



Marcher Apple Network

APPLES & PEARS

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Non-members £2

Autumn 2021



Reviving the old varieties of apples and pears
in the Marcher counties

www.marcherapple.net

EDITORIAL

Welcome to the 2021 edition of Apples and Pears and we hope this finds you well in what has been an eighteen months like no other. What can we take from these times?..... well perhaps we all had more time to spend in our gardens and orchards to look at and tend our fruit trees and to perhaps slow down, stay local and reflect on what is important in what for many had become a hectic world.

At the time of going to press it looks as though the Autumn show programme will be limited with the few that do go ahead being somewhat different in form to previous years, being more spread out, socially distanced and with a limited range of attractions all coming in to play. As such you will not see MAN at the number of events we have previously attended. Any that we may attend will be listed on the website nearer the time.

As we come out of lockdown and hope for a resumption of activities we are still looking for more folk to get involved with the running of MAN. We currently have a committee of six where we once had 14 in the early 2000s so we really do need interested **folk to get involved**: anyone interested please contact the secretary at secretary@marcherapple.net In this edition we bring you a varied mix of articles and reports on a wide range of orchard subjects, from tree guards to perry pears and wild apples, to pollen, voles and pitchers.so read on to find out more.

Annual General Meeting 2021

Last year Trustees, in line with Charity Commission guidance at the time, decided to cancel the AGM. This year, Trustees have made arrangements to hold an Annual General Meeting on Saturday 20th November. To ease participation from our widely scattered membership, and to proof our arrangements against the re-introduction of any restrictions, the meeting will primarily be held online, with an opportunity for a small number of members to attend in person.

Members are asked to make full use of the facility for proxy voting, either by post or email, that is permitted by our Articles of Association. In your copy of 'Apples and Pears' you will find a proxy voting paper. If you wish you can complete and return this by post. Those with access to the internet will also find the voting paper on MAN's website www.marcherapple.net, under 'Membership' <https://www.marcherapple.net/membership/agm-2021/>. From there you can download a copy, complete and return it by email. Our articles require that votes are received at least 48 hours before the meeting.

If you wish to attend the AGM in person, or if you wish to follow the AGM by Zoom, please let us know at last 48 hours in advance so that we can advise you whether a place is available and/or provide you with a link to the virtual meeting. You will find full details of how to do this on the Proxy Voting Form.

We will need to achieve a quorum of 14 for our AGM. We have allowed for a maximum of twelve members, including at least one Trustee, to be present in person. Those present will ensure oversight of the proceedings and tallying of votes. Places will be allocated on a first come, first served basis. Members are also invited to join the meeting using the Zoom conferencing facility, where they will be able to follow the proceedings, including the announcement of results of the voting. All members are asked to exercise their proxy vote in advance, whether or not they plan to attend the meeting in person, by Zoom or not at all. Proxy voting will be limited to motions on the agenda.

There will be an Open Forum session at the end of the meeting, to allow for Questions and Answers to be raised and addressed through Zoom. On this occasion, there will be no

provision for online voting, either digitally or by show-of-hands. Any issue raised by a member during the Open Forum can be passed to the Trustees for a response or, if required by members, an Extraordinary General Meeting may be held by video link once Articles have been amended.

As is usual, a number of Trustees will retire this year, including some that do not intend to seek re-election. For this year, any member willing to serve as a Trustee can be co-opted. This simplifies the process and gives nominees an opportunity to experience the role before deciding whether to stand for election next year.

Notice of the AGM:

Notice is hereby given that the 26th ANNUAL GENERAL MEETING will be held at Frank P Matthews Ltd, Berrington Court, Tenbury Wells, Worcs, WR15 8TH on Saturday 20th November at 11:00.

AGENDA

1. Apologies for absence
2. To receive and approve the Minutes of the 25th AGM held on Saturday 17th November 2019
3. Matters arising
4. To receive and approve the Trustees' Annual Report 2020-21
5. To receive and adopt the Annual Accounts 2020-21
6. Election of Directors
7. To determine to appoint Examiners for Accounts 2021-22
8. Open Forum where Trustees will be available to answer questions
9. Any other business

The current DIRECTORS AND TRUSTEES are::

Peter Austerfield, Jim Chapman, Jackie Denman, Nick Dunn, Sir Andrew Large, Andy Pillow, Mike Porter, Stephen Ainsleigh Rice and David Smith.

Four Directors will be retiring. Mike Porter, Jim Chapman, and Jackie Denman are due to retire at the end of their current term; Stephen Ainsleigh Rice was co-opted by Trustees in November 2020 to serve until the coming AGM.

We are keen for members to become Trustees. Indeed, it is now critical for MAN's future, the future of your Charity and Company and all that has been achieved and yet to do. Places are available as we know of several Trustees who will be retiring during the next years. For simplicity we propose co-option for the first year and election by the membership subsequently.

If willing to serve, you may contact any Trustee or the Secretary secretary@marcherapple.net

Andy Pillow

Company Secretary

Brock House, Pelham Road, Upton Magna, Shropshire SY4 4UA



Before and after.....

Paramor orchard after the first plantings were made in 2010 and how it looked in August 2021



Apple Growing: an art or a science or neither ?

**What should I plant ?
What is a good variety ?
What will do well in my
garden / orchard / village?**

These are all questions we regularly get asked at M A N. Now there are countless books we can pluck from the shelf and they will tell us that such-and-such a variety performs in a certain way, blossoms at a certain time, fruits in a certain month, grows vigorously or slowly and so on — a sort of scientific prognosis of fruit growing and production. But is it actually like that ? Reports and observations we have made and collated over the years suggest there may be a far less rigid set of behaviours in the way varieties perform. Not to in any way denigrate the authors of the books or those who made the observations they are based on, which may be absolutely correct for the time and location they were taken. Yet is that to say they can be taken as read for other places? In many ways it stands to reason that there will likely be differences, for surely factors like climate, soil, altitude, exposure, rainfall, sunshine levels, pests and disease, let alone more subtle factors like soil chemistry and michoryzal levels will have an impact of a plant or tree's performance.

It was whilst reading an amazing book entitled "Call of the Reed Warbler", a book not about bird watching but about regenerative agriculture, that I came across the subject of epigenetics.

Epigenetics is the study of how behaviours and environment can cause changes that affect the way genes work without actually changing the DNA of those genes. Unlike genetic changes which are permanent, epigenetic changes are reversible and so do not change DNA sequences, but they can change how living organisms, survive, thrive and adapt.

So when an apple variety performs completely differently in one location from another is there perhaps an element of epigenetics at work? The environmental factors, alongside issues of fertility, chemistry and weather could be causing certain genes in the tree to perform in certain ways and suppressing or stalling other genes.

A variety grown in the south of England on a sheltered south-facing slope will and does

behave, look and taste very different from the same variety grown on a exposed Welsh hillside in the Marches. A whole host of factors are different. Over decades multiple grafts of the same tree in the Marches will effectively produce a different strain of that variety even if a DNA test puts it as being identical to the tree of the same variety grown in the south. So there are perhaps these different strains or versions of the same variety which are different but, in a purely scientific sense, classed as the same. Epigenetic versions of varieties can be seen in the behaviours we have recorded. A simple example is Discovery, I have three trees of it — two in an orchard, one in my garden — and they all crop early, usually heavily, and finish early.. Yet a few miles down the road in Worcestershire's Teme Valley I have seen Discovery apples weeks later still hanging on the tree when mine have all dropped long ago. Both definitely Discovery yet behaving very differently only a few miles apart. Equally with blossom we see a wide range of variation in flowering times.

The great unknown in all this theorising is were we to switch say a fifth generation tree from an exposed Welsh hill-side with a fifth generation of a sheltered South West grown version of the same tree, would they retain the characteristics they exhibited in their place of origin or would they adapt, change and become the form of their new location type? This opens up a huge area of exploration as to how much is purely environmental and how much this might be Epigenetics and indeed are the two things separable or inseparably linked?

In Britain we have this amazing array or between 2000 and 3000 varieties of apples, some home-grown progeny, other immigrants from near and far. In fact most of the commercial or supermarket apples are far, far from home: Braeburn, Jazz and Gala from New Zealand, Granny Smith and Pink Lady from Australia and Golden Delicious from America (Yes America, and not as many might imagine France) so on the basis of local adaptation one might deduce New Zealand to have a similar

climate to here hence an assumption they be suited to UK conditions, Australia perhaps less equitable (at least on paper) and so on. Aside from Pink Lady which is not grown here, they have all been produced on a large scale with commercial success.

An interesting test would be how much of their success is based on nurture, husbandry and management but since so many of our native heritage varieties are never grown on a comparable scale, it is an impossible question to answer. We can but speculate. So whilst DNA may tell us two apples are the same variety, experience suggests they can be different in taste and appearance, flowering and cropping time, reliability and disease resistance.

**So it it an Art, a Science,
or neither?**

Wade Muggleton



'Discovery' – a variety that seems to perform differently in different in locations

Orchard News

Paramor

Eight trees were removed as duplicates or common varieties, and one sold. Tom Adams and Paul Davis provided 46 grafted trees, now planted. A further seven have been retained to grow-on this year and will be planted along with another 42 grafted this winter.

A visit by 6-7 calves in June was thankfully brief; apparently they were wandering outside on the lane and a group of well-disposed folk out walking thought they were better in the orchard than being a danger on the road. MAN owes a debt of gratitude to one of the neighbouring residents who kindly alerted the neighboring farmer to his nomads' whereabouts. And the damage? Tips of a dozen young trees were nibbled; it could have been so very much worse.

Mike Stroud is kindly repeating a series of fungi surveys throughout this year to check for any changes since the last one in 2011. Most fungi are found in the coppice area on deadwood. Observations are entered FRDBI (Fungal Records Database for Britain & Ireland). One unusual fungus observed was the *Rutstroemia conformata*.



Tom Davis, Mary Shuldham and Ainsleigh have pruned the standard trees at Paramor.

Ty Glyn

81 trees were removed as duplicates or common varieties, and all but one sold. Tom Adams and Paul Davis provided 80 grafted trees, now planted. A further seven have been retained to grow-on this year and will be planted along with 107 grafted this winter. Pruning of the collection is underway, but has been a little delayed following a serious injury to my toe while reaching for a bag of onions (clearly I don't know my onions!).

During the year regular observations are made of blossom date, tip-bearing tendency, fruit yield, vigour; we're thinking of adding testing for pitcher tendency. This spring, as a result of lameness from a compound fracture of my big toe, Mary Shuldham has kindly helped continue this. Pruning has been a bit delayed but got underway in July.

We're hoping to expand testing to include the most important thing: TASTE. If you'd like to be part of this programme please let us know. We have a proforma crib sheet for the answers.

Tredomen

The owner having decided to sell the pink bungalow, a few trees will be removed (all of interest have been propagated elsewhere). The access route to the orchard will revert to that over the in-bye land to the south. Sheep guards continue to be effective.

ID report

Through much of the UK there was a good apple harvest during 2020, in some areas around the Welsh Marches, a hard frost about 12th May killed fruit just as it was setting; as a result our own orchards have had a poor fruit yield.

The effect of the covid-19 pandemic resulted in all but one autumn show being cancelled. It was understandable, sensible and very sad.

MAN still offered an ad-hoc service for apple identification for fruit sent by post, during orchard visits, or through emailing of photographs. We considered the ID of 118 samples, and were able to identify over 80%, a total of about 60 hours was spent on this work. Of the total nearly 20 were recommended to be DNA fingerprinted for a confirmatory assessment, either because we just didn't know or we simply thought some were very interesting and unusual.

