursery area were not pruned as they will likely be removed over the next few years, either grafted on standard rootstock here, or copied to Ty Glyn and FP Matthews.

At the beginning of the day, it was the hottest one of the year to date, we worked on three trees in the main orchard that have mistletoe infestations on their stems. Two of them, 'Galloway Pippin' and 'King's Acre Pippin' were noted as infected 4 years ago and both had the affected areas trimmed back and wrapped around with black plastic bags, gently tied top and bottom to prevent photosynthesis. Last year, after two years, the bags were removed revealing lots of insects surprised at the sunlight. This year shoots had re-appeared. It rather confirms a general experience that mistletoe can't be easily controlled.



We decided to cut off the whole sections from about 300 mm below the lowest shoot. Pollard them in summer, will it be 'Kill or Cure'? David Bussel volunteered to 'top' the 'King's Acre Pippin'. 'Galloway Pippin' was cut at barely 500 mm above the ground. We're also keen to see if the trees survive such drastic pollarding in the summer. Sections were checked for an absence of the green rooting into sapwood. The section shown below, of diameter about 80 mm, is one cut right through the centre of an infestation, with two green roots at 2-o'clock.

During a visit to Paramor about 6 weeks later, I went to see these trees. Had they produced shoots or did they look to be dying? Below is a photo of the Galloway Pippin that had been pollarded. I think you'll agree a pretty extreme case of pollarding. There were at least four young shoots already opening leaves. That's clear then, it is likely possible to pollard apple trees in mid-summer and not kill them. Will this be our way to control mistletoe in the future?

In case we need replacement, graftwood material is available at Ty Glyn and NFC. Despite few apples trees around the Cwmdru area, mistletoe is found locally in quite a number of the other host trees including hawthorn.

John Teiser has found some research available on possible chemical treatments. Lichter et al. found that glyphosate affects the whole tree growth for at least a year and is not recommended. More positively

treating pruning stubs with pruning paint seems to stunt growth for at least a year. Also ethephon, a chemical used to regulate plant growth, when applied to cut stubs prevented growth for a year but only retarded growth when applied to mistletoe leaves. [https://joa.isa-arbor.com/article\\_detail.asp?JournalID=1&VolumeID=17&IssueID=5&ArticleID=2432](https://joa.isa-arbor.com/article_detail.asp?JournalID=1&VolumeID=17&IssueID=5&ArticleID=2432)

However! Ethephon has no "on label" approval for use as a mistletoe control in the UK or Europe, and thus is illegal to use for this purpose.

John asked Sylvain Drocourt what the situation is at his orchard in France. When he bought it in 2003 old trees were full of mistletoe. Each year he tears (yes tears, not cuts) the mistletoe off. Trees are alive and healthy, and now with much less mistletoe.

For sometime we've been considering how to manage grass at Paramor, either graze with sheep or convert as wildflower meadow and harvest. Several members have started wildflower meadows and this is encouraging interest for Paramor. Do you have a wildflower meadow and what equipment do you have or use and, if borrowed, from which organisations? Please would you let us know? Contact the secretary at [secretary@marcherapple.net](mailto:secretary@marcherapple.net)



Stephen Ainsleigh Rice

Left; rather drastic measures deployed on Galloway Pippin

Above; evidence of how Mistletoe gets its roots deep into the branch or trunk.

Top; pruning as a severe measure.



# Phoenix Trees

There is bad presumption that if a tree falls over that, that is it and it is best cleared away, start up the chainsaw and tree becomes logs. Whereas the opposite is true, falling over can be just another chapter in a trees life from horizontally prone trunks many a tree has been rejuvenated and gone on for years, or decades growing an entirely new crown.

The challenge is often convincing the owner that it's fine, it is not the disaster it might appear to be. Persuade them to leave it be, go with nature. There is even a good argument that falling over in middle age is a good survival strategy for the undoing of many old trees is their sheer height and physical bulk meaning that they break up in storms and get really broken into pieces. Whereas merely falling over will usually only involve minimal root breaks and thus the tree will happily go on living in a prone state and being far less vulnerable to wind damage, having a much lower centre of gravity. In fact a tree might achieve a significantly greater age by being what we call a Phoenix tree i.e. one that has risen again. Here is a gallery of some remarkable Phoenix trees from across Worcestershire, Herefordshire and Shropshire.





Photos by Wade Muggleton

# Ty Glyn Orchard

Nineteen trees were removed at Ty Glyn, mostly because they were the (slightly) weaker one of duplicates; a few appeared diseased and will be replaced. A total of 33 new trees grafted by Paul Davis were added including some of the varieties previously held in the Paramor Nursery area, some from Cui Parc, some replacing trees previously removed because of a disease, and some unknown varieties from Lower Eggleton Court, Yarkhill and Tenbury Wells. Incidentally, when we replant at a given location we wait at least 2 years since removing a tree there. There are now 497 cordons at Ty Glyn. They have grown fast this year, with the wet warm conditions. So big this year I have special thanks to Andy, David, Gareth, Mary and Wendy for their cheerful help with pruning. It sustained me over 497 trees.

Fruit set looks far better than at Paramor or F P Matthews. Why? It's in a narrow valley, Glyn, protected from the wind. Also we've social black bees in the house roof just 4 m from where I now type. Any break in the poor weather they, and other, pollinators can get busy quickly.

Each year since the first planting in 2018, the dates when each variety first (normally king fruit) blossom opens, when about 50% are open and about 90% are open are recorded. This year 350 had blossom and it seems that blossom was about a fortnight earlier than last year, which itself was nearly a fortnight earlier than the 'traditional' dates. First blossom was 3-6<sup>th</sup> April for some such as 'Kerry Pippin', 'Beeley Pippin' and 'Gennet Moyle (of Taylor)'. Some varieties were only just about flowering by the last week of May, such as 'Court Pendu Plat', 'Stoke Red', 'Black Norman', and even later 'Tyleclydach'. There is an indication that culinary and dessert varieties are on average a bit earlier than cider varieties.

Seeing some of the delightful colours and forms they have, I thought of sharing them with you below. But the data serves a purpose. What are the pollination groups and spur/tip bearing characteristics of varieties not already assessed at the NFC and elsewhere? That's one of my regular spring observations, other than the delight of seeing a sign of Spring. To get me started with analysis, the NFC has kindly shared their data, for some varieties stretching over 60 years, many for 20 years; pollination groups are assigned when there is at least a 10-year average. It's clear that the average temperature in March and April has a very big influence of when blossom opens, a 1 degree Celsius increase advances blossom by about a week. On average the time periods between the recorded opening dates from King fruit to 50% and to 90% are about 5 and 7 days respectively; five days is the difference in blossom date of the prior and following pollination groups. It's such a useful measure because varieties with a group one more or less have some flowers open simultaneously giving opportunity for viable pollen transfer. (Well, that's true if they aren't triploid varieties....)

A handy listing of pollination groups is available from the RHS

<https://www.rhs.org.uk/advice/beginners-guide/fruit-basics/fruit-pollination> It is based upon the NFC observations. I've checked it with a fairly sophisticated statistical analysis covering 183 varieties. For most the RHS group and NFC blossom times agree to within about 3 days, for 26 there may be a case to adjust by 1 group. For three varieties they could be adjusted by 2 groups ('Beauty of Blackmoor' to 4, 'King of the Pippins' and 'Woolbrook Pippin' both to 3). There is no overall bias towards higher or lower group.

Stephen Ainsleigh Rice



Chatley's Kernel 4th May 2024



Barcelona Pearmain 4<sup>th</sup> May 2024



Webb's Kitchen Russet 4<sup>th</sup> May 2024



Morgan Sweet 4th May 2024



Morgan Sweet 4<sup>th</sup> May 2024



Kennedy's Late Cider 4th May 2024

# News from the MAN Orchard Visit Group – July 2024

We held our second MAN orchard visit on Sunday 14th July at Boraston, 1.5 miles north of Tenbury Wells. This is the home of Phil and Izzy Bustin who were keen to have MAN visit to give opinions and advice on a number of orchard related matters – tree management, pruning, mistletoe and apple varieties. We were offered a welcome cup of coffee and cake, as some members had travelled 1-2 hours to reach the orchard.

Phil described his land-holding as an ancient orchard with some trees over 100 years old. The orchards contain apples, pears, damsons and plums which are separated into three areas, the oldest on a south facing slope, the main productive orchard on a gentle north facing slope and other trees are in an area of wild flower meadow on level ground to one side of the Bustin's garden. There are 148 main fruit trees with the orchard, ponds, flower meadow and hedgerows under DEFRA Higher Level Environmental Stewardship.

