

# APPLES & PEARS

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

## Increasing the resilience of orchards during droughts

I suspect this year has made all of us with fruit trees and veg much more aware how important regular rain fall is. My watering cans are in near daily use for veg, usually with slops from the kitchen and rainwater harvested months ago. I'm now watching the fruit trees in my garden and MAN's orchards for signs of wilting.

At Ty Glyn, the cordons are okay, even those planted last winter. They had about 100 mm woodchip mulch just after planting. All cordons were pruned in June and have begun to put out nice shoots, though not as long as I would have expected. Reducing evaporation, limiting competition from grass and wildflowers, and the reduced transpiration have really helped these trees.

At Paramor the trees planted last winter showed signs of stress by early August. While the grass sward was cut back during planting and the grass is regularly cut, there was no mulch applied. With competition for moisture by surrounding grass, the young trees need some help. I starting a run from Hay-on-Wye with about 200 litres of water in containers each trip, the most I can manage in and out of my wife's Nissan Leaf. A plan is hatching to use the little spring-fed stream that is still running through Paramor for filling the containers. So far the older trees seem okay.

With these experiences I asked for some help from Andy Ball and Wade Muggleton to see what they are doing in their orchards. Andy Ball of the Colwall Orchard Groups has reported that they have taken lots of steps to make their orchards and allotments more resilient to drought conditions. Here's his account:

"At Colwall Village Garden we've done quite a lot of work on water supply recently. When the site was first acquired just over 10 years ago there was no mains water so initial water supply relied upon rainwater harvesting from the roof of our traditional apple packing shed.

At around the same time, when 60 allotment garden plots of varying sizes were created on site, a network of buried underground 20 or 25mm plastic irrigation pipework was trenched into the allotments area. That has only recently over the last year been made operational with the system being finished with checks for leaks and the provision of 12 standpipes.

We now continue with rainwater harvesting from the shed roof. That's stored in a series of domestic style water butts together with a 1500 litre galvanised water cistern tank acting as a feeder. In the winter when the feeder tank is full we also pump harvested water from that to a brand new 6000 litre plastic water tank which was a bargain buy for £60 from one of our allotment tenants. We have also purchased a small quantity of second-hand 1000 litre IBCs which will at some stage provide additional harvested water storage capacity. We found the IBCs at local agricultural auction or through local contacts.

The irrigation system to the allotments is now operational but is currently exclusively fed off mains water supply. The supply is metered using a sub meter so we can measure dedicated use of water by the allotments separate from other general use on-site. At some stage the intention is to make harvested rainwater available through that system. We've also installed a surface laid 20/25mm irrigation pipe around the perimeter of the 4 acre community orchard with standpipes at convenient intervals. Again that's currently mains fed and we use hosepipes to water trees. We graze the orchard with sheep and the mains water supplies their drinking trough.

We're prioritising our tree watering to (a) very young trees, (b) those visibly displaying drought stress and (c) priority species that are less tolerant of water shortages like quince and

hazel. I think that we will be watering all of the trees before the end of August - such has been the lack of water, high temperature and prevalence of drying winds."

Wade Muggleton has been out watering his younger trees at his orchard:

"I too have resorted to watering my younger trees, anything planted under 3 years ago and I too have a huge tank that collects water off a large field shelter that is up against my orchard fence. Lugging two cans at a go I give each tree a through soak and have mulched with cut grass to hopefully reduce evaporation.

It's not really sustainable so if this is going to be the norm perhaps we'll morph into the Marcher Citrus Network?

Our Shropshire clay does seem to stay damp longer than more free draining soils, and hopefully the trees can see out this very dry spell. It is a wonder that they survive when there are such long periods of zero rainfall'

The big wide cracks that are opening up in soil are the result of water in clays being lost by evaporation or uptake into plants. As clays dewater, they shrink just like a cork does. Often cracks form along lines of soil weakness revealing vole, mice or mole burrows. Some are big, wide and deep enough for planting another tree.... now I'm getting ahead of myself

Stephen Ainsleigh Rice



## Crunch time for Marcher Apple Network



## - does MAN have a future?

Can this question really be on our minds when we think about all the great work that MAN has done and what has been achieved since its small beginnings in 1993?

We've grown to an organisation of 300 members. Over the years, a faithful band of enthusiasts has put in countless hours of research and endeavour, enabling us to preserve and even rediscover some varieties believed lost. We've developed six orchards to house these varieties, attended countless shows and chatted with a vast range of local people about orchards, history and apples. We have published several books and this our annual magazine. In recent years we have delved into the world of DNA as a sure-fire way of identifying those mysterious apples and subsequently had numerous varieties accredited, securing them a place in pomological history.

But, yes, the question is definitely on our minds. We've been failing to replace these individuals, just as the old varieties of apples were once lost. Can we put it down to COVID? — well, no, because we were already appealing in these pages for new Trustees to come

forward in Autumn 2019. COVID hasn't helped of course, with the fall-off in face-to-face encounters and public events. But our fragile organisation has also been hit by retirements and ill health, by increasing reluctance to travel long distances, by the growing influence of the border between England and Wales. And when long serving stalwarts choose to stand back, is there really no-one ready to step into their shoes?

You will recognise our three main current 'doers', Ainsleigh Rice, David Smith and Wade Muggleton, because their names crop up again and again. However, both Ainsleigh and Wade have made clear that they no longer feel able or willing to sustain this level of effort unless some more people step forward to get involved alongside them. We have been appealing for new volunteers for the past three years, and we are grateful to the few who have come forward, offering to take on one-off tasks. But creating real momentum is going to take a new wave of enthusiasm to pull things together. We urgently need new blood, a new generation of enthusiastic doers to carry MAN forward on the next leg of our journey.

We have arguably found many of the rare or previously lost varieties of our Marches region, and by propagation secured their survival, so is it perhaps time for a new direction? Can new connections be made by tapping into the changing issues on the minds of our potential audiences and supporters? Of course, heritage and local identity remain important, but are they now seen within the wider context of concern about the future, especially environmental issues such as climate change and biodiversity. We know that the pandemic has accelerated interest in the immediately local environment, in productive ways of spending time outdoors, growingyour-own food, increased awareness of local provenance and food miles, strengthened appreciation of community. Can MAN build support on those enthusiasms? Can we change the emphasis of MAN's mission from "Reviving the old varieties of apples and pears in the Welsh Marches" to something more like "Engaging more people with varieties of apples (and pears) traditionally associated with the Welsh Marches."?

MAN's foundations are secure but its future is precarious. Without new involvement from new people and a new vibrancy and direction then this could be the last edition of 'Apples & Pears' and the end of MAN too. This is a call to you the members to decide the future. This year's AGM will be on and may be the most important in our history. We urge as many of you as possible to attend either in person or via Zoom and to bring ideas and enthusiasm with you.

Jackie Denman on behaf of the Trustees of Marcher Apple Network

### **Pearfection**

It probably hasn't escaped your attention that the title of this publication is Apples & Pears yet all too often is largely all about apples, so to slightly