Perhaps the most interesting find was an isolated tree high up on a hillside west of Oswestry just by the Welsh border. DNA showed it to be Minshull Crab, a Cheshire cultivar not far away from home. Morphological identification had been attempted, but the

apple samples were such windswept weather-beaten things that it just wasn't possible.

Another interesting find was at an orchard near Hereford, likely dating to the later nineteenth century, or earlier. A tree known locally as Martin produces a rather bland dual purpose apple, but it was still sitting almost wrinkle free in my fruit bowl in July, nine months after it was picked.

Among the samples inspected were 37 from the new cordon collection at Ty Glyn. Checks were made to confirm that no propagation error had been made from taking scions to planting trees, thus enabling DNA fingerprints to be transferred with confidence from scion's source tree to progeny.

On 3rd November I was amazed to see a few samples of Discovery which had been picked the day before. They were still in good condition if hinting at mealiness and less flavour. It's one of the easiest apples to identify and I quietly thank every member of the public who brings me one for identification. What an astonishing cultivar it is.

DNA 2020 report

David Spilsbury's father bought a farm near Tenbury Wells in 1922. David's pretty sure that a tree they came to know as Jones's Seedling was growing there at that time. DNA has shown it match Thomas Jeffrey, and they are pretty similarly morphologically. It is reported to have been raised by D.W. Thomson of Edinburgh and named after his foreman. The NFC received it in 1923 from N.F. Barnes, then head gardener at Eaton Hall, Chester. Some years before this it had been given an award by the Royal Caledonian Society. It must have been Edwardian or even Victorian, and are we really sure it came from Edinburgh?

Gelli Aur. Another one has been found in County Cork at Firmount, barely 10 km south of the two I visited on John Rice's farm a few years ago. That's now three in Cork and two here. But does it have another older name?

The French National Research Institute for Agriculture, Food and the Environment, INRAE, has recently been matching together

all the European DNA records, including the UK set. That is over 20,000+ fingerprints, a mammoth and magnificent operation. It has so far revealed just one match for a MAN apple. Which? Of several found at the old Forge orchard in Callow, one was accredited as Haywood Pippin in November 2019 INRAE

have matched it to a well-known Danish dessert apple, Citronæble. You can find details on the Danish National Museum website under 'Bøghs Citronæble'.

<https://natmus.dk/museer-og-slotte/frilandsmuseet-det-gamle-danmark/huse-og-gaarde/haver-og-landskab/gamle-sorter/>

frugt-og-baer/aebler/boeghs-citronaeble/ Perhaps we may be excused for having missed this ID! We'll undo that accreditation at the next meeting.

Stephen Ainsley Rice

Accreditation

The table below lists those varieties that have been accredited recently, together with the DNA sample number, general comments and literature references about the variety.

<i>Name</i>	<i>DNA sample</i>	<i>Comments</i>	<i>References</i>
Brithmawr	A3382	medium-large mid-season culinary apple with attractive speckled and striped colouring	Report of the conference held by the Royal Horticultural Society ... 1934 . Edited by F. J. Chittenden, p187; M.Porter, Welsh Marches Pomona [2010] p24; Native Apples of Gloucestershire, Charles Martell, 2014, p172
Chatley Kernel Red	A371	Listed by Richard Smith & Co., culinary late-keeping apple; it was exhibited at Crystal Palace in 1894 by Bunyard. Sport of Chatley Kernel.	NAR p92 Welsh Marches Pomona [2010] p30
Checkley Foxer (MAN)	A2401	Dual purpose variety found growing on old trees at 5 widely scattered locations	none
Christmas Pippin	A1180	Chance seedling from Somerset with excellent characteristics, parents Cox's Orange Pippin x Golden Delicious	website FPMatthews https://www.frankpmatthews.com/catalogue/Apple/10528
Friar (MAN)	A487	Old Herefordshire farm apple, deep crimson, extremely and variably angular with prominent ribs and of questionable merit!	Pomona Herefordiensis [1811] XXX; G. Lindley, Guide to the Orchard and Fruit Garden, 1833 p77; R. Hogg, A Fruit Manual 1884, p82; Herefordshire Pomona: illustrations prepared for but not included in it, Cider Museum accession 2004.2.49 103 but hanging in Cider Museum
Machen	A440	medium-large mid-season culinary apple with attractive red colouring and sometimes traces of speckled and striped colouring	none
Tidicombe Seedling [£]	A063	Seedling found growing in a garden at Barnstable	Roseanne Sanders, 'The Apple Book', 2010, p35.
Wrought of Beet	A2416	Round deep maroon red fleshed mid-season dessert apple with delicate perfume	none

[£] with Orchards Link

Pruning cordon bushes

Last year we presented our approach to pruning of standards and half-standards at Paramor. Here we very briefly cover cordons at Ty Glyn, while full details can be found on our website: www.marcherapple.net/

Cordon trees are grown on dwarfing or semi-dwarfing rootstock and are intensively pruned to retain their shape. The pruning practice we employ is founded on advice from Paul Davis, Tom Adams and Nick Dunn. Two things we strive for:

- maintaining health
- getting a good spur structure.

Pruning cordons is more fiddly and intense than for standard trees, though generally only secateurs are needed. A summary of tip bearing varieties best avoided is given at the end of this article.

There are three distinctly different activities we carry out for shortening extension growth:

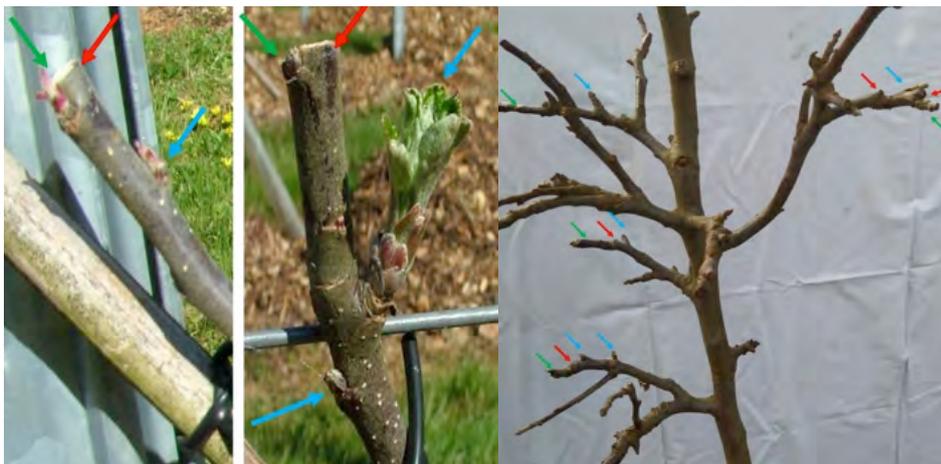
- the leader
- side shoots to three buds
- side shoots to one bud

The leader

The leader is retained through winter in case we need grafting material late in the season.



During a dry spell in March the leader is shortened to 150–200 mm above last year's growth collar. For preference we cut 1–2 mm above the tip of a bud on the lower side of the shoot (see red arrows). This encourages a new shoot to develop, initially growing parallel to the direction of the main stem (green arrow). The next bud down will become a side shoot (cyan arrows), and possibly some lower down too. With this spacing clusters of side shoots, spaced 150–200 mm along the cordon stem, will be created. Sometimes it doesn't work out quite like that and the second and third buds take the energy.... But that's life.



Repeating this for each side shoot as well creates the bifurcating structure we call a 'spur'; in winter looks a bit ugly. Location of cut and new shoots remains pretty clear, and while trimming leaders, any shoots retained in the autumn because they might be tip-bearing but now show no fruit buds can also be trimmed back to 1–3 leaf buds from the growth collar.

shoot on the left has been shortened to just above the nascent bud tucked in between the leaf stalk (petiole) and shoot. The shoot on the right-hand side is being similarly cut just above the petiole. Once the tree is pruned it will look a bit like the sheep in the next field! Neat and tidy. Only the leader shoot is retained (shown with the blue arrow).

First summer pruning – encouraging spur growth

As the cordons are usually planted close together, an essential part of pruning is to keep the spur development compact. Tom's method does this.

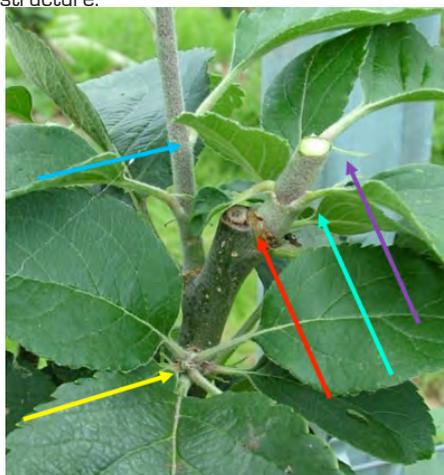
Come late June or early July many young side shoots have grown 100–400 mm. The first summer prune is for shortening these shoots to 1 mm above the third leaf, though to above 4 or 5 leaves is still OK. The red arrows show roughly where to prune the whole tree. Precisely where to prune along each is better seen in the next photo. This shows that one



In the two photos of this tree (previous page) you may notice that the tree to the right has already been pruned, while that to the left hasn't. There is some advantage pruning cordons sequentially, starting with one at the end of a line and is 'above' its neighbor; all its new shoots grow upwards unshaded by its neighbour. Once that is pruned, it's easier to work around it and see the next tree 'underneath'.

In response to pruning, usually one or two of the buds at the end of the shortened shoot will develop as new shoots, extending the spur structure. In the photo bottom left, you can see what pruning achieves over a few months. Here *Byford Wonder* was pruned again on 31st August 2020. The red arrow points to where it was pruned back to the third leaf on 4th July, just above a blossom bud (yellow arrow) that had already formed. As a result two shoots grew (green and blue arrows) and one was snipped (purple) back to a leaf pointing away from the second shoot. This second shoot (blue arrow) to the upper left was retained as it just might have a terminal blossom bud.

Further replication of this practice will result in more bifurcation of shoots and form a spur structure.



Second Summer pruning – encourage compact spur growth

As you saw in the photo of *Byford Wonder* (left), towards late August or early September a second summer pruning is made for encouraging development to remain compact and close to the main stem. Tom is shown in the picture above right cutting back (red arrow) the new extension growth to just above one, or sometimes two, leaf(s): really tight back, close the first summer pruning. Normally buds by the base leaf do not grow much more during the autumn than swell in readiness for next year.



It looks pretty scruffy in the winter. But beautiful at blossom time. During a dry spell in late winter the leader and some of the side shoots (shown with red arrows) were pruned back, respectively to about 150 mm of growth and to two or three leaf buds.



Here's a case seen last year with two (small) growing buds at the end of the shoots with fresh yellow-green leaves; tips are barely noticeable (yes, apologies, the focus isn't sharp). The photo on the right shows there is a (fat grey) terminal bud. Snip the two (red arrows) and retain the latter (blue arrow). That terminal bud blossomed this spring. Over a few years each of these side shoots off the stem will divide into two or more sub-shoots, and so on.

The tree shown below is *Baker's Delicious* and many of its side shoots have blossom buds. It isn't a variety well suited to growing as a cordon. Pruning will always require cutting off many of the potential next year's apples.