Most trees are of unknown variety so Phil and Izzy are looking to members to help identify the wide range of varieties which are thought to be locally sourced. It was decided that another visit for apple ID enthusiasts, at harvest time, time would be in order. In the meantime Phil will research local tree nurseries and their catalogues that existed in the area over 100 years ago, to provide a list that can be checked against his older trees.

We were left to wander around the orchards at our leisure or join Phil who led a group around pointing out interesting features, while gaining advice from knowledgeable MAN members. It became clear that a number had mistletoe growing on them and so thoughts were noted about its management which later became a group discussion over lunch. We noted that Phil had successfully removed much of the cankerous wood, now there was little evidence of it. Many of the trees had a lot of lichens on the branches as the previous owner had let the hedges surrounding the orchard grow into trees; trimming hedges was suggested as a way to improve air flow through the orchard. Many of the big old cherry trees (perhaps 100 years of age) did not appear to have any fruit, perhaps they could be propagated from scion wood in case some are interesting heritage varieties.

Over lunch Rob Uren and John Teiser (Museum of Cider, Hereford) got to talking about the challenge of managing mistletoe. The first surprising statement made was "manage mistletoe using a chainsaw"! Take off all branches with mistletoe to beyond the point of rooting, by about 18cm (or to be on the safe side cut at 30cm below). It's kill or cure! When a branch is cut away, if there is a green root showing on the cut face, then cut away more branch. Mistletoe can kill huge trees! Prune on a cold day during a dry spell in winter, when the mistletoe stands out clearly. It is unlikely that this will kill the tree unless it is weak or very old. Mistletoe fruits in the winter and draws off the tree's reserves during winter when they can't be replenished. This is the reason mistletoe can destroy a tree, getting the tree when the energy reserves have been drawn down into the roots. Mistletoe can be removed in the Summer, which would help the tree make apples. We have already applied it at Paramor and it works.

Rob Uren (Museum of Cider) began pruning in 1996 and it was unusual to see much mistletoe on the apple trees then. Mistletoe was found primarily in apple and elm trees, until this country lost its elms in the 1970's. The mistletoe went on to colonise lime, poplar and hawthorn. Mistletoe has had a major effect on the Bulmer orchards. Of 750 trees, 250 have been lost in ten years, killed by overgrowth of mistletoe.

Jon Teiser noted that mistletoe is said to be spread by mistle thrushes but as they are very territorial it's unlikely that they spread the seed far or fast. It is now thought that blackcap that overwinter here, as they congregate in flocks moving around a lot, are the more likely birds to be spreading mistletoe seeds.

Britain's mistletoe capital is the Worcestershire town of Tenbury Wells, where almost all of Britain's crop - or rather, England's, since it is harvested mainly in Gloucestershire, Somerset, Herefordshire and Worcestershire - has been bought and sold for 150 years. It is traded at the town's Mistletoe Fair in the Autumn.

In the United States the practice is to cut off the mistletoe and then wind black plastic around the wound. This solution wasn't thought to be very effective, see Paramor report.

Phil and Izzy have done just the right thing. A couple of years ago when they moved to Boraston, there was a large apple tree overhanging a shed. It needed reducing; it was pollarded with chainsaw. Here's a photo of it, vigorous with 2 m of healthy extension growth in two years.

Jonathan Briggs was mentioned as a British mistletoe expert. His wisdom can be found at <https://mistletoediary.com/>

Karen Limbrick



## F P Matthews collection copy

In Apples and Pears last year a report was made of the work copying the unique and interesting parts of the MAN collection onto new cordons at F P Matthews. It was a most kind offer and they are making impressive progress. Here in the photo are two new rows planted with the saplings shown in the photo taken last year. It's a new area at the top of their nursery orchard. All on M116 for minimising risk of phytophthora and limiting vigour; Nick Dunn gave a real gem of an additional advantage M116 rootstock, it has a lesser suckering tendency than most other rootstocks.

That's about the first 200 planted. There is another batch of about 100 grafted and growing on ready for planting next winter. Over the next two years we'll hope to complete almost all the rest.

Nick mentioned that the fruit crop is very low this year, partly as a result of wet windy days and also by a hail storm in the spring.



Young Cordons and potted trees growing on at F P Mathews Nursery in Worcestershire

## Gabalva

Gabalva is returning to Cardiff where it was marketed over a 100 years ago by Treseder. It's a nice late season cooker and was given an Award of Merit from the RHS. MAN supplied a bunch of Gabalva scions to Ian Sturrock last winter for him to graft on for satisfying a contract with Cardiff Council. Also there will be some going to Cardiff Castle, back to its original home. We have to thank the National Trust at Aberglasney House for having conserved this variety for many years until it was identified by Mike Porter and Paul Davis.

Stephen Ainsleigh Rice

## Spring Grove Codlin

Living in Spring Grove, Isleworth near to Spring Grove House, where Joseph Banks' home once stood, my wife and I have been cultivating a specimen of what was thought to be Spring Grove Codlin, purchased from Brogdale, for more than thirty years. Then in 2022 I had a chance contact through social media with Mr Tim Henderson, Joseph Banks researcher and local heritage apple enthusiast. He advised that it was unlikely mine was correctly named and was able to arrange a DNA analysis of my sample leaves through his connection with Marcher Apple Network. It was revealed to be American Mother, apparently due to an historic oversight made at the National Fruit Collection.

Ainsleigh Rice very kindly offered me the opportunity of gaining some scion wood of the actual SGC, subsequently the three provided were successfully grafted onto M26 stocks, one of which will be donated to the nearby Cultivate London's The Salopian garden.

Tim's guidance and Ainsleigh's assistance are very much appreciated.

Philip Robinson

## Welsh Marches Pomona- reprint or expand?

Mike Porter wrote our lovely Welsh Marches Pomona (WMP), and Margaret Gill kindly illustrated the blossom, leaves and fruit. They described 31 varieties. It was published in 2010 with a print run of 1000 copies. All but about 50 have been sold and these will likely go over the next 2-3 years.

Peter Laws of [www.fruitID.com](http://www.fruitID.com) has praised the book, describing it as beautiful and informative. I agree whole heartedly.

We've been wondering what to do. Do we do nothing and risk leaving a big hole in our website shop, on our autumn stands, and withdraw from advertising our finds? Do we reprint? Maybe we add a few corrections resulting from DNA matches to other varieties? Do we expand the number of varieties and publish it as a new WMP2? If so do we keep illustrations as watercolours or do we use photographs?

Mike is keen that we expand it by including some of the varieties that have been found and accredited since 2010, and there are some other known varieties from our region that were not included in the original. I have to say I'm a bit tickled by the idea of WMP2.

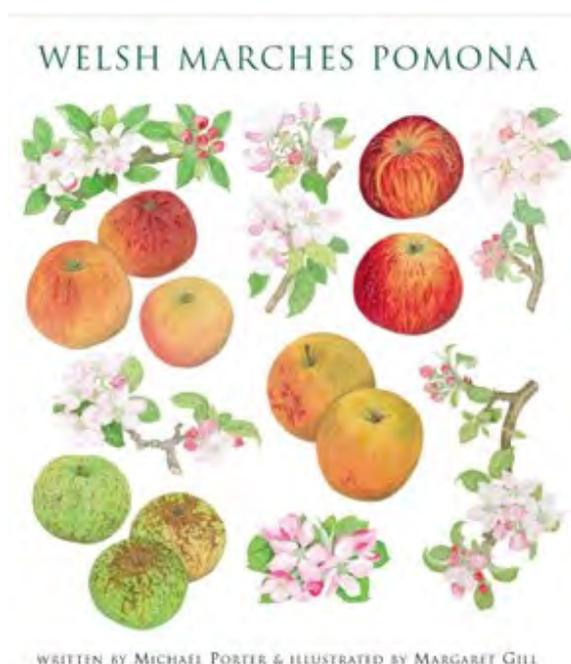
Could we do it? Many, most, of our more interesting finds have now been photographed, written up and accredited, details are available at [www.fruitID.com](http://www.fruitID.com). That will make things much easier. What about paintings? We feel that they are a better illustration of key details than photographs, and help with identification, as well as being so very attractive. Also it makes it easier to retain the original varieties and artwork; a hybrid of watercolours and photos would look a bit as if it was cobbled-together. We've found two Botanical Artists who are keen to give it a go, Lizzie Harper and Polly O'Leary. They live quite near to Paramor and Ty Glyn, which would be handy for getting live samples, especially of blossom, to them quickly. In fact Lizzie is already working with Mike and John Crellin on their 'Flora of Brecknockshire'.

The original publisher, Gomer, is willing to consider printing either the reprint or WMP2. By the time we are nearly ready there may be other printers that we should consider.

How many varieties to include? I've been mulling it. Thirty is I think the minimum for ensuring that it has a lot of new material to offer for tempting folk! I'd prefer more like 50, even though I recognise quite a lot of the work will fall to me, too. If we add 80 or more there is risk these include some that are less good varieties or that some are described elsewhere such as in Roseanne Sanders 'The Apple Book', a volume that it'd be impossible to better.