Tip bearing varieties need particular care

We have recorded blossom and bud occurrence over the last four years on a few hundred of our trees, some on M25, MM106, M26 rootstock, some 20+ years old and some

just 1 year old. Preliminary results so far have been compared with comments in books by Joan Morgan and Martin Crawford. There is also an extensive listing given on the fruitID website, in which occurrence of spur and tip blossom buds is divided into five categories,

from mainly spur, 75% spurs, 50%, 25% spurs and mainly tip bearing. Compiling all these sources we suggest there are at least 28 that are not really suited as cordons (espaliers and fans are bigger structures so this is of a little less concern). For these, the majority (75% or more) of blossom is on tips and there aren't many buds forming on short spurs growing out of two-year old wood (sometimes they may look like brussel sprouts around a stem). And generally we would not expect cider varieties to be found on cordons.

Our preliminary analysis further suggests another 70 varieties that have roughly an equal number of blossoms on tips and spurs (including on two or more year-old short spurs). These may still be grown as cordons, but just do remember to "look before you snip" and preferably mark the tree with a label to remind you into taking greater care....

Useful further reading

'How to Prune an Apple Tree: A guide for real people with imperfect trees'

This is a handy and easy to read guide on pruning apple trees.

Author: Chloe Ward, Publisher: Self Published, Publication year: 2014

'Apples and pears: growing and training as cordons'

Royal Horticultural Society website <https://www.rhs.org.uk/advice/profile?pid=87>

Marcher Apple Network

From Glasu: http://www.marcherapple.net/wp-content/uploads/prn_en.pdf

Stephen Ainsleigh Rice

Doubtful if suited as a cordon

Baker's Delicious	Friar (MAN)	King's Acre Bountiful
Brabant Bellefleur	Golden Noble	Lewis's Incomparable
Breakwell's Seedling	Harvey's Wiltshire Defiance	Red Victoria
Broxwood Foxwhelp	Haughty's Red	Round Winter Nonesuch
Calville Rouge d'Automne	Hereford Cross	Smart's Prince Arthur
Channel Beauty	Hereford Redstreak	Strawberry Norman
Cissy	Herefordshire Beefing	Underleaf
Cockle Pippin	Irish Peach	Wheeler's Russet
Exeter Cross	Kennedy's Late Cider	Withington Fillbasket
Frederick		

Care when pruning it as a cordon

Adams's Pearmain	Cox's Pomona	Lord Hindlip
Alderman	Crimson Bramley	Madresfield Court
Ball's Bittersweet	Dewdulp Seedling	Margaret
Barcelona Pearmain	Downton Pippin	Mother
Bardsey Island Apple	Dubbele Belle Fleur	Newtown Pippin
Beeley Pippin	Dutch Codlin	Notarisappel
Bismarck	Edward VII	Oaken Pin
Blenheim Orange	Ellis Bitter	Pearson's Plate
Bramley's Seedling	Flower of the Town (NFC)	Perthyre
Brithmawr	Gabalva	Pig yr Wydd
Brookes's	Gelli Aur	Queen
Brown Snout	Gennet Moyle (of Taylor)	Saint Edmund's Pippin
Bulmer's Foxwhelp	Gilfach	Sheep's Nose
Castle Major	Gilliflower of Gloucester	Shropshire Hills
Catshead	Golden Spire	Sugar-Loaf Pippin
Charles Eyre	Green Balsam	Summer Golden Pippin
Chatley Kernel	Grenadier	Thomas Rivers
Chatley Kernel Red	Holstein	Tydemans Early Worcester
Checkley Foxer (MAN)	Isaac Newton's Tree	Wanstall
Cheddar Cross	John Standish	William Crump
Coeur de Boeuf	Lady Sudeley	Wyatt's Endurance
Collington Big Bitters	Lamb Abbey Pearmain	Wyken Pippin
Cornish Gilliflower	London Pearmain	Yorkshire Greening
Court Royal		

A short reflection on a day's pruning with Tom at Paramor

Being an average and keen pruner myself it was an honour to be asked by Ainsleigh to join Tom The Apple Man for a day of summer pruning on site at Paramor back in June. The day was one of those blisteringly hot ones we enjoyed at the tail-end of summers apex, so lunch time was beckoned in gladly. Gladdened for time to rest in the grass and reflect, conversations branched out naturally from pruning to the implications of orchard care and beyond. Access to land, land use and the necessary work towards soil health, plant and

species diversity at all scales, to community endeavours in bridging the gaps seen in our food to plate disconnect, (especially for our young people) were all touched on. Tom has a project brewing which speaks directly to this. We looked at combination cuts, cuts to encourage bud growth in new areas of the tree and how to open spaces up within each tree in accordance to its unique growth pattern, a sensitivity which takes an admirable quality of presence and attention.

It was great joy to be part of this ongoing work, a quiet fervent work, timeless yet timely. I came away from the day enlivened, humbled and wiser in my knowledge; with thanks to Tom's generosity of skill and ecological sensitivities, I am a better pruner for it.

Thank you to M.A.N and to Tom for having me take part in the ongoing stewardship of preservation and revival to the host of wonderful and intriguing apple and pear varieties gathered there at Paramor.

Mary Shuldham

The Wild Apple....

When is an apple not an apple ?

No, not the start of some corny joke but a serious scientific question.

Surely an apple is just an apple? Well actually no, the apples in our fruit bowls are *Malus domestica*, the cultivated apple whose genetic origins lie in the east being descended from wild apples found in the mountains of Kazakhstan and China. It is a relative newcomer to the British landscape when sat alongside *Malus sylvestris* the British wild apple that has resided here since the end of the last of ice age. Some fascinating new research led by Markus Ruhsam¹ has been looking into the genetics of the matter. For it seems there are some pure ancient wild apples but also an increasing number of hybrids, for the cross pollination is leading to an increasing number of feral apples of mixed genetic make-up. A comparison made in British Wildlife Magazine equates it to that of the Scottish Wild Cat where its true genetics have been lost by inbreeding.

¹Worrell, Ruhsam and Renny: "Discovering Britain's truly wild apples." *British Wildlife*, Feb 2021.

The picture is confused by the fact we use the term 'crab apple', whereas *Malus sylvestris* is distinctly different from the colourful cultivated crab apples, so in their article Ruhsam, Worrell and Renny* would prefer we all use the term 'wild apple', that being the native apple and not to be confused with the vast array of decorative incomers sold in garden centres. The basis of future research, like that of the wild cat, relies upon DNA analysis as to how pure to the original any tree might be.

The occurrence of wild apples (*Malus sylvestris*) is intriguing as they appear solitarily in ancient woodland, never in large stands. Ruhsam's research also found they can make huge trees when allowed to do so, way bigger than the standard description in Tree Identification books.

We know from archaeology records from as far back as the Neolithic that apples were part of the human diet and they would have been wild apples, which we would consider today utterly unpalatable — hence the wholesale dominance today of *Malus domestica* — so it is easy to see why there would be little or no interest in growing *M.sylvestris* from a human consumption point of view. Yet from a wildlife, landscape and heritage point of view there could be great merit in conserving them, their prevalence for vast longevity, outstanding blossom production and their place in the countryside all mean we ought to be interested in this issue.

Wade Muggleton

"You could eat a different kind of apple every day for more than six years and still not come to the end of the varieties we can grow in the British isles"
— Sue Clifford and Angela King,
— *Apple Source Book.*

Beware the Voles of March

We are perhaps well aware of the threats posed to young fruit trees by rabbits, deer and domestic livestock, and usually take guarding precautions accordingly. But there is a smaller culprit that can be even more damaging and it is small enough to often go unnoticed. In certain years and in certain conditions voles can cause huge devastation to individual or whole groups of trees. Being active below ground it is often a case of the damage is already done before you realise. A tree may slump sideways or have an extreme lean which when investigated you discover it is no longer attached to its roots.

If weather, food availability or time of year are factors is not clear for voles strikes do appear random, not that common and somewhat unpredictable. When it does happen it can be catastrophic, I have lost 2 or 3 trees like this. One year I had two trees that fell sideways and been almost severed, but with nothing to lose I mounded them up with soil and

left them to what I assumed would be certain death. But oddly they both survived albeit they put on hardly any growth for the next 2 or 3 years but survive they did. The question that I don't have an answer to is are those trees still on their rootstocks or did the combination of being 90% severed and then the mounding up

cause them to put on their own roots that they have potentially been growing on ever since. Although they have survived they are, 5 years on, less than half the size of trees of the same age, planted at the same time. So clearly it did not do them any good, own roots or not. But survive they did.

Wade Muggleton



Young tree completely felled by vole damage below ground.

On Guard

Grass management in orchards is always problematic, its the 'ole mow it or graze it' dilemma. Mow and you don't need sturdy, expensive tree guards, but you do need an expensive mower, fuel and time to cut it. Also, preferably no deer in the area! So grazing can be a more attractive and certainly a more traditional form of managing the sward. But how best to protect your trees from the unwanted attention of tree munchers.?



Sheep will wreak havoc on an inadequately protected tree

Sheep are the commonest and the traditional orchard grazing tool and perhaps the easiest of the four legged mowers to accommodate, (in theory at least) being shorter in the leg and with less strength than horses or cattle who are a huge challenge to keep off fruit trees.

2020 was the year I finally decided to graze my own orchard so spent some time researching options. The traditional way with 3 or 4 posts with rails and netting is very heavy on materials and very time consuming in construction. I was looking for something quick and minimal in its application. Mega mesh is a good product with the great advantage of being climb proof from even the most tenacious of sheep breeds and I like its water harvesting potential of catching rainfall on mizzling, drizzly days. But it is plastic, and as we all know there are countless issues about how much plastic there is in the environment. So I opted for weld mesh which was also cheaper — 1.2 metre high, 50 x 50mm squares cut into about 1.5m lengths

and held by a single tannalised 75mm post. Nice and quick and easy to install. Stapling the mesh to the post makes them difficult to re-open for maintenance so I use a jointing plate (from Screwfix) which is screwed over the join and with a cordless drill driver they can be opened and re closed in seconds.

A 25m roll of mesh cut into 1.5m lengths yields 16 guards at a cost of £118 for the roll means each mesh guard comes in at about £7.50 plus a £2.75 stake and a few pence-worth of plates and screws equals near as damn it £11 a guard: not bad and only a matter of minutes each to install. A minor detail to finish it off, I cut a 1.5m length of hose pipe down its length with a Stanley knife and put it around the top of the weld mesh tube to form a soft rim and prevent any chaffing should the tree rub on the guard. The tree itself is not staked as I firmly believe a bit of movement in the breeze is good for root development and leads to a more substantial tree perhaps developing a better anchorage and less likely to blow over in later life.



Mega mesh is a good product but is plastic.

Deciding what is best for your own situation requires an assessment of threats and opportunities. The afore mentioned deer can devastate an orchard so if they are present, you may need to guard regardless of any intention to use domestic grazing animals. Then once you have committed to protect your trees, cost, aesthetics and personal preferences will all come into play. But be on guard because seeing your lovingly planted trees decimated is extremely demoralising.

Wade Muggleton

Thanks to the Colwall Orchard Group for their shared experiences and discussions on this subject.



Weld mesh tubes at 1.5 long and 1.2m high. The joint plate makes for quick and easy reopening.



In search of the Turgovian perry pear

John Evelyn, in his *Pomona* of 1670, suggested asking other European countries for scions of fruit they have found to produce excellent perry. In response, in March 1658 Dr John Pell, at that time ambassador to the Swiss Cantons, suggested the Turgovian pear, sending details of it and a Mr Hake, member of the Royal Society, brought grafts and a sample of the perry itself, which was pronounced by Evelyn to have a taste of the most superlative perry the world certainly produces. John Worlidge in *Vinetum Britannicum* commented that he wished that it was more generally dispersed.

The trees grown from these grafts will long since have died unless repropagated, but trees then growing in the wildwood or Shadow Orchard may have been pollinated by it, [perhaps](#) resulting in half Turgovian seedlings? Can the Turgovian Pear or its progeny be recognised in the perry varieties of today?

To discover this, it is necessary to determine whether the Turgovian pear can be identified as existing anywhere. The most likely place is in its homeland — the canton of Thurgau (German), Thurgovie (French), Turgovia (Italian), a region in Switzerland bordering on Lake Constance — an area famed for its orchards.

The Swiss Department of Agriculture kindly supplied details of varieties it might be. They suggested it could be one of these four pears:

- Turgauerbirne
- Thurgauer Weinbirne
- Thurgauer:
- Sülbirne, also known as Thurgauer Mostbirne:



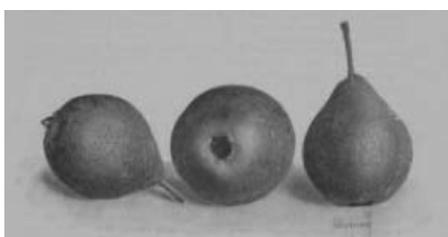
Thurgauer Weinbirne



Thurgauer



Turgauerbirne



Sülbirne

= *Sülbirne*

The fruit is small, conical and rust-spotted. The skin is green-yellow and becomes dark yellow with increasing ripeness. The flesh is yellowish-white, coarse-grained, juicy, rich in sugar and acid and very tart.

and from Germany comes another suggestion

- Schweizer Wasserbirne also known as Thurgibirne

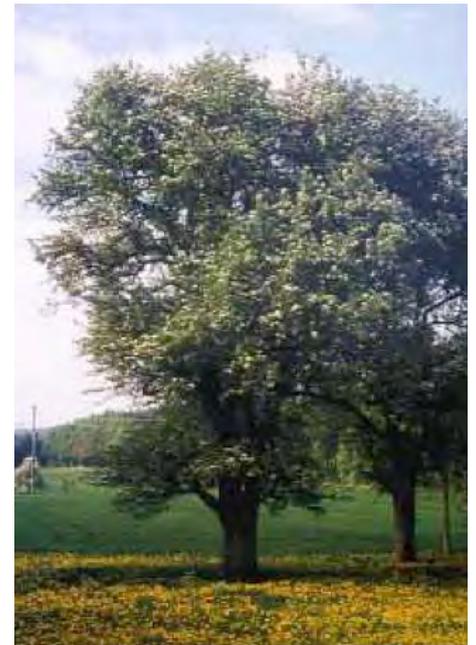
Do any of these pears match the Turgovian fruit described by John Pell in 1658, as being small and ill-tasting?

Schweizer Wasserbirne, is edible — quite pleasant when fully ripe, and large, so it can immediately be discounted.

Pell also explained that they make great stores of perry, from the very small pears, which were hard and full of very unpleasant juice, so that no man will eat one of them raw. He found that the Turgo perry is of two sorts, the one boiled to a syrup, so that it became almost as thick and as sweet as honey, the other un-boiled and clear. Later he was sent a bottle “whose colour smell and taste enticed me to pronounce it to be as good a muscatel as ever I had tasted”. This he was told was Turgo wine made from boiling the juice until it had reduced by two-thirds. It was then kept in barrels for 10 years, being periodically topped up with fresh juice. This process is similar to that used for Zurich wine, which are sometimes kept in huge vessels for many years.

The Turgauerbirne pear would appear to be too large to match the description of Pell’s fruit, but both the Thurgauer Weinbirne and the Thurgauer (apparently genetically different) might fit the description — the weinbirne presumably being the one most suitable for perry.

The Sülbirne pear is also a possibility, being described as well suited for fruit brandy, giving an excellent and long-lasting wine. Connoisseurs also call it the “Queen of the cider pears”. The landscape-shaping value of this magnificent tree is also appreciated in Switzerland, with new plantings in suitable locations. Indeed, the landscape value of our own perry pear trees is only slowly being recognised in the UK.



So, what is the next stage in the quest to discover any influences of the Turgovian pear in our perry varieties? For this we must turn to their DNA. Perhaps using the parentage tool developed by Ainsleigh Rice, we may further unravel the ancestry of this fascinating fruit. Keenest followers of the perry pear story will recall the article in which I suggested

that Hellens Early, an excellent perry pear from Much Marcle, Herefordshire, and Wasserbirne, a pear found around Lake Constance in both South Germany and Thurgau in Switzerland, were the same.

It was a good story, but the answer is likely to be far more mundane! Although not yet conclusive, it is now thought that the matching DNAs may simply be a case of mixed sampling when the collection at Brogdale, Kent was analysed. They are retesting their trees.

Jim Chapman

Pitchers of Ireland

Most orchard fruit trees are grafted onto special rootstocks which regulate their eventual size. The iconic 'Standard' trees which dominated traditional orchards of Ireland are trees grown on their own roots or on vigorous root stocks which were often grown from wild crab apple seeds. When tall enough, well-spaced apple trees were then customarily under-grazed by livestock.

Apple trees like most plants, adapt characteristically over time to suit their locality and do best where they originated. It is noteworthy that a disproportionate amount of varieties in the Irish heritage apple collection display one distinct characteristic: they self-root without the need for grafting, a characteristic not lost on the upland small-holder. Self-rooters occupied many old Irish orchards because they are well suited to the poorer soils (acidic, wet, rushy, etc) found in uplands and especially along the western seaboard of Ireland. Irish Seed Savers Association found such varieties in the West Cork/Kerry area, Clare, Leitrim, Mayo, Donegal & Cavan. They are incredibly durable, adept even in the cold temperatures, high rainfall and salt-laden winds associated with our temperate Atlantic climate.

Self-rooting trees tend to develop deep taproots and this stronger root system is less prone to wind throw as more frequent extreme weather events begin to bite. These trees will tend to thrive, grow larger and live longer than those that undergo the physiological shock of being grafted onto growth-restricting modern rootstocks developed in East Malling's horticultural research stations. I recently heard grafting described as 'fixing the head of a scientist onto the body of an athlete and only the renegade horticulturalist would defy all reasonable advice to allow self-rooting to occur'. Perhaps we can rethink some of our fixated approaches when embracing the nature of our apple varieties.

Since joining Irish Seed Savers I've had time to know 'Tommy's Self Rooting Orchard', the orchard named after founding member Tommy Hayes, himself a fervent self-rooter advocate dedicated to the phenomenon of self-rooting apple trees. Planted in 2001 by Kevin Dudley, it is one of the few places where these astonishing varieties can be found. Also called 'Pitchers', which comes from their ability to be 'pitched' anywhere and take root, these trees were passed on from generation to

generation by taking hardwood cuttings and growing them on. They do take longer to fruit than grafted varieties but are much hardier. For example, the Orchard in Capparoo is north-facing and quite wet, but almost no disease has been noted.

The first tree collected by Irish Seed Savers founder Anita Hayes was a self-rooter, the *Ballyvaughan Seedling*, located growing close to Galway Bay. Other varieties, to name but a few, include *Sheep Snout* (dark green pointed leaves and oblong shaped fruit), the Irish & Yellow Pitcher's, *Foley*, *Ecklinville Seedling* (used commercially as a cooker, locally typical to north County Down and Antrim), *Appletown Wonder* and *Castlegregory* (an apple collected in Co. Kerry, which Dr. Lamb reckoned was a good apple), *Pilltown Early Red* is a remarkable large, brilliantly red, early cooking apple which sweetens to eating quality if left on the tree.

There are honourable mentions for *McCann's*, an apple with intense fizzy sweetness which we brought two crates of to Electric Picnic in September 2019, to the delight of the many, many late summer festival goers passing through The Global Green area. For cider, there is *Finola Lee* or *Reordans*, the latter emerging as an auspicious artisan variety with commercial potential. Keep an eye out for '*Haddocks Favourite*', donated by long time supporter Steve Marsh who contributed a comprehensive review of it in our Summer Newsletter 2020. And of course, a star in the collection, *Mrs. Perry*. A tree of eminence, it expresses a low sprawling character when liberated onto its own root system: first on the list of any Irish heritage orchard design; vigorous heavy cropper, large juicy apples. It has earned its recognition with organic market gardeners as a fantastic mid-season dual purpose apple.

Self-rooting varieties can be identified by looking for aerial roots and burr knots, which are concentrated zones of resting root primordia. Aerial roots are usually red and emerge from the burr knot and will root into soil given a chance. Search 'burr knot' and spend a little time exploring a multitude of compelling techniques to propagate trees from them! To propagate from hardwood cuttings prune 2-3 year old wood (c. 35-55cm long) and plant into soil or coarse sand at minimum 25cm deep. Branching unions seem to be the best place for rooting, suggesting a



Pitchers have that unusual ability of self-rooting

concentration of rooting and growth hormone in the branch collar or heal of the tree. Cuttings take time to root, sometimes more than a year. Growth habit varies considerably from tree to tree, as do success rates. '*Sweeteen*' (an old cider variety) is the most vigorous from our research to date.

I would like to see these varieties utilised more as an ideal urban amenity tree for schools or community groups anxious to introduce food growing to their area. There is an opportunity to think creatively about what urban and community orchards could and should be like. Not pushing the trees to produce maximum blemish-free yields means the trees can be managed organically, or as near organic as possible, with benefits to beleaguered urban wildlife and our own health and wellbeing.

The irregular shapes and sizes of fruit tell a tale of their decline in popularity with the subsequent loss in native species of fruit falling foul to pristine regimented transcontinental varieties imported by supermarkets. In extreme old age they may not look very pretty, and they may stop bearing fruit (often because they are poorly maintained or because their companion pollinating tree has died and not been replaced).

These factors have led to the demise of many a good old tree, ripped out by fussy uninformed

new owners. In ages past an old tree would be propped, or left prostrate on the ground if it had fallen. Our forebears not only saw beauty in idiosyncratic, gnarled, knobbed and leaning shapes but they understood a strong tendency to regenerate once timber reconnected with damp earth. Our modern cult of appearances does not leave space for this magic that generates the atmosphere of a traditional orchard. The true beauty of a self-rooter is in its flair for rejuvenation and when managed appropriately, its infiniteness.

As interest moves back towards traditional orchards and more recently agro-forestry,

permaculture and forest gardening, a new light is cast on these forgotten gems of our shared agricultural heritage. Why not adopt a self-rooter into your own garden or orchard to ensure their continuity and in doing so, enjoying deep reservoirs of novelty that can be tapped once again? A cosmic riot of colours and diversit, they stand for resilience and life's persistence. They echo the spirit of Irish Seed Savers Association and we would be happy to share material with the Marcher Apple Network.

Jeremy Turkington

I thank Ainsleigh for inviting an article from Irish Seed Savers Association. Following recent conversations, I have followed the discovery and accreditation of your Welsh Pitcher, found growing widely throughout south Wales. I thought I'd take an opportunity to discuss this shared tradition and explore a common ground between collections..

Book Review

Enter a different world...

In 'Orchard - a Year in England's Eden', authors and passionate conservationists Ben Macdonald and Nick Gates invite you to step into the secret world of an orchard. Ben was the first to stumble upon a small farm in a corner of Herefordshire in the shadow of the Malvern Hills, whose ageing orchards have been increasingly nurtured for the wildlife that teemed within. Over a period of five years, Ben and Nick developed an intense familiarity with the orchard, visiting most weekends from their base in Bristol, making detailed observations, creating hundreds of pages of field notes and nest records.