What do you think? Like it? Or am I mad? Would you like to help? Or help me come to my senses? Costs? Ah, not cheap.

Stephen Ainsleigh Rice



## Pear Decline

Apparently some years ago, a consignment of pear scions from Gloucestershire was sent to the US, but were rejected because they were found infected. John Teiser and Ian Carr of Animal and Plant Health authority (APHA) collected samples from some local weak pear trees and had them analysed. Phytophthora but no pear decline (PD) was found. Further sampling at Breinton of the roots of old dying pear trees did not reveal any PD.

Then about 5 years ago it appeared that a considerable number of pear trees in our area had been grafted from infected material and sold quite widely. PD is spread by the Pear Psylla, a small insect, which is recognised as a serious pest in the USA because it can develop resistance to insecticides. As the phytoplasma retreats to the roots during winter, it leaves extension growth clear and this can be used for propagation. Bud grafting can unintentionally spread PD if source material is infected. Winter grafting after a cold spell is recommended in preference to bud grafting.

University of California Agriculture and Natural Resources department recommends using rootstocks such as Winter Nelis, Old Home x Farmingdale (the most commonly regarded selection would be OHxF 333), or Pyrus betulaefolia seedlings for rootstock. It seems that rootstocks with some resistance to fireblight are also suitable against PD. Pyrodwarf, a well used semi-standard rootstock in UK, may be suitable.

John Teiser and Stephen Ainsleigh Rice

## BBC article

Veronique Greenwood of the BBC produced a very nice article about seeking and identifying lost varieties of apples. <https://www.bbc.com/future/article/20240619-the-apple-detectives-hunting-for-lost-varieties>

She mentioned that John Teiser has been looking for the heritage cider apples of Herefordshire and beyond. Specifically she included 'Eggleton Styre', 'Forest Styre' and 'Oaken Pin'. She also mentioned 'Lemon Roy'; as this is really quite interesting we've added some more details below.

## Lemon Roy

Last September, out of the blue, I had a request from Dr. Matt Ordidge, Curator of The NFC. He reported an interest that INRAE in Paris (Institut National de Recherche pour l'Agriculture, l'Alimentation et l'Environnement) had in a variety 'Lemon Roy'. Could I let them have some leaves for DNA testing?

Now Caroline Denance and Helene Muranty of INRAE have been doing some ground-breaking research work there reconstructing the parentages (pedigree) of apples. They've been working closely with our Matt Ordidge and with Dr. Nicholas Howard affiliated to the University of Wageningen using some incredibly detailed and subtle variations in apple genomes to work out family relations including which is the parent and child. Helping such a study was a must.

MAN has a tree propagated from material supplied from Slimbridge and which we had originally called Cambridge Ballard. We've heard that it likely came from Tumpy Green Farm nearby, given by Brigadier Stephen Goodall who was a collector of local heritage apples. Years ago we had matched this to 'Lemon Roy' a variety found and described by Charles Martell in 'Native Apples of Gloucestershire' (2014), a very old tree growing at Broadway at Minsterworth. We can't find out yet a connection between the accession from Slimbridge and Minsterworth.

Despite the early morning rain, I popped over to Paramor and found some young fresh green leaves. Damped them off thoroughly and slipped them in a jiffy bag, packaged, popped down to the Post Office in Hay-on-Wye and proudly posted them to Paris.

Then I forgot about it all.

This April, out of the Blue, I had a note from Caroline Denance with results. Success! Research work using DNA SNPs had shown that 'Lemon Roy' was one of the suspected very early apples; Nick Howard previously named it 'Unknown Founder 8'. It is a parent of quite a few apples and our friends in the Gloucestershire Orchard Trust now have the makings of a lovely family tree.

MUNQ	NFC Accession	Name
9	1949-182	'Lombarts Calville'
72	2000-085	'Jubilee' (syn of 'Royal Jubilee')
74	1921-015	'Edward VII'
86	2000-049	'Hormead Pearmain'
104	1920-019	'Stanway Seedling'
1903	1930-039	'Green Harvey'
1980	1946-096	'Longney Russet'
2016	1953-056	'Wickham Green'



Original photograph of Malus var. 'Lemon Roy' fruit by C.Martell, 2001. Permission to reproduce gratefully acknowledged.

'Lemon Roy' must have ancient origins, as 'Green Harvey' has provenance to 1813 and 'Horthead Pearmain' to 1826. The apple variety is likely 18th Century or earlier. It was likely on the continent too as it is also a parent to 'Gelber Osterapfel', which is present at the Ökowerk and Julius Kühn-Institut collections in Germany.

Nick Howard has determined that 'Lemon Roy' is closely related to two very old French varieties 'Reinette Franche', and 'Reinette des Carmes'. Those two appear as parents of many old varieties which you may recall, such as 'Reinette de Hollande (or 'Golden Reinette)', 'Reinette d'Anjou', 'Claygate Pearmain', 'Adams's Pearmain' (also Hubbards, Mabbot's and Mannington's Pearmain), 'Pig's Nose Pippin', 'Gipsy King', and One in Gloucestershire with DNA sample number A724. And those two are grandparents of 'Yellow Ingestrie', 'Downton Pippin', 'Bringewood Pippin', and 'Grange'. Fantastic work!

What a wonderful find Charles Martell made, super that he described and conserved it. There just remains a question. Has it always been called 'Lemon Roy' or has an original name been lost many centuries ago?

Now, what can you find?

Stephen Ainsleigh Rice

## DNA and Parentage

Peter Laws of fruitID.com has advised that NIAB, who took over last year from East Malling Research to carry out the DNA fingerprinting, have had an equipment failure and aren't able to complete the analysis. They have passed DNA samples to Source Bioscience next door in Cambridge who do have equipment.

Latest news from Peter Laws as of late August 2024 is that he has received DNA 2023 results for apples (576) and pears (95). They required significant work-up. He found that results were not as consistent as those we have hitherto received from East Malling Research. Following extensive discussions including support from the NFC Curator, Dr Ordidge of University of Reading, it has been decided that they will repeat the analysis with the same methodology as EMR used. In July a group of pomologists, including three from the USA, discussed alternatives for the future of DNA fingerprinting of fruit; it was clear that the current method is no longer going to be available widely. Dr Danny Thorogood of IBER at Aberystwyth University is willing to continue. Instead the much more sophisticated SNP method will likely be taking over.

Meanwhile Peter has been very busy organising parentage records. He's analysed recent DNA literature reports using the much more rigorous SNP methodology, and also working with DArT and SSR results. You can find his (preliminary) compilation of 1118 varieties on the fruitID website about the bottom of the first page under the heading 'Parentage' at <https://www.fruitid.com/#help>

These results have a good basis in fact and should be used in preference to those given in the National Apple Register, many of which were understandably taken from the then only sources of old literature and nursery keeper's notes. We now know a large fraction are erroneous. Comments are welcome about them to Peter or Ainsleigh.

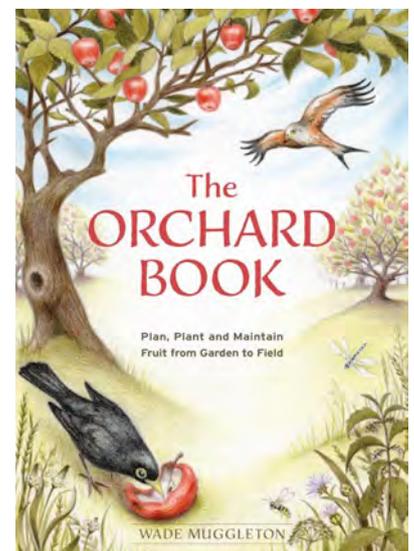
A few examples illustrate the change. 'Hunt's Duke of Gloucester' is quoted by George Lindley (1833) to have been raised from a seed of 'Nonpareil'; it wasn't. We may speculate it was from 'Rosemary Russet' (a parent of 'Cox's Orange Pippin'). Both 'Arthur W. Barnes' and 'Millicent Barnes' were raised at Eaton Gardens about 1902 from 'Gascoyne's Scarlet' x 'Cox's Orange Pippin' and catalogued about 25 years later. DNA suggests more likely parentage 'Bismarck' x 'Cox's Orange Pippin', perhaps this 'error' had something to do with the World War I (recall 'Maid of Kent')? Usually one parent is identified as correct, the variety from which the pips were taken. There are about 20 for which both are wrong, including five bred by Wastie of Oxford. A Sussex example is 'Encore' claimed to be 'Warner's King' x 'Northern Greening'. DNA SSR suggests it maybe 'Annie Elizabeth' x 'Lord Derby'. In these cases even the tree on which fruit grew was wrongly identified or records lost.

Stephen Ainsleigh Rice

## The Orchard Book by Wade Muggleton

has just been reprinted and is available from the Shop Pages of our website along with a range of other titles.

[The Orchard Book by Wade Muggleton - Marcher Apple Network](#)



## Bark Splitting in Fruit Trees

I wonder if other readers have experienced this phenomena whereby seemingly healthy youngish trees suddenly undergo splits in their bark? I have certainly experienced it in my Shropshire orchard. So some research and investigation suggests it can be caused by fluctuating growth conditions of high temperatures followed by excessive wet periods which in turn can cause erratic stop, start growth patterns. We are on clay so perhaps the difference between a dry summer like 2022 and a wet winter does cause this issue. Although unsightly it is unlikely to be fatal as apple and pear trees are tough as ole boots and from a conservation point of view cracks and splits can lead to veteranisation which has biodiversity benefits.

Sun damage is also claimed to be one possible cause so perhaps hot summers like 2022 when areas of exposed bark must reach extremely high temperatures and so the sap inside them and their cells undergo extremes which may then cause splitting. If as climate change projections suggest we are to undergo more extremes of weather from hot dry summers to incredibly wet spells then this could be a phenomena we might see more and more of.

Wade Muggleton



## Storing Apples

Shropshire Smallholder Scarlett Penn set herself the goal to successfully store home-grown apples in her cellar until 1st June this year, and she did ! With these 3 being the winners: Rosemary Russet, Idared and Granny Smith. Of course in the past Apple storage would have been a really important aspect of food preservation through the season.



The winners left to right, Rosemary Russet, Idared and a rather yellow Granny Smith, and Scarlett with her pick of the best the Rosemary Russet.

Scarlett talks through the results on Youtube at: <https://youtu.be/soe9beEm76Q?si=4LsQTfH3tGUqnAXd>

Wade Muggleton

# John Williams of Pitmaston, Worcester

John Williams (1773-1853) was a Worcestershire horticulturalist who introduced and developed a number of fruit varieties in the first half of the 19<sup>th</sup> century.

He came from wealthy stock and, as the eldest of eight children, had inherited the family business – a distillery in Tybridge Street in Worcester. He married Dorothy Wigley at Claines in 1800 and built Pitmaston House, a grand residence in Malvern Road in St. Johns, in what is now a southwestern suburb of Worcester. Williams probably moved in to this residence around 1804 and lived there until his death aged 80.

His achievements as a pioneering horticulturalist, plant breeder and meteorologist are commemorated by a blue plaque, erected in his honour at Pitmaston house, by Worcester Civic Society in 2015.

It seems that Williams was a bit eccentric, fearful of the possible effects of the Reform Bill of 1832, which allowed a greater proportion of the populace to vote, he famously built a large grey stone wall around his house to keep people out so fearful was he, like others at the time, of the potential for mob rule.

Pitmaston House, and its extensive gardens, was sited in a very favourable part of the Worcester area for fruit growing. In the 19<sup>th</sup> century St. John's was the location of an enormous fruit growing nursery initially created by Richard Smith, son of nurseryman Thomas Smith of Lower Wick. Later in the 19<sup>th</sup> century this grew to be one of the largest nursery concerns in the world as described by William Watson in *An Orchard Survey of the City Of Worcester, February 1999*.

*'In its heyday in the late 19th century St. John's Nurseries covered 157 acres stretching from the Bransford Road, St. John's to Lower Wick in the south, There were 18 miles of walkways between its rows and displays. It had a 2,300 yard-long central drive lined by trees and there were two and a half acres of glasshouses: The whole operation was manned by a labour force of 200 (Grundy M. 1988).'*

Williams did much experimentation relating to micro-climates. He grew an extensive selection of fruit in the grounds of Pitmaston House which was managed as an ornamental nursery, including areas under glass. He controlled the environment within the conservatory at Pitmaston House for growing grapes publishing his book *Climate of Great Britain* in 1806. He described in 1818 how he had constructed a vinery *'with a steam vault under the soil, for supplying occasional warmth to the roots.'* He added *'I have noticed the effects of ground heat with some attention.'*

He wrote articles for the *Transactions of the Horticultural Society in London* (the forerunner of the Royal Horticultural Society). In one of these he described how, in his experience, a hawthorn hedge surrounding his fruit growing areas harboured harmful insects that attacked his fruit, whilst a holly hedge did not.

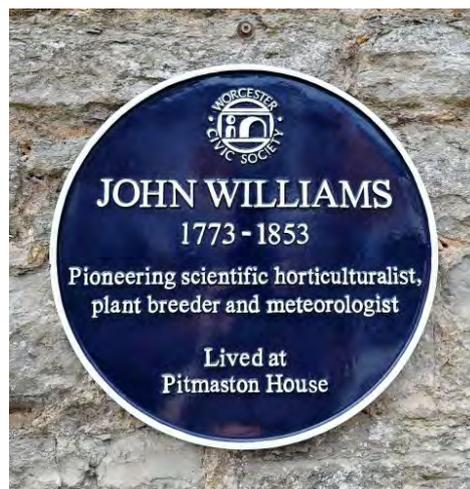
Many of the fruits selectively bred or introduced by Williams have 'Pitmaston' in their name. The 'Pitmaston Pine Apple', a late dessert apple with a russet skin, was actually initially raised elsewhere and its origins can be traced back to 1785 in Herefordshire. However, by 1820 it was being grown by John Williams in Worcester and he exhibited it in 1845 at an exhibition of the London Horticultural Society.

Another late dessert apple 'The Pitmaston Russet Nonpareil' (syn. 'Pitmaston Nonpareil') was raised earlier by Williams having first fruited at Pitmaston House in 1814 and being exhibited at the London Horticultural Society in 1818.

Other less well-known apple varieties also bear the 'Pitmaston' name. In *The Fruitist: a treatise on orchard and garden fruits, their description, history, and management, etc.* by Benjamin Maund, from 1843 there's an excellent description of the (now probably lost) 'Pitmaston Golden Wreath' apple. Raised by Williams this was a cross between a 'Golden Pippin' and a Siberian Crab apple with what sounds like a very attractive tree described by Maund as follows.

*'The fruit bears ample evidence of its parentage; and a more beautiful object amongst trees, can scarcely be imagined, than this presents when laden with fruit. Its branches partake much of the character of the Siberian Crab-tree. They are long, slender, and drooping; not much branched by lateral shoots; and their effect may be conceived, when we state that these twiggly branches, two or three feet long, but little thicker than quills, become densely crowded with bright yellow fruit, forming a brilliant exhibition of pendent golden wreaths.'*

Williams is perhaps best known for two pears - the 'Williams' and the 'Pitmaston Duchess'. The 'Pitmaston Duchess', a mid-season dessert / culinary pear, has a superb reputation for its size and beauty. Once prized as an exhibition fruit and previously much used for canning / bottling it has fallen from favour commercially, although it is still popular with gardeners and exhibitors. According to Joan Morgan's *The Book of Pears* this variety is attributable in 1841 to either John Williams or his gardener – Mr Sprague.

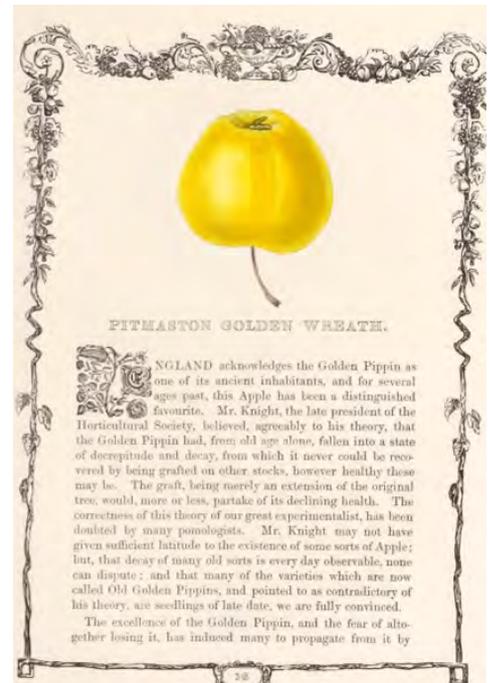


Maund in *The Fruitist: a treatise on orchard and garden fruits, their description, history, and management, etc* illustrates and describes the 'Auch-Chisel' pear a cross made by Williams between a 'Green Chisel' and a 'Poire d'Auch'. In describing this pear Maund mentions the friendship that existed between Thomas Andrew Knight and John Williams. Apparently, Knight in the latter part of his life, referring to the very favourable growing conditions at Pitmaston had once said to Williams *'You have a better climate to work in than I have at Downton. I hope you will continue your experiments; you will be able to effect more than I have done. I give up the Apple and Pear to you'*. Encouragement indeed from one of the greatest horticulturalists of the time.