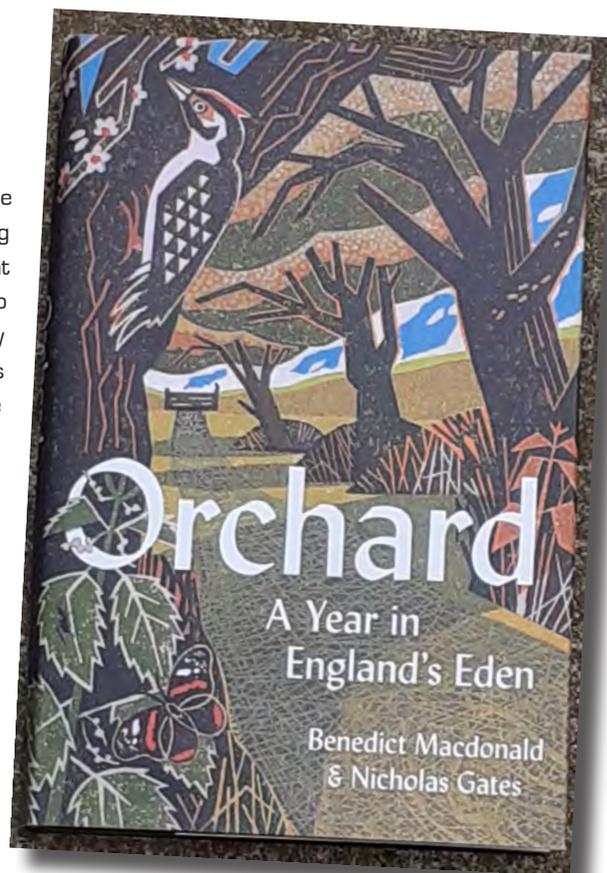
Passed down the generations, currently in the stewardship of a mother and son team whose focus is pinned on farming wildlife while deriving income from the orchard's seasonal bounty of 100 tonnes of fruit, this orchard has much to tell about the wildlife value that accrues from allowing traditional orchards to grow beyond maturity with no more than conservative, well-informed intervention.

In this compelling book, Ben and Nick share what they have come to understand of the living story of this orchard - how it works, what drives its abundant diversity, which species have lived and died here - and why. The richness of the orchard's biodiversity revealed here is matched only by the incredibly rich text. The orchard world is not romanticised - nothing is spared in describing the butchery of a family of lesser spotted woodpecker chicks by a pair of great spotted woodpeckers. "Here lies a tangled world where carpenters and singers, lovers and murderers jostle side by side." Even Ben and Nick, with their detailed

observations, frequent presence at all times of year and during the least social hours, admit that there is much that they miss. "So fast-changing is the seasonality of Britain's wildlife, so myriad its layers, that each year we are caught napping as extraordinary spectacles come and go."

MAN members will be particularly interested in the spotlight cast on particular trees as individual characters in the orchard's story. The Betty Prosser pear, her "furrowed bark... a focus for gleaners and foragers", is home to treecreepers, green woodpeckers and noctule bats. Old Kingston Black is found to be a living ecosystem whose "limbs splay at the bottom, creating a moss-encrusted cave", carpeted with slime moulds whose spores will dive into the apple's timber consuming millions of bacteria. To date, forty bird species have been recorded within its grasp. Small insectivores, such as marsh tits and nuthatches, can be seen traversing the expansive limbs of the Strawberry Norman, which "stretch horizontally like a gnarled embrace". The Blenheim Orange, with its "gnobbled carbuncles", conceals the "tennis-ball moss-green" nest of a chaffinch.

Since at least the 1940s, over 700 fruit trees have stood in this space. As they have aged and decayed, their value to the complex network of relationships between wildlife species has only increased. How important



it is to give space to allow such orchards to continue to thrive, with one eye on the past and the other fixed firmly on the future.

Jackie Denman

Orchard - a year in England's Eden'

by

Benedict Macdonald and Nicholas Gates

is available in hardback and paperback,
published by William Collins.

Nicholas Gates is due to lead an orchard walk and talk in Much Marcle during the forthcoming Big Apple Harvestime, scheduled for 9th and 10th October.

While this will be based on two fine old traditional orchards, neither is the subject of this book.

Apple Pollen and Triploids

Half of that apple you're about to eat started with a pollen grain...

I wonder what it looks like, you may ask. Well, nothing like the apple. They're tiny, impossible to see with the naked eye. Under a microscope at 400 times magnification they are like a tiny cod-liver oil pill or rugby ball!

Here are some from *Grenadier*.

Distance from top to bottom of this photo is about 0.5 mm (20 thou). Normal size of dry diploid grains is ca. 45 µm long x 22 µm wide, that's 0.045 x 0.022 mm or in old money about 2 thou x 1 thou. Small, very small. Just to put those small numbers in context, the human hair is at least 17 µm in diameter and may range to 180 µm. Yes, a microscope is really necessary.



Look carefully and you'll see a few grains look a bit misshaped or smaller than usual. Something went wrong with these, and these usually fail at pollination. Given how much pollen is made by a single blossom, let alone a whole tree, these mistakes don't affect success of pollination; that's more down to total number of blossoms, weather, and insects.

Some varieties, the triploids such as *Bramley's Seedling* or *Ashmead's Kernel*, aren't good at pollinating. Why? Let's have a look at pollen from *Ashmead's Kernel*, under just the same conditions as before. Many or likely most grains are angular, almost like rough diamonds, and quite a few are small. Many fewer are the nice rugby ball shape. This may have something to do with their inability to pollinate a flower.

So let's see if there's something behind this. When a pollen grain is carried by a pollinating insect to another blossom, it may be brushed onto the stigma, the slightly sticky end of the style that leads down to ovaries below the petals. Perhaps such pollen grains do not adhere well onto the stigma? Well I've not been able to test this yet, but should have a go maybe next year if I can get kit to manipulate these baby rugby balls.

What I did do, though, was to test whether a pollen grain could germinate and grow a tube. This is the way that a pollen grain passes its DNA down to the ovary. Amazingly it grows a thin 10 µm tube 10–20 mm long through the style enabling the strand of 17 chromosomes to pass through it. (By the way, I had a double take till I realised there is no connection between apples having 17 chromosomes and the 17 year cicada cycle: they just share a prime number).

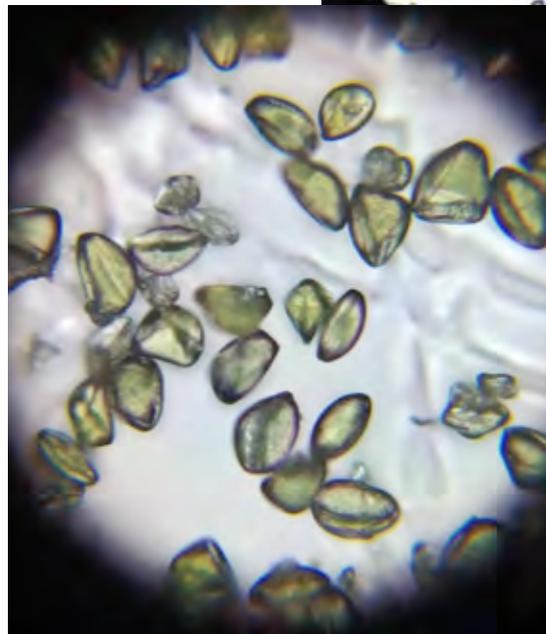
I dusted a little pollen from *Thomas Rivers*, a diploid, onto a few small drops of sugar solution. Next morning I had a look through the microscope and just used 100 times magnification.

Now I could see most grains had developed a tube at least 0.2 mm long (that's only a per cent or so of

the style length, but they already long and thin). You can see these tiny thin tubes in the photo and they are much longer than the pollen grains. Other diploid varieties I tested also showed that most grains germinated pretty well.

When I got to look at half a dozen or so triploids the outcomes were very different. *Bramley's Seedling*, *Gabalva* and *JBunn 10* all gave me a flat no do. For *Ashmead's Kernel*, *King's Acre Pippin*, *Hambling's Seedling* and *Cornish Pine*, about 1-5% of grains germinated, and *Lady's Delight* was perhaps 10%. Photos of these aren't so exciting, showing only a few tubes; I've spared our Editor and you.

Well, it seems then that triploids are poor pollinators in part because the grains don't have a high success germinating. And why are triploid grains odd shapes?



Perhaps it's something to do with having a difficult time during meiosis, splitting their bundle of 3x17 chromosomes contained in the DNA threads into two equal parts for forming the DNA bundle to go into the pollen grain. Can someone help me understand it?

Stephen Ainsleigh Rice

Shrawley notebook sheds light on early apple history

Early records of apple growing are not that common but occasionally snippets of Pomological history emerge in archives and records that shed new light on the varieties of the past. One such is the notebook of the Revd. Mr Daniel Piercy, vicar (from 1769 to 1781) of the village of Shrawley, Worcestershire. Largely a record of tythes paid or owed in the village, it also contains a page more akin to a garden diary where he records his apple grafting and planting exploits of 1773.

If we analyse his list of varieties we find some interesting pointers about what may have been popular varieties in the area nearly 250 years ago.

Today we consider The National Apple Register (NAR) of 1971 as the most definitive list of varieties and synonyms ever put together and what we use as a base reference for researching named apple varieties. So comparing the NAR list with Piercy's, this is what we find...

Peach apple — the NAR says 'in existence 1875, first recorded 1818, not to be mistaken with Irish peach that was introduced to England in 1820'. Hence, assuming this is the same Peach apple, we appear to have a record 45 years earlier than previously recorded.

Large pearmain — no record, although there are several apples with names that end in Pearmain (said to be derived from their pear-like shape). But there are seemingly no name matches to a Large Pearmain, so it may have been his interpretation of a large apple of that shape.

Lemon apple — in terms of an exact name match, NAR states the only record for Lemon apple is in 1883 from Brentford, Middlesex but could possibly be just 'Lemon' as listed in NAR exhibited in 1883 and first recorded in 1881, so 100 or so years later or could it have been 'Lemon pippin' which NAR states was known before 1700?

Dutch codlin — NAR states 'bought to notice 1783' thus ten years later than the Rev Piercy's notebook.

Margil — an old variety that was known in England before 1750.

Moyle — there is a Gennet Moyle or Moyal known to have been a very old variety, possibly from as early as the 15th century, used for cider but also as a cooking apple.

Lady's finger or **Mock pearmain** — no record of a Mock Pearmain and the name

Lady's finger appears to have attributed to several different apples over the years. The Marcher Apple Network have found several variants claiming to be Lady's finger.

Baxter's favourite — NAR states 'only record is when it was exhibited from Worcester in 1888' so 105 years later than Rev Peircy's record.

Bennet apple — no record as such although it is in *Pomona Herefordiensis Pl. XXI* and TAK wrote that the age of the trees he had seen shows that it came from before end-C17. There is also a 'Bennet's Defiance', sometimes known as fern's apple. But it could equally have been a local apple that originated from a Mr or Mrs Bennet; also could be a local synonym of something else.

Garden snout — no known records of that name although several cider apples have the name snout. There is a Brown snout, a Dog's snout, a Cow's snout and Pig's snout.