Williams did not confine his fruit growing expertise to apples and pears. Several other 19<sup>th</sup> century fruit varieties were attributable to him including the 'Pitmaston Green Gage' gooseberry, 'Pitmaston Champagne' gooseberry, and the 'Pitmaston Orange' nectarine together with numerous other apple and pear varieties not described here.

Since John William's death Pitmaston House has gone through many changes. The building is now grade II listed and was, during part of the 20<sup>th</sup> century, used as a school. Some of the original structures such as the tower and icehouse were destroyed around 1945, although many of the other garden features such as the walls were still intact and supporting the original restricted form fruit trees until well into the 1950s. The grounds now form part of a predominantly grassed, public park within the city of Worcester.

Apart from the blue plaque mounted prominently on the boundary wall to Malvern Road that honours Williams there's little there remaining as a reminder of Pitmaston House's impressive fruit growing heritage. Perhaps more appropriately the valuable work of John Williams endures in the form of some superb fruit varieties that are still popular to this day.



Above; Pitmaston house in it era as a school

Andy Ball

# St Milburga White

Around twenty years ago Much Wenlock local Kenneth Milner was out walking his local patch when he noticed an apple tree growing in an ancient hedgerow high up on a farm a mile or two outside the town. The tree appeared ancient and may well have even been laid into the hedge in the long and distant past. The blossom of the tree was pure white and later in the year the fruit were a long stemmed small crab apple. Some correspondence with Brogdale took place and it



was added to the national collection in Kent. So Kenny was given the option to name it for which he chose St Milburga who is the patron saint of Shropshire. Kenny and his friend Neil have over the years propagated the St Milburga and distributed them near and far with several trees now growing in the town and even one sent to a historic garden in Scotland. So if per chance the original was unique, then its genetics have now been conserved. A great example of local action by enthusiastic local folk out there on the ground.

Wade Muggleton

Above; the pure white blossom, left: the ancient trunk suggests considerable age and below Kenny and the tree



# The Mistletoe Marble Moth (*Celypha woodiana*)

This article is a brief introduction to an orchard wildlife rarity – the Mistletoe Marble Moth. Somewhat disparagingly, (albeit accurately), it has been described as a micro-moth that looks like a 'bird dropping'. You may be fortunate enough to encounter this small insect in local orchards in the MAN area.

It was first found by Dr John Henry Wood (right) (1841 – 1914), a physician and eminent entomologist, in 1878 when he was living in the village of Tarrington near Hereford. The moth was given the name of *Celypha woodiana* by Barrett in 1882 thus acknowledging Wood's discovery. The name Mistletoe Marble Moth is a new moniker following its Priority Species listing in the UK Biological Action Plan (BAP) in 2008.

In recent decades this has proved to be a rare insect species with occasional records across Herefordshire, Worcestershire, Gloucestershire, Gwent, Somerset and Warwickshire. The BAP listing raised the profile of the Mistletoe Marble Moth and in 2009 a national survey was undertaken by Butterfly Conservation with funding contributions by the National Trust and Natural England.

Butterfly Conservation has a helpful factsheet on this moth that describes its life cycle. '*The species is single brooded. Eggs are laid on mistletoe in July and August. Upon hatching the larva burrows into a leaf, overwintering in a small crescent-shaped mine. In early spring it resumes feeding and the mine is extended into a narrow gallery. The striking deep green larva continues to hollow out the leaf and by May this forms a conspicuous, inflated pale blister. The larva exits the mine to pupate in June, in a loosely spun cocoon under bark or lichen growing upon the branches of the host tree.*'



Wood was not only the first to identify this moth but was also then subsequently to successfully rear it and identify that its larvae feed on mistletoe (*Viscum album*) commonly found in traditional apple orchards.

Mistletoe is a hemi parasitic plant predominantly associated with Apple (*Malus* spp.), Pear (*Pyrus communis*), Hawthorn (*Crataegus* spp.) and Crack Willow (*Salix fragilis*), together with Rowan (*Sorbus aucuparia*) so it might reasonably be expected that the Mistletoe Marble Moth could conceivably be found across all of those types of trees.

The national survey by Butterfly Conservation resulted in a report - *Survey for the Mistletoe Marble (Celypha woodiana) in 2009* - James McGill, 2009 (Butterfly Conservation Report No. S09-29). This report shed additional light on what was previously a little-understood species.

James McGill's report is helpful to us, as orchardists, because his research findings provide more detail on the habitat of the Mistletoe Marble Moth which can help inform our approach to orchard and tree management. McGill's study covered 34 sites that contained mistletoe habitat spread across Somerset, Gloucestershire, Herefordshire, Worcestershire, Warwickshire and Monmouthshire. Twenty-seven of those had not previously been surveyed and this resulted in the Mistletoe Marble Moth being found at 10 new locations. This was tempered by the fact that the moth could not be found at three locations where it was previously present. Anecdotally McGill noted that the moth was less easily found in 2009 than in the 1980s.

Where the moth was found it proved to be hard to predict exactly which habitat situations were the most favourable. However, it was suggested that the moth preferred healthy mistletoe and that it was more likely to be found on mistletoe in sunny rather than shaded positions on trees. McGill further concluded that it's possible that the moth preferred mistletoe at a higher rather than a lower height. It was also suggested that it was better to have a few large clumps of mistletoe on many trees in an orchard rather than lots of trees heavily overloaded with mistletoe. That's also a prudent approach to mistletoe management for tree health reasons. Tree management at locations where the moth is present should be carried out in a sympathetic way and McGill recommended that wherever possible it is important to preserve *any* trees occupied by the moth, together with their nearest neighbours.

The selection of sites for the 2009 survey was quite heavily biased towards traditional orchards. As mentioned previously mistletoe, and hence potentially the Mistletoe Marble Moth, can also be found on several other tree species. When planning a new large-scale orchard, or indeed a more modest garden one, it might be worth considering the planting of other host tree species such as Hawthorn (*Crataegus* spp.) or Rowan (*Sorbus aucuparia*) either within hedgerows, or as feature trees. Habitat diversity, as ever, is always important.

As part of his survey McGill provided training for volunteers in the identification of the moth, its larvae and evidence of mining activity in mistletoe leaves. Larval mines are best searched for in May and it may be necessary to use binoculars to search for these in clumps of mistletoe that are out of reach.



Top left : Mistletoe Marble Moth mine on mistletoe leaf. Photo credit: Dave Shenton

Above : The larva has a vivid green body and a black head. Photo credit: Patrick Clement

Left : The adult moth has wings that are mottled with a mixture of white, fawn and cobalt blue mimicking bird dropping. It is likely to be found on tree trunks during July and August. Photo credit: OUMNH

During my previous mistletoe management work in traditional orchards, usually carried out in winter, I've been careful to check clumps of cut mistletoe for evidence of leaf mining activity. Sadly, I've never seen this first-hand despite having worked in some excellent veteran traditional orchards in both Herefordshire and Worcestershire. Nor indeed have I ever encountered the larva or the adults at other times of year.

Why is this small insect significant? It is primarily as a matter of *species diversity*. What Benedict Macdonald and Nicholas Gates in their book *Orchard – A Year in England's Eden* describe as part of the existence of '*food chains within food chains*'. It is also notable since it is scarce.

This is a species to be noted, cherished, and protected if you do come across it. Your local Biological Records Centre or Wildlife Trust will probably be very grateful to receive records of any sightings, to include photographs if possible.

The Mistletoe Marble Moth is another small part of the rich tapestry of flora and fauna that makes orchards such important and treasured habitats.

Andy Ball

# My Local Orchard

I left Herefordshire for Kent eight years ago. After all my involvement with MAN I expected it would be easy to get involved with a local orchard group. But no, there appeared to be none on my doorstep. Kent is a large county and Brogdale is on the other side from where I live and I wanted somewhere I could easily pop into.

Then, as luck would have it, I came across a Facebook event for a local community orchard, about ten miles from home. They were holding an apple day with a band and other entertainments. On the day, full of excitement, off I set. The directions took me down narrow lanes and past high hedges. But no orchard in sight. Disappointed I decided to return home, passing an actual hop garden on the way. And then I passed an orchard, with cars parked in it, and an entrance – I had arrived. I parked and set about discovering what was going on. The band was playing and there were a few stalls but nobody obviously in charge. A sign said we could pick the apples (and people were scattered about doing just that). There was a map showing several plots where we were not to pick with the advice that these plots were not actually marked out on the ground. I grabbed a collecting bag and set off to see what I could find. The orchard was large, stretching a long way up a gentle, south facing slope. There were trees large and small, gaps in the planting grid, dead trees, mounds of brambles which might or might not have concealed a tree. There was no obvious logic to the planting with several small groups of different varieties scattered around the orchard. And half way up the slope I met some sheep. I filled my bag and returned to the car. Through a gate was another, smaller orchard and through another gate yet more orchard. This was overgrown with long grass, difficult to wade through. I recall finding Howgate Wonder and Pitmaston Pine Apple. The first I have yet to re-find and the second, I am now sure, was a mistake.

On leaving I grabbed a friends form and am now part of Standen Community Orchard. This is the orchard's history, as I understand it. Other versions may differ. The orchard was planted up in the 1950s. The large, old trees I saw fit to that time frame. In the 1970s the orchard was divided up into a large number of mostly rectangular plots which were then sold. I originally thought this was a cunning plan to prevent the orchard from being developed into a housing estate. But no, it was a cunning plan to develop the orchard, maybe not with housing but certainly with holiday homes. At which point the local council said "This is an Area of Outstanding National Beauty. There is no way any development will be permitted. Not now, not ever". And that's how it remains. Some 50 years later the orchard is still an orchard and the Standen Fruit Farm Community Orchard Association now manage it on behalf of the plottolders.

On joining the Association I enquired about what varieties were there. To which the reply amounted to that there was no definitive list, and no way of locating a variety even if known. Well, here is a task which would give me an excuse to visit the orchard – finding out just what varieties are there. The orchard itself covers some 50 acres. Even at 30 standard trees an acre that is 1,500 trees. I have a bit of work to do – a five-year project. The orchard itself, I found, is split into 12 fields. Fields 1 and 2 are cherries leaving just ten fields for me to work on. As I said earlier, I am an apple man.

The first thing I needed to do was to map the orchard. With a map, the next thing is to mark out identical varieties. I don't want to have to identify 1,500 varieties if there are only 40 or so there.

I tried using Google maps to map out the fields but it proved tricky. The trees appeared quite fuzzy at the scale I wanted to use and the edges of the fields were indistinct disappearing into surrounding woodlands. Instead, I have been walking the fields noting the size of trees and which trees were missing or just mounds of brambles.

With a map created, I have been plotting out where the same variety can be found. Spartan is a lovely purple colour so it's easy to mark on the map where the plantings are. And so, in theory, for other varieties. But isn't it strange how, after a while, all apples look the same. Many visits are required to mark and then check which trees are the same variety.

As for actual identification. Well one day I passed a charity shop in Dymchurch which had a book sale. All books at only a £1. There was a copy of Rosie Sanders *The Apple Book* in there. I wasn't going to let that by. Everywhere I have been where there has been an apple id session I have seen a well-thumbed copy of this book or its predecessor. The Association's website has a list of about 35 varieties to be found in the orchard so I extracted descriptions of these from Rosie's book, supplementing them as necessary from Joan Morgan's *The Apple Book*. These would be the first port of call for identifying the apples in the orchard. But I do wish I had attended more of the apple id sessions at the Harp with Mike Porter and the other MAN experts. In 2022 I put on a small apple display at the Association's AGM hoping it would prompt members to come forward with more information. The display was a success but not the information gathering.

And this is how I am getting on with the project: Among the varieties I have found are Grenadier, Howgate Wonder, Blenheim Orange, Discovery, Spartan and Cox. But one of the other fields contains some far less common varieties including William Crump, Yellow Ingestrie, Madresfield Court and King Charles Permain. Not varieties I expected to find in Kent

Much mapping and identifying still needs to be done. It's a wet Winter/ Spring and I won't be visiting the orchard until it gets dryer – and only when I have got on top of my own garden! Plotting varieties has proved more time consuming than I had anticipated. Not helped when 2021 was a poor year and any apples which were produced appeared uniformly grey and unappetising. And other years when trees bear no fruit.

Three and a half years in and still 5 years to go!

Richard Wheeler – ex-MAN webmaster.



Left : my small display at the Orchard open day.



Above : some of the older orchard trees



Left : identifying the varieties is a slow process to be sure of getting them all right.

# Hotchin Pippin

At the meeting at the University of Reading last November we were spellbound listening to Denis Smith and Karen Meadows tell of their incredibly detailed research into a variety 'Hotchkin Pippin'. I've tried to summarise their work, it is really a most astonishing document; I hope this gives a flavour. If you want all the details see [fruitID | Apple | Hotchkin Pippin](#).

It's a medium to large slightly oblate green-skinned cooker that keeps to February, it is rather similar to 'Wyken Pippin'. DNA has enabled associating it with the NFC accession 'Nelson's Glory' and to several trees from around Rutland, Bedfordshire, Hertfordshire, and Cambridgeshire where it has various names including including, 'Rutland Founding', 'Hodgkin's Pippin' and 'Hedge Apple'. The nursery Ingham and Wood of Huntingdon were selling trees under the first of those names at about 1877. Also it seems to have been assessed, but rejected as not good enough, by Thomas Rivers of Sawbridgeworth. The second of the synonyms was the name by which it was known locally in Rutland. This seems to confirm associating the variety with the area on the borders between East Anglia and the East Midlands. Karen dug into history and found that the apple had been named in about 1810-17 by a Mr William Hotchkin who was a (market) gardener and worked at Lyndon Hall near Oakham. Until the early C19th it had been known as 'Hedge Apple', but Karen thinks the local curate, John Wood, suggested 'Hotchkin Pippin' as more distinctive. She found evidence showing continued local interest in the variety by both John Wood and a successor Rev Charles Boys, thus confirming a continuity throughout C19th.

The naming of the NFC accession 'Nelson's Glory' appears to have little basis. Exhibited samples of that name at the 1883 Congress were assessed to be 'Warner's King'. Samples were provided to the NFC in 2004 by Crapes Fruit Farm of Colchester from an old tree growing at Halsted in Essex. A sample apple seemed to match Bunyard's description but doubts remained. There doesn't appear to be any written records to support that naming.

To add complexity into this 'simple' story, trees with matching DNA have been found at Dalemain in Cumbria and at Llangenny near Crickhowell in Powys; MAN has called this one 'Llangenny Evagil'. Leaving aside how it got to Cumbria, how does an East of England variety end up near Crickhowell? Karen went digging even deeper, She found that a Jasper Walters from near Trowbridge moved to Oakham in 1856 and set up his own nursery, likely building on his father's experience as a fruit tree nurseryman. Nine years later year he married a Monmouthshire girl and moved to Abergavenny. There he had a market garden of 4 acres at Llanfoist and a Fruiterers at 12, The High Street. Two younger brothers retained the nursery near Oakham, though three years later it was sold to another local nursery man, Henry Clark, the stockist who sold 'Rutland Foundling'. Jasper Walters continued making visits back to Oakham; in 1875 the Abergavenny Chronicle reported he had won prizes in the Stamford Horticultural Society Show. It would seem likely that sometime during this period he brought 'Hotchkin Pippin' to his Llanfoist nursery. The business was continued at 41 Frogmore Street in Abergavenny until the time of WWI. That gave 40-50 years for someone from Llangenny to buy and plant a tree.

Now personally I have to say that Thomas Rivers was probably a little hard when he dismissed it, but the competition among late keeping cookers is intense.

This is an attenuated description of what likely happened. Some, such as 'King's Acre Bountiful' aren't so difficult to uncover or recount, but others can be even harder.

## What is it?

No one recognises it. It's a beautiful apple. Dessert, if a little sharp, perhaps just a hint of tannin, good flavour and keeps into well into the New Year. Desirable. Others have thought so judging from the fact that trees have been found in Cornwall, Ireland, Sussex, Surrey, Yorkshire, Bristol, Lincolnshire. The widespread distribution suggests that it may have been a popular choice from a large nursery that had a 'mail order' service. We have it too at Ty Glyn. Despite extensive searches and discussions, it's still a mystery. The best strand so far seems to be from DNA, that it might be progeny of Orange Goff, a good Kentish variety. But it doesn't seem to feature in catalogues of nurseries in the SE: Bunyard's, Cheal's or Veitch's. It was once accessed into the NFC as 'First and Last', but it was removed as it doesn't match Hogg's description. I've wondered if it could be Veitch's Perfection. Does it remind you of ...?

Two of the Best

One of my favourite cookers is 'Green Purnell'.  
One of my favourite eaters is 'Kidd's Orange Red'.

What do you like?

Stephen Ainsleigh Rice



## Triploids

Perhaps you may remember last year a report was made of a trial by John Teiser of growing seedlings from the pips of Ashmead's Kernel and Warner's King. Growth wasn't strong, but he was able to pick enough leaves to submit them for DNA analysis at NIAB. Well, no results yet. Over the winter John grafted a couple of scions onto dwarfing rootstock for encouraging earlier blossom; growth has been weak.