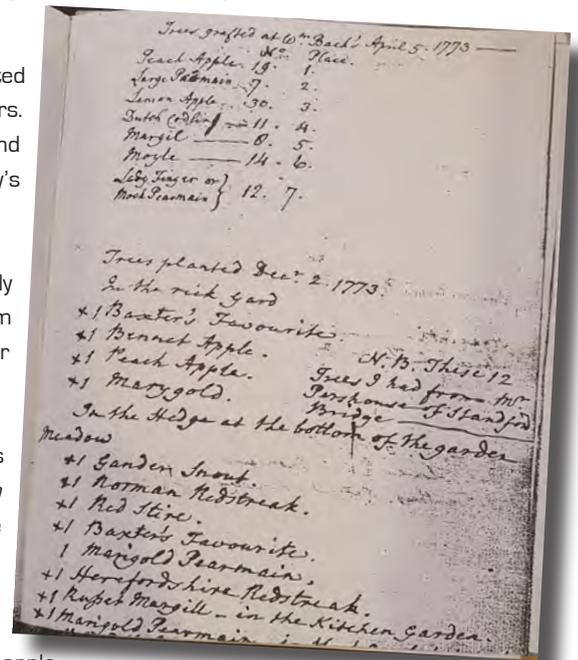
Norman redstreak — the name Norman and the name Redstreak are associated with various cider apple varieties but I have not found a record of the two names put together in relation to a single variety.

Red stire — or **styre** is an ancient cider apple variety believed to have originated in neighbouring Gloucestershire; fell from favour when superior varieties came along in the late 1800s.

Marygold - see Marigold pearmain.

Herefordshire redstreak — as for Norman redstreak, drawing a distinction between different red streaks.

Marigold pearmain — interesting that he has Marygold (above) and Marigold pearmain. Are they different or is it merely the spelling of the time. Seems odd perhaps that, allowing for spelling, he uses the pearmain suffix on one and not the other.



Rupert margill — again, interesting that he has Margil above, simply a spelling variation?, And what is the Rupert part? I cannot find any record of a Rupert Margill

From the several cider apple varieties included we might deduce that the Reverend had an interest in making cider.....?

This fascinating insight into 1773 raises so many more questions than answers. Several of these dates are earlier than the National Apple Register, suggesting that previous records of those names occur. This is quite feasible of course but as such makes this Notebook a fascinating and important find in building a picture of the history of apple varieties in the UK. It is unlikely any of the Rev'd trees still survive today but it is possible that some were propagated by grafting in the generations that followed and could still be found in gardens and old orchards of the area.

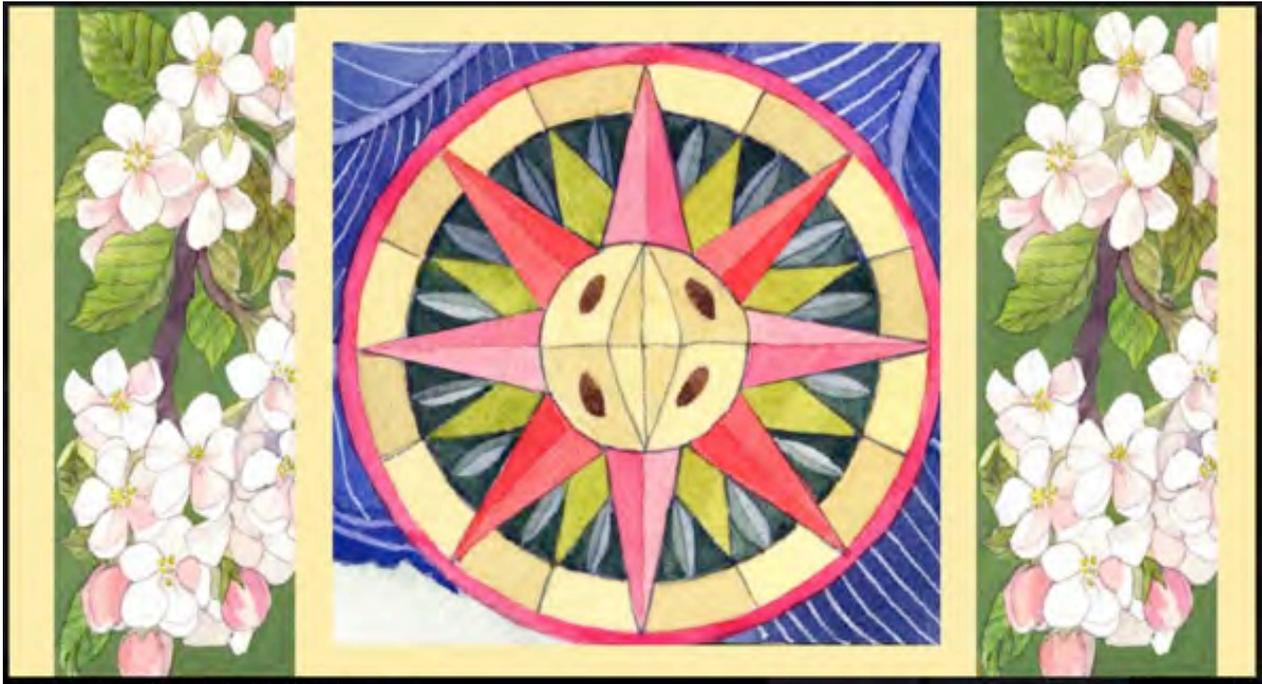
MAN has been working over the last 27 years to research and recover the rare varieties of the West Midlands and Marches area. If any readers have any further information please do get in touch with me at

secretary@marcherapple.net

Wade Muggleton
I am indebted to
Richard Pumphrey of Shrawley for
bringing this to my attention.

The astonishing story of the apple

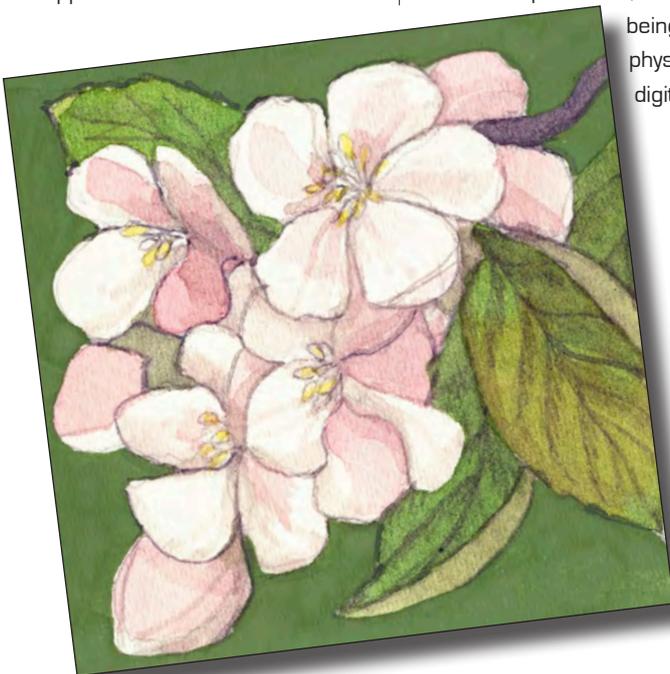
Apples & People <https://applesandpeople.org.uk/> invites you to explore the astonishing story of the apple, connecting its diverse history to humanity and culture.



A newly commissioned global map of the apple, painted by Helen Cann, traces a network of stories from the ancient world to the present day. **Apples & People** sets out to highlight just how significant this fruit is to people, and how vital people have been in selecting the rich variety of apples that are enjoyed around the world today. Symbolising global connectedness, individual achievement, happenstance, and people and nature working closely together, the apple we eat today offers us hope as well as nourishment. This digital response to a time of great uncertainty makes the astonishing global story of the apple available to all.

The UK plays an important part in the global story of the apple and Herefordshire grows more apples than anywhere else in the UK, so it is no surprise to find that this programme has sprung from Herefordshire. This has been a creative partnership between the Brightspace Foundation, the Hereford Cider Museum and the National Trust in Herefordshire, helped by a panel of some of the world's leading apple experts – from USA, China, New Zealand, Italy and across the UK. Exhibition funders have been extremely accommodating as plans changed during 2020 in response to the COVID-19 pandemic, switching for the time being from the intended physical exhibitions to the digital programme.

Forty stories are due for release throughout 2021 and 2022. Over one-third are already available, with themes as diverse as 'Snow White's poisoned apple' via the 'Heavenly Mountains' to Cezanne's famous 'Still Life with Apples'. Be first to hear when a new story is published by subscribing here: <https://applesandpeople.org.uk/subscribe/>. A series of small creative commissions to professional artists, mainly those local to Herefordshire, is helping to adorn the unfolding apple stories with diverse art forms, including music, poetry and animation. Anyone interested in the history, future and value of the apple will find something new to enjoy.



All the images are from The Apple World Map by Helen Cann, commissioned by and licensed to the Cider Museum, Brightspace Foundation and National Trust
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DNA Solves Pear Mysteries

- or does it?

In parts of rural Worcestershire there were anecdotal claims to a local pear known as Worcester Silk. It did not appear in any book or catalogues by that name but local claims persisted that it was a local variety. After some tracking down, some fruit was collected in 2018 from a very old tree on a farm in Ombersley which his late father had always claimed to be Worcester Silk. These medium sized pears had a flat round shape about the size of an average apple. They did not keep very well in store, not lasting much beyond the end of November.

Unable to identify them from fruit specimens, MAN submitted leaves in June 2019 for DNA analysis as a no-match result would have suggested a local and previously unrecorded variety. However, the answer came back as a match to Autumn Bergamot, one of the oldest known pear varieties, believed to go back to the Middle Ages, and possibly even Roman Times (although this is utterly unprovable!).



'Worcester Silk' which turns out to be 'Autumn Bergamot'

If we thought Wardens, those hard cooking pears that last through the winter were a tough group to fathom (A & P, 2017) then Bergamots are an equally confusing type. Hogg claimed that the Autumn Bergamot was the same as the English Bergamot yet Brogdale have them as two distinctly different types. There are a good number of these short round pears and like Wardens it is unclear how true or not they may come from seed, hence the possibility of variation by seedling propagation may be a factor with so many similar pears.

So on the one hand disappointment that we do not have a local county variety but interesting that somewhere down the line it obtained the local name 'Worcester Silk'. It is the

development of DNA testing that is helping us solve these local mysteries, even if the results may not be what we wished. The scientific truth will out, rightly so....

Another interesting revelation from the 2019 DNA submission was a pear P832. This was from a tree in an ancient orchard in Upper Rochford near Tenbury Wells, Worcestershire. The owner had thought it was perhaps a Worcester Black pear which, from samples of the fruit, it was clearly not, so a leaf sample was sent off in June 2019. The results showed a match with only one other sample, that of a pear that was sent to Brogdale in 1952 by a Mr Smith from Weston Park in Shropshire. To date, that is the only match and thus the only known samples of this pear. It has not been given a name and is just an accession with a number in the Brogdale collection.



The mystery Rochford / Weston Park Pear

The tree in Rochford is probably 80 to 100 years old; the Weston park was sent in 68 years ago. Is there a connection between Weston Park and a farm in Rochford? Speaking with the owner of the farm, it seems that she was not aware of anything that potentially links the two sites.

Sometimes a bit of historical digging can turn up a link where farms or estates have some past shared ownership that could mean scion was taken from one site the other. The existence of a link may suggest that something more possible than a random seedling and so could be one of those hundreds of missing or lost pear varieties which were mentioned in the 1800s but of which there is no trace today. By now having a DNA profile it means that if any future matches ever come in it may shed further light on the subject.

So on the one hand DNA can solve mysteries like the Worcester Silk/Autumn Bergamot but

in the case of the Rochford Pear it throws up as many questions as it answers and is a timely reminder of how pears are such an understudied subject and how so many varieties have been lost. The National Fruit Collection at Brogdale currently have some 530 odd varieties, yet as recently as 1870 Scott's Nursery in Somerset listed a staggering 1,538 named varieties so as many as a thousand historic varieties of pear are presumed lost or extinct.