John's work encouraged me to have a go. Last Autumn, I took fruit from trees, twenty varieties of triploids and twelve of diploids as controls. All were open pollinated. The pips were extracted and classified into plump (so had a usual endosperm starch storage), wasted (markedly thin and lesser quantity of starch) and tiny (perhaps little or no endosperm).

It was pretty evident that most diploids set six to ten plump pips whereas triploids were typically one to three, occasionally six or so. Count and examine the pips next time you cut open an apple!

Twenty plump pips from each of these 32 varieties were stratified and then planted in compost this winter. Here you can see triploids in pots on right of the photo. On the left are the saplings from diploid trees. About 75-90 % of seedlings from diploid fruit survive to make consistently good growth, whereas just 20-75% of triploids have survived six months and most are making much weaker growth.

Andy Gilchrist from South Lakes Orchard Group has kindly mentioned to me a similar experience he has had. And I've heard others too have tried and triploids have failed, so it's not my fault, honest.

In summary the chance of growing a sturdy sapling from a triploid variety, to compare with that from a diploid variety, is less than one in ten: fewer plump pips, fewer survive, fewer make strong growth.

Even without seeing whether these triploid sourced saplings will have blossom, fruit and viable seeds, it is evident fewer are likely to become a parent of a new variety; plant breeders won't spend time on them. Hence Nick Howard has made the suggestions that triploids are an evolutionary dead-end. I hope to have the patience to raise saplings from these young triploid source saplings, please wish me luck.

But it explains our scepticism that any triploid will have been a parent especially of a sturdy variety. Where Bramley's Seedling, Ribston Pippin, Blenheim Orange, Warner's King, or Catshead are mentioned as a (possible) parent, best view is to doubt it... I'll back you up!



## Pollination and Triploids

Yes, triploid varieties don't have viable pollen. Then if a triploid were to come into blossom either before that of most diploid varieties, or after them, then there might be little or no pollen available to fertilise them. Lets see what the NFC/RHS list tells us. There are 194 varieties with a blossom date. Group 1 has only four members, one of which is triploid, 'Gravenstein'. In Group 5, there is one triploid, 'Suntan', and five diploids. Pollination group 6-8 has four members none of which are triploids.

Stephen Ainsleigh Rice

## Book Reviews

### Medlars Growing & Cooking by Jane Steward

This delightful book explores all facets of this historic and almost entirely overlooked fruit. From its place in history as far back as the Romans and Greeks through to the twentieth century and its fall from favour. Through to its growing, cultivation and then onto Jane's own passion of using medlars for a range of culinary purposes. Written with enthusiasm and an obvious passion this is well worth reading for anyone with an interest in orcharding and historic gardening. Jane hopes to enthuse us to grow medlars and take them from relative obscurity to the useful fruit she believes they can again become.

A great fireside read for a winters evening.

Wade Muggleton

### The Orchards of Eastern England, History, Ecology & Place by Gerry Barnes and Tom Williamson

This comprehensive book into the history of those orchards in Eastern England which are perhaps less well known than the orchards of the West like Somerset and Herefordshire. Incredibly well researched, written and full of fascinating history specific to certain places, along with lots of historical gems and anecdotes.

Wade Muggleton

### The apple by Sally Coulthard

This 2024 book takes a fascinating romp through the apples place in a range of historical contexts from its genetic origins in the Tian Shan mountains its journey along the silk road, through to the Greeks and the Romans. It journey through medieval times and out to the New World. The realms of cider and right up to date with modern production methods for the mass market.

A really interesting read with countless snippets of apple history and anecdote.

Wade Muggleton

### Finding the Mother Tree by Suzanne Simard

Whilst not about orchards this fascinating book should be of interest to anyone with a passion for trees.

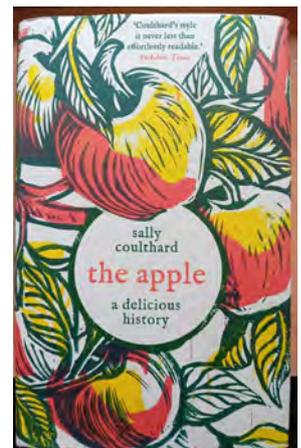
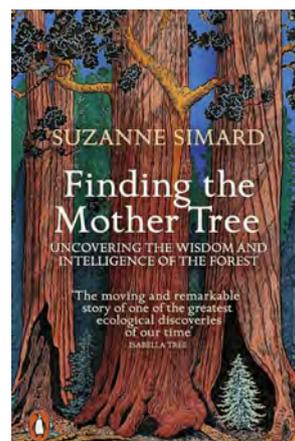
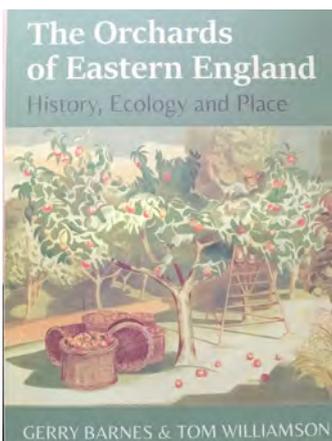
Working within the Canadian lumber industry, then as a forestry research scientist, and as a professor in the Department of Forest and Conservation Sciences at the University of British Columbia - Simard is known internationally for the research that she conducted on the underground networks of forests characterized by fungi and roots.

Her early discovery - that fir trees were using the fungal web to trade resources with paper birch trees over the course of the growing season - led on to other scientific discoveries proving that forests are far more than just collections of individual, competing trees.

Rather than revealing more details I'd urge you to seek out and read this book. It's a compelling read, written in a very accessible way, that details Simard's challenging scientific journey skillfully interwoven with an account of her own, at times, similarly difficult life story.

I came away from reading this account with a respect for Simard's passion for forests, for her humanity and her tenaciousness. I also found that I had a renewed interest in the hidden world within the soil, and an even greater appreciation of the wonder and global importance of trees.

Andy Ball



**MARCHER APPLE NETWORK**  
**(A COMPANY LIMITED BY GUARANTEE)**  
**CONSOLIDATED STATEMENT OF FINANCIAL ACTIVITIES**  
**(INCLUDING SUMMARY INCOME AND EXPENDITURE ACCOUNT)**  
**FOR THE YEAR ENDED 31st MARCH 2024**

	<u>Unrestricted</u> <u>Funds</u> <u>£</u>	<u>Restricted</u> <u>Funds</u> <u>£</u>	<u>Total</u> <u>2024</u> <u>£</u>	<u>Total</u> <u>2023</u> <u>£</u>
<b>Incoming Resources</b>				
Annual Subscriptions	1,010	-	1,010	1,574
Apple ID	-	-	-	-
Gross Bank Interest	97	-	97	33
Donations	98	-	98	3,763
Life Members	-	-	-	100
Misc. Receipts	590	-	590	72
Pomona Project	-	-	-	-
Speaker Fees	-	-	-	-
Grants Received	-	-	-	-
Events	-	-	-	100
Sale of Books & CD's	1,123	-	1,123	649
Sale of Trees	924	-	924	274
Peelers	-	-	-	-
Grafting/Pruning Courses	160	-	160	-
Juice Sale	-	-	-	-
Legacy	200	-	200	-
Closing Stock	8,486	-	8,486	7,084
<b>Total Incoming Resources</b>	<b>12,688</b>	<b>-</b>	<b>12,688</b>	<b>13,649</b>
<b>Resources Expended</b>				
Direct Charitable Expenditure:				
Running and maintenance costs	9,028	-	9,028	8,679
Opening Stock	7,084	-	7,084	8,167
<b>Total Resources Expended</b>	<b>16,112</b>	<b>-</b>	<b>16,112</b>	<b>16,846</b>
Net Incoming Resources	(3,424)	-	(3,424)	(3,197)
Fund balances brought forward at 31st March 2023	71,835	-	71,835	75,032
Fund balances carried forward at 31st March 2024	68,411	-	68,411	71,835

All amounts above are derived from continuing operations and the Charity has no recognised gains or losses other than those passing through the Statement of Financial Activities.

**MARCHER APPLE NETWORK**  
**(A COMPANY LIMITED BY GUARANTEE)**  
**BALANCE SHEET**  
**AS AT 31st MARCH 2024**

	<u>Note</u>	<u>2024</u>	<u>2023</u>
		<u>£</u>	<u>£</u>
<b>FIXED ASSETS:</b>			
Tangible assets	10	37,425	37,533
Intangible assets	11	-	-
		37,425	37,533
<b>CURRENT ASSETS:</b>			
Stocks		8,486	7,084
Debtors due within one year	12	-	-
Short term deposits		-	-
Cash at Bank & in Hand		24,957	27,977
		33,443	35,061
<b>CREDITORS: amounts falling due within one year</b>	13	(2,457)	(758)
<b>NET CURRENT ASSETS/(LIABILITIES)</b>		30,986	34,303
<b>TOTAL ASSETS LESS CURRENT LIABILITIES</b>		68,411	71,835
<b>CREDITORS: amounts falling due after more than one year</b>	14	-	-
<b>NET ASSETS/(LIABILITIES)</b>		68,411	71,835
<b>FUNDS:</b>			
<b>Unrestricted Funds</b>			
General Funds		68,411	71,835
Designated Funds		-	-
		68,411	71,835
<b>Restricted Funds</b>		-	-
<b>TOTAL FUNDS</b>	17	68,411	71,835

These accounts have been prepared in accordance with the provisions applicable to companies subject to the small companies' regime and in accordance with the Financial Reporting Standard for Smaller Entities (effective April 2008).