DNA can go some to giving some answers, but much will remain lost to history

Wade Muggleton

"I get the impression that it was the practice on some farms when planting a new orchard, whether with cider apples or perry pears, to plant seedling rootstocks and then wait until they were large enough to fruit. Any tree that produced a fruit that had a reasonable sugar content and could be added to a blend was left to grow on, but the ones that were not up to scratch were re-grafted with a better variety. Some might even be of dessert or culinary quality. I think this was a common practice, and when a particular tree was deemed worth propagating for future use they were named. This method of working probably accounts for the huge number of varieties that have been produced in this country.

The US seems to have an even greater number of varieties, and this was probably because as the pioneers spread out colonising the land they could take apple seeds with them but not scions as there would be nothing to graft them on, so the majority of early orchards would have all been seedling orchards from which the best were propagated. Almost any apple would have been useful, even a small acidic crab would produce verjuice or vinegar, the only acids available for cleaning or pickling.

If you find any of your seedling varieties in ancient orchards that are particularly good, then maybe it is worth thinking about naming, registering them, and propagating them."

A reflection by John Teiser on why some ancient farm orchards seemingly have numerous unknown varieties.

Marcher Apple Network Trustees' Annual Report and Financial Statements for the period 1 April 2020 to 31 March 2021

The Trustee Report is reproduced here for member information.

Marcher Apple Network is a company limited by guarantee, Company No. 3787303. It is also registered as a charity, Charity No. 1095151, and is governed by its Memorandum and Articles of Association as amended by special resolution dated 19th October 2002. The Directors of Marcher Apple Network are the Charity Trustees. This combined annual report contains the Directors' report as required by company law.

MAN Trustees:

Trustees for the reporting period were: Peter Austerfield - Life Vice-President, James Chapman, Jacqueline Denman - Chairman, Nicholas Dunn, Sir Andrew Large - President, Andrew Pillow - Company Secretary and Treasurer, Michael Porter, Stephen Ainsleigh Rice and David Smith.

As required by our Articles, one of the Directors, Stephen Ainsleigh Rice, was due to stand down at the 2020 AGM. In the absence of an AGM, Trustees agreed to his continuation in office until the AGM due to be held in 2021.

Additional Governance Matters - Trustees:

The Marcher Apple Network, along with many organisations, has been heavily impacted by the coronavirus pandemic. On 25th May, Trustees reached agreement on a protocol for decisions to be taken by email, and this device was used for two sets of decisions, on 25th June and 30th November 2020. It was also agreed not to hold an AGM in person in November 2020, whilst also acknowledging that our governing documents do not allow for a virtual meeting. The decision to cancel the AGM was carefully considered and recorded to demonstrate good governance. It was explained to members in Apples & Pears Volume 3 No. 2, which also included the Annual Report and Accounts and an invitation to raise any ideas or concerns which might otherwise be expressed through an AGM. The main business of the November meeting

of Trustees was to consider and approve the Annual Report and Accounts for 2019-20.

A first virtual meeting of Trustees was held on 11th January 2021, where discussion took place on the need to consider ways to spread responsibility for day-to-day activities amongst a wider group of people. A small working group was established to meet over the coming months to review options to address the concerns that had been expressed. Jackie Denman agreed to convene the group, which Sir Andrew Large had offered to join. Subsequently, the group was joined by Wade Muggleton, Secretary to the Management Committee, and David Emerson CBE, formerly Chief Executive of the Association of Charitable Foundations (ACF) and currently Chair of ACRE, Action with Communities in Rural England.

The group, which became known as the Futures Working Group, held its first three virtual meetings in March 2021, starting from the position that MAN's record of success to date in delivering its charitable aims, together with a changing external environment, pose a new set of challenges and emphasise the need to gain access to a wider and younger audience. The group's work continued into 2021-22 and is reported elsewhere.

Additional Governance Matters - Management Committee:

Day to day activities of Marcher Apple Network (MAN) are run through a Management Committee. Members of the Management Committee are: Peter Austerfield, Sheila Leitch, Wade Muggleton (Secretary), Daniela Bergman, (until 3rd March 2021), Andy Pillow, Stephen Ainsleigh Rice (Chair), David Smith. Some Trustees are members of the committee with specific responsibilities, but all are welcome to attend.

As with the Trustees, in-person meetings were considered out of the question and it took some time to build sufficient confidence in the technology to hold a virtual meeting. Ad-hoc discussion between Committee Members continued as necessary to keep on top of operational matters. A first virtual meeting

was held on 1st December 2020 and a second on 9th March 2021. Committee members received detailed reports of continuing activity required to keep the collection and its records in good order. Business dealt mainly with pressing matters, including concern about the diminishing number of volunteers.

Aware that new people, new ideas and new directions are required, the committee identified a range of opportunities to become involved with in support of MAN, including: social media; exploring apple and orchard histories; investigating fruit characteristics; online talks and training; help at shows and events; practical help in the orchards; photography; roving reporter; technology and web-based skills; and identification.

Once technological challenges had been overcome, a new system was brought into use to facilitate communication with those members who had given permission to receive emails.

Objectives and Activities

The objects for which the Association is established are to further the education of the public by promotion of research, identification and to conserve by any recognised means, old varieties of apples, pears and other fruits found growing in the Marches Area of England and Wales, and elsewhere, and to make collected information available to individuals or organisations by displays, demonstrations, talks or any other communication system.

Summary of the main achievements during 2020/21

MAN has much to celebrate in the extent to which it has accomplished its original mission:

- A dedicated team has successfully constructed and documented a collection of most apple varieties found growing in the Welsh Marches, including a good number of varieties of the region thought to have been lost.
- The collection has been rationalised, maintaining remaining varieties as the

premier collection of apple varieties found growing in the Welsh Marches.

- Steps have been taken to back up the collection through selective distribution to other parties.
- MAN has established a track record and is known and recognised for the exceptional body of knowledge which it has developed.

Despite a year of little visible activity, MAN has welcomed 18 new members. Membership stands at 300, including 25 dormant members. In February 2021, a survey was distributed by the Management Committee to all members, in order to discover more about their interest in MAN and to invite offers from any member willing to become involved in MAN activities. Of 36 replies received, 16 respondents expressed willingness to talk with a member of the Committee about opportunities to become involved with an activity on behalf of MAN.

Due to the age and vulnerability of many of MAN's volunteers, especially those with the skills and experience to offer an ID service, the decision had already been taken to exercise a duty of care and not to ask any of them to attend the usual round of shows in a period of uncertainty concerning COVID-19. In the event, only one show took place – Autumn Apple Day at the Shropshire Hills Discovery Centre at the end of October. MAN continued to offer a 'hands off' identification service, taking in apples by post, from emailed photographs and from orchard visits. The shows were much missed, being a principal source by which MAN 'finds' old varieties, and also providing an important opportunity to meet with members and the public.

A total of 118 samples were considered for identification, not through the usual ID meetings but largely by Ainsleigh Rice in consultation with one or more of MAN's regular ID team, resulting in an agreed ID for over 80% of samples. 20 samples were recommended for DNA fingerprinting for a confirmatory assessment. Confirmation of ID was given for 37 samples from the new cordon collection at Ty Glyn, an important check against propagation error.

Although the harvest was good in many parts of the UK, a late frost in the Welsh Marches led to a poor fruit yield in MAN's orchards.

57 samples of apples and pears were submitted to the 2020 DNA campaign, including 22 apples of interest to MAN from

the private collection at Cuiparc. Those from MAN's own collection were limited to the few that had not been analysed before, and those over which there was some doubt or which needed to be confirmed for purposes of propagation for collections of National Trust or Duchy of Cornwall. A few additional, mainly recent, accessions have been selected for DNA in 2021.

MAN's collection covers about 10% of the entire National Fruit Collection apple holding; it includes most of those historically associated with Wales and the English border counties. It is a regional contribution to reducing biodiversity risk.

MAN submitted eight varieties to an Adjudication Panel which held a virtual meeting on 10th November 2020 for accrediting varieties for accession to a National Register of Local Cultivars. Four of the varieties were submitted in collaboration with another organisation. *Brithmawr*, *Machen*, *Chatley Kernel Red*, *Tidcombe Seedling*, *Christmas Pippin* and *Wrought of Beet* were accredited outright, while a further two were renamed as *Friar* (MAN) and *Checkley Foxer* (MAN).

Summary of the main activities undertaken for the public benefit:

In managing the year's activities, the Trustees have taken careful consideration of the Charity Commission's general guidance on public benefit, to the extent that this can be met within the restrictions imposed by the presence of COVID -19.

Marcher Apple Network manages five museum orchards: two sites where the main collection is held (Cwmdu (Paramor Orchard) and Ty Glyn); Tredomen, where a managed withdrawal is in train; and two small sites at Croft Pendarren and Westhope. These orchards provide a gene bank from which local varieties may be propagated by graftwood or budwood as well as allowing unknown varieties to be grown on for later identification.

Due to COVID-19 restrictions, all contact with the public this year has been online. Enquiries are handled by the secretary, who can be contacted through the website. Increased use of this inbox over the year appears to have been prompted by 'stay-at-home' restrictions leading to renewed interest in gardening and growing, with every effort made to reply to genuine enquiries. When regulations or

guidance have allowed, occasional visits have been made to inspect orchards of particular interest. In certain cases, this has led to new identifications, fruit being sent for DNA or the resolution of some uncertainty.

MAN has continued to invest time and effort in improving the website and uploading new content. Results of the DNA Campaigns are available to the public via www.fruitID.org.

Apples & Pears Volume 3 No 2 was circulated to members in Autumn 2020, using a combination of post and email, depending on expressed preference. Opportunities for contact with members has been increased through the introduction of email correspondence via Mailchimp, which enabled the survey of members to take place and also supported improved delivery of the Spring Newsletter 2021.

Marcher Apple Network is a member of PAVO – the Powys Association of Voluntary Organisations.

Achievements and Performance

Practical activity has been maintained at a high level throughout the year, all the more remarkable given the varying restrictions across the border between England and Wales, which separates our voluntary orchard manager, Ainsleigh Rice, from our Paramor orchard at Cwmdu.

A detailed plan is now in place for completing consolidation of the collection at Paramor, Ty Glyn and elsewhere. Multiple copies are to be retained of varieties that MAN has accredited, of those cultivated from MAN's (wide) region, or associated with it, and any 'unknown' varieties still under research. In general, only one copy of some of the more common and out-of-area cultivars are to be retained for reference. A detailed Inventory and an Accession Policy have been prepared.

About 90 common and/or duplicated varieties have been removed to make space for planting next winter, these being made available for sale through informal networks in the local area. A further 38 trees were recommended for removal from the cordon row at F P Matthews,

Orchards

In total, 45 trees have been planted at Paramor and 80 at Ty Glyn this year. A new

set of hardy handwritten labels for the 385+ trees at Ty Glyn was prepared by a very patient volunteer.

All the main orchard trees at Paramor, and all 386 trees at Ty Glyn, were summer pruned in 2020, a combination of volunteer effort and contract work. Tree protection from sheep grazing at Tredomen appears to be working well, saving the cost of mowing.