The financial statements on pages 10 to 11 were approved and authorised for issue by the trustees on ..... and signed on their behalf by:

.....  
Director

## Major apple and pear events

Further details of some of these are available at <https://www.marcherapple.net/whats-on/events-diary/>

\*= Apple display and MAN ID service. Please note that MAN requires at least 5 typical specimens of apples in order to attempt an identification. We ask for donations towards our work in return of the I D service.

**Gloucester Orchard Trust** Perry Pear display and ID at Hartpury Orchard Centre, Hartpury Orchard Centre, Blackwells End, Hartpury, Gloucestershire GL19 3DB.

Friday to Sunday 13<sup>th</sup> – 15<sup>th</sup> September. The Ludlow Marches Food and Drink Festival <http://www.foodfestival.co.uk/> . There is always a good selection of local cider makers and fruit juicers in attendance.

Friday/Saturday/Sunday, 27<sup>th</sup>-29<sup>th</sup> September. Autumn Show at Three Counties Showground, Malvern <https://www.malvernautumn.co.uk/> .

Hereford AppleFest is returning for 2024! 28 September to 13 October 2024. On Saturday 28 September with a day full of live music, performances, artisan cider, perry and apple juice, children's activities and more. Two weeks of fringe events follow, taking place all across Herefordshire. From cider tasting, to apple fairs, to art exhibitions, events of every variety are hosted by our wealth of hard-working organisations to provide unique and memorable experiences for visitors.

For further details see [Hereford AppleFest – Hereford City Council](#)

**\*Saturday, 5<sup>th</sup> October.** Applefest, Tenbury Wells, held on the town's Burgage Recreational Area, from 10:00–17:00, Further details: [www.tenburyapplefest.co.uk](http://www.tenburyapplefest.co.uk)

We expect the National Trust Berrington Hall will again have daily events throughout October 10:00-15:00, but yet to be confirmed. It is near Leominster. MAN may possibly attend on Sunday 6<sup>th</sup> and offer an ID service. [Events at Berrington Hall \(nationaltrust.org.uk\)](#)

**Tuesday 8<sup>th</sup> 13:30** Kensington Hall, Brecon. Breconshire Local and Family History Society Stephen Ainsleigh Rice will speak on "*Apples: where did they come from, who are they, who were their parents, and some puzzling interactions with people*". There will be Welsh apples and some puzzling associations. If you aren't a member of the Society and wish to attend please contact MAN secretary to see if there are places available.

**Saturday/Sunday, 12<sup>th</sup> - 13<sup>th</sup> October** 'THE BIG APPLE'. Weekend rural events in and around Much Marcle <http://www.bigapple.org.uk/> . £2 entry to historic grounds of Hellens, from 11:00–16:45 where there will be apple and pear displays. Apples for identification can be handed in for later consideration. There is often a wonderful range of cooked apples for tasting. Further details of talks, demonstrations and other events, from Jackie Denman, Tel. 01531–670544.

**\*Saturday and Sunday 19<sup>th</sup> – 20<sup>th</sup> October,** National Botanic Garden for Wales, Llanarthne, SA32 8HN, 10:00 - 18:00, Apple Weekend <https://botanicgarden.wales/visit/whats-on/>.

**Sunday 13<sup>th</sup> October, 2.00pm – near Minsterley**

Member only event. The orchard was started around 2012 and is a mix of culinary and dessert apples, stone fruit, cider apples, cobs/filberts and a few crab apples, mulberries, quince and almond.

Tea/coffee and cake will be available. Hosted by Alice Fraser and Peter Sheppard, if interested please contact MAN at [secretary@marcherapple.net](mailto:secretary@marcherapple.net)

Tessa Bunney photographic exhibition running from 20<sup>th</sup> April - 31<sup>st</sup> December. details to follow [Museum of Cider - Hereford \(cidermuseum.co.uk\)](#)

Sunday 19<sup>th</sup> October (to be confirmed) Knucklas Castle Community Orchard Land Project apple day. [Community orchard - Knucklas Castle Community Land Project](#)

**\*Saturday, 19<sup>th</sup> October.** Leominster Apple Fair at The Priory, Leominster. 10:00–16:00. Parking nearby in Bridge Street Car Park. "Various stalls, apple display and ID by MAN". Details from Felicity Norman, Tel. 01568–780886. <https://www.eventgoat.co.uk/leominster/leominster-apple-fair-2019/>

Friday 21<sup>st</sup> October, National Apple Day <http://commonground.org.uk/projects/orchards/apple-day/>

**Saturday 9<sup>th</sup> November MAN AGM** at 10:30 for 11:00 at The Mascall Centre, Lower Galdeford, Ludlow, Shropshire, SY8 1RZ. [Accommodation and Meeting Rooms in Ludlow, Shropshire \(ludlowmascallcentre.co.uk\)](#) see page 11.

## Available from the Marcher Apple Network

**Welsh Marches Pomona** is written by Mike Porter and illustrated by Margaret Gill. It contains beautifully illustrated descriptions of 31 varieties of local apples, some of which have never featured in the apple literature. Life-size views of ripe fruit and blossom at both pink bud and fully open stages, plus line drawings of leaves and sections of fruit make this a truly unique reference work. Hardback format, 300mm x 230mm; full colour throughout. 96 pp. **Price** £20.00 + p and p.

**Apples of the Welsh Marches** describes 54 old varieties of apples cultivated in the traditional orchards of the region, plus 24 further varieties grown here extensively in the past and still found in local farm orchards.

**Price** £5.00 + p and p.

**The Worcester Black Pear** written by Wade Muggleton is an in-depth story of this iconic fruit, so embedded in Worcestershire life. Here is its story, including up to date DNA research. **Price:** £8.00 + p and p.

**The Herefordshire Pomona CD** contains copies of all the 77 coloured plates from The Herefordshire Pomona, originally published by the Woolhope Naturalists' Field Club of Herefordshire in 1885. The corresponding sections and text descriptions of the 432 varieties of fruit illustrated on the plates are included, as are the lists of local cider apples and pears and the lists of varieties which the Woolhope Club recommended for planting.

**The Orchard Book** written by Wade Muggleton tells of the wonderlands of bounty and beauty, orchards offer an abundance of fruit in a wildlife haven full of diversity. A well-managed orchard works with nature to provide maximum harvest for minimal effort. Wade Muggleton has distilled 20 years of orchard know-how into this practical handbook to help you plan, plant and manage your orchard, whatever your garden size or budget. **Price** £14.95 = p and p.

**The Vintage Fruit CD** contains 290 separate descriptions of cider varieties and 107 descriptions of perry pears, all taken from hard to obtain reference works. **Prices** £5.00 per copy + p and p.

**Full Colour Postcard Reproductions** Seven plates from The Herefordshire Pomona, in postcard format (6" x 4"). **Price** £1.00 per pack, plus p & p

**Back Numbers of the MAN Magazine** Many of the articles featured contain advice and ideas which have stood the test of time and still make an interesting read. Copies of previous issues are now available as PDFs - see web site for order form with full details of prices.

**The Paramor Orchard Cwmdu**, an illustrated flora, 2014, includes the history of the acquisition of the orchard. With detailed, botanically accurate black & white illustrations which could be coloured in by children. The original black & white drawings by Dr Margaret A V Gill, have been deposited in the National Museum of Wales, Cardiff. **Price** £3 + p and p.

**The Apples & Orchards of Worcestershire** by Wade Muggleton This book captures a few of the stories of the apples of a county once so renowned for its orchards. With 32 varieties described and photographed, as well as chapters on lost varieties, heritage varieties, pears, Orchard stories and aftercare, the book will be available at all events that MAN attend as well at [www.marcherapple.net/shop](http://www.marcherapple.net/shop) all proceeds from the sale go to Marcher Apple Network **Price** £8.00 + p and p.

**MAN Library** contains over a 40 books and major articles on fruit, principally apples. Members may arrange to borrow these, and the public by specific arrangement (donations are welcome). A library listing is given in <http://www.marcherapple.net/libr.htm>

For more information contact [secretary@marcherapple.net](mailto:secretary@marcherapple.net)

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