Graftwood and Propagation

Over the winter of 2020/21, graftwood scions were collected for propagation principally into the new orchard at Ty Glyn and Paramor, but also to the cordon collection at Frank P Matthews (FPM), and to standard-sized trees to the National Trust and Duchy of Cornwall. Sources included MAN's own orchards, individual MAN members, the National Fruit Collection, Gloucestershire Orchard Trust, Herefordshire Cider Museum Trust, National Trust, etc.. MAN also supplied limited quantities of scion material to, or exchanged with, like-minded organisations and individuals. For the coming season, Paul Davis and Tom Adams have been asked to graft 55 more trees for Paramor, 145 for Ty Glyn, and 84 variously for the cordon row at F P Matthews, and associated collections with the Duchy of

Cornwall and National Trust; the cost of which was included in our accounted accruals.

Collaboration with National Trust and Duchy of Cornwall

For three National Trust properties in Herefordshire, MAN has selected trees of traditional varieties which have a strong local connection with the area immediate to each of these properties. All trees delivered before 2020 have now been planted at Brockhampton. The National Trust has allocated some of its funding available for planting traditional orchards to Berrington Hall, meaning that trees delivered last year by MAN will now be planted, together with six more delivered this winter and a further 50 from their own sources. Next winter, MAN will provide around 50 more trees.

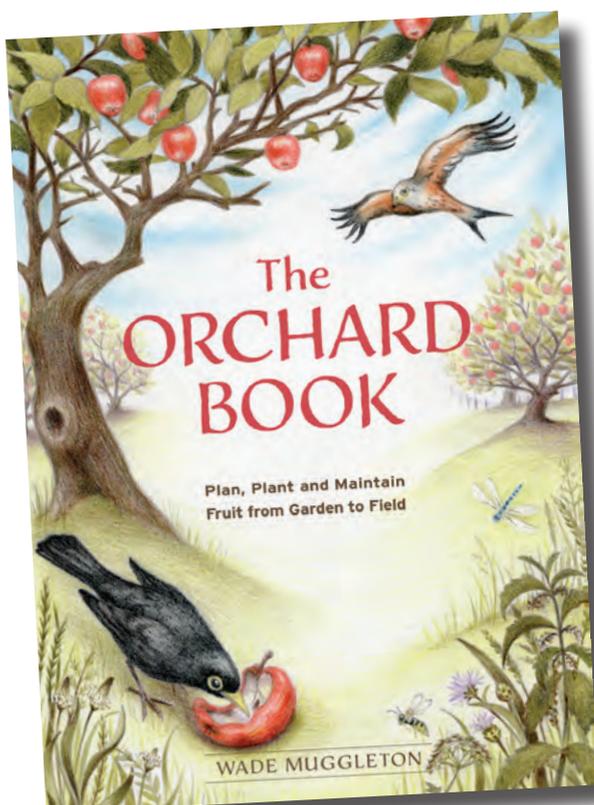
The Duchy of Cornwall has kindly accepted about 100 local traditional varieties as part of their support of the NFC, and of MAN. A further ten were added to their collection.

While MAN has prime responsibility for conserving 'unknowns' and 'uncertains', we are grateful to F P Matthews for providing the cordon row as back-up for these, thus reducing pressure on MAN's resources and risk of loss.

Commentary on the Annual Accounts

COVID-19 restrictions have had an inevitable impact on income and, to a lesser extent, expenditure during the course of 2020-21. The lack of shows and events and the introduction of virtual meetings has led to a small reduction in travelling expenses. A reduction in income through lack of direct sales of books and CDs, and the absence of ID fees was, happily, largely mitigated by an increase in the online sales of books and CDs. With some reduction in the costs of orchard maintenance and an increase in donations, there has been an overall increase in the amount available to carry forward at the end of the year. This will need to be kept under careful review throughout the coming year as it seems likely that some of the same factors will continue to apply during the critical autumn season, although hopefully to a lesser extent. A review of the reserves policy led Trustees to increase the amount identified as being adequate to meet annual running costs from £6K to a more realistic £10K. Again, this needs to be kept under review as it is anticipated that there will be a reduction in costs for DNA analysis and planting compared with recent years. The embryonic Endowment Fund now contains approximately £11K on deposit in a Virgin Money account. The fund has yet to be officially launched, awaiting an opportunity to engage more actively with the public.

Our Secretary has a new book out in October



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. With his expert guidance you can have an orchard on any plot — smallholding, garden, allotment or yard — and make the right choices of rootstock, varieties, planting plan and maintenance strategies. Not just a field with fruit trees in it, an orchard can be anything from an over-grazed field to a row of neat little cordons.

With growing, harvesting, storing and preserving advice for multiple varieties, Wade helps you choose the right options for your needs and space, and provides practical suggestions on pruning, propagation, maintenance, and eco-friendly pest and disease management to help you maximise your harvest and minimise your outlay.

The diversity, history and heritage of apples and other fruit trees is fascinating, and Wade's passion for them is infectious. Let him draw you into a world of apples and pears, cherries and plums; of ancient varieties such as quince, medlar and mulberry; and even of juicy apricots, figs and peaches.

Imagine having organic fruit all year round from your own little nature haven: use Wade's tried-and-tested experience to create your perfect orchard.

Available to pre order from Permanent Publications at <https://shop.permaculture.co.uk/the-orchard-book-plan.html>

Late harvest



Yes I know, large Bramleys are nothing new in the apple world. However, this is a slightly different story.... You all remember the disastrous late frost in May last year: this took out all my apple blossom, blackened the blossom buds on the strawberries and

raspberries as well as the walnuts. I wandered round the orchard in the spring and summer thankful that the pear blossom, having done its thing earlier, survived OK and indeed we had some great fruit. Remarkably, the soft fruit plants shrugged their shoulders and simply

threw some new shoots and we eventually had good yields, just a little later than usual. However, no-one believes me when I say that there really were NO APPLES AT ALL!

Late in November then, imagine my surprise to find a large, shiny red apple on the ground under the Bramley and, looking up through the few skeletal leaves on the crown, saw that there were real apples there waiting to be appreciated. This tree (planted on M25 as per the conditions of the grant I got from Leominster Council when the orchard was established) is now some 5 metres tall so I had to use a fruit picker to retrieve them individually.

I understand that this 'repeat flowering' is quite common but it was new to me. The apples were delicious, as only naturally ripened late fruit can be and oh so welcome!

Celia Kirby

Obituary

Gillian Bulmer

Born into the renowned Bulmer cider making family in Hereford, Gillian spent all her life, when not travelling or working abroad, at Little Breinton, a house with land in the countryside, though just outside the city boundary. Here she was surrounded by traditional orchards and many cider apple varieties that were to become an enduring influence and great passion in Gillian's life.

Never happier than when walking in orchards, while selecting and naming rare varieties for display, Gillian became an ambassador for their preservation; an aim she accomplished by the formation of The Gillian Bulmer Charitable Trust (The Pippin Trust) in 1992. Not only were new orchards, comprising 150 varieties, established on the Trust's land in the following years but also financial support given to many individuals and local good causes, particularly those involved with trees, sustainability, the countryside and education. Now incorporated into the Hereford Cider Museum Trust, of which Gillian was a trustee, her legacy of promoting cider apples, orchards and the county of Herefordshire continues.

Gillian was instrumental in the set-up of Museum of Cider in 1981, even helping to paint display settings just before it opened. A trustee from 1997, Gillian was a 'keystone' of the charity: her wealth of knowledge of cider history and rural traditions is behind much of the collection. From selling the museum's cider brandy at early events to setting up displays of

heritage cider fruit every autumn, Gillian was deeply committed, and the museum was a source of great enjoyment to her.

Whilst she was modest about her considerable achievements, she knew her subject matter and would be staunch in encouraging people to get their facts right. It was more important to her to protect landscape and history than to promote herself. She was quietly generous, giving Drover's Wood to the Woodland Trust, orchards and important antiquarian books to the museum. Gillian has the respect of orchardists, cider makers, naturalists and heritage professional, in Herefordshire and far beyond.

Tony Malpas, past Vice Chairman and Life Member of MAN, adds:

Ann and I first got to know Gillian in the late nineteen eighties, and particularly in October 1987 when she was involved in the setting up of an apple exhibition in Hereford Shire Hall; and again in 1993 when she took part, with Stan Baldock, again in the Shire Hall, in a very large exhibition of culinary and dessert apples, some pears, and notably over eighty varieties of cider apples. That was probably one of the biggest exhibitions of cider fruit put on in modern times in

Hereford, echoing the days of the exhibitions put on by Hogg and Bull, compilers of *The Herefordshire Pomona* in the nineteenth century. Later, as space became available in the Cider Museum, exhibitions of cider apples were held every year and Gillian was always, of course, the central figure in collecting the apples and setting up displays there in the late nineteen eighties and early nineties. In so doing she was, among other things, helping to ensure the continued conservation and survival of the old traditional cider varieties that her father had planted in the orchards he had established all those many years before. She will be very much missed by all those who knew her.



MAN Accounts

Statement of Financial activities for the year ended 31st March 2021

Statement of Financial Activities for the year ended 31st March 2021

	Unrestricted Funds £	Restricted Funds £	Total 2021 £	Total 2020 £
Incoming Resources				
Annual Subscriptions	1,399	-	1,399	1,457
Apple ID	55	-	55	997
Gross Bank Interest	28	-	28	45
Donations	13,500	-	13,500	11,166
Life Members	300	-	300	400
Misc. Receipts	665	-	665	5,150
Pomona Project	-	-	0	95
Speaker Fees	-	-	-	-
Grants Received	-	-	-	-
Events	-	-	-	-
Sale of Books & CD's	1,355	-	1,355	1,449
Sale of Trees	416	-	416	28
Peelers	-	-	0	238
Grafting/Pruning Courses	-	-	-	-
Juice Sale	-	-	-	-
Closing Stock	9,050	-	9,050	8,781
Total Incoming Resources	26,768	-	26,768	29,806
Resources Expended				
Direct Charitable Expenditure:				
Running and maintenance costs	10,750	-	10,750	14,966
Opening Stock	8,781	-	8,781	8,462
Total Resources Expended	19,531	-	19,531	23,428
Net Incoming Resources	7,237	-	7,237	6,378
Fund balances b'fwd at 31st March 2020	71,421	-	71,421	65,043
Fund balances c'fwd at 31st March 2021	78,658	-	78,658	71,421

Balance Sheet as at 31st March 2021

	As at 31/03/2021		As at 31/03/2020	
	£	£	£	£
Fixed assets held for Charity Use				
Land & Improvements	36,000		36,000	
Orchard Equipment	1,243		1,381	
Computers	47		62	
Library, Reference Books & Equipment	3,000		3,000	
		40,289		40,443
Current Assets				
Debtors	-		-	
Bank Balances	33,041		26,577	
Stock held for Resale	9,050		8,781	
		42,091		35,358
Less Current Liabilities				
Creditors	3,722		4,380	
		38,369		30,978
NET ASSETS		78,658		71,421
Represented By:				
Capital Reserves - Unrestricted Funds		78,658		71,421

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 × 230mm; full colour throughout. 96 pp.

Price £15.00 + £5.00 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.

Back Numbers of the *MAN* Newsletters

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..

To Order all items: Preferably download an order form from www.marcherapple.net/books.htm — note that *MAN* now has a PayPal account — or write to Membership Secretary, Marcher Apple Network, 25 Grange Road, Shrewsbury, Shropshire SY3 9DG. Cheques should be made payable to Marcher Apple Network.

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 all proceeds from the sale go to Marcher Apple Network

Price £8.50 + p and p.

MAN Library contains over a 100 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> When new website is launched there will be a new address. For more information contact secretary@marcherapple.net



APPLES AND PEARS

is the Newsletter of the Marcher Apple Network

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Company No 3787303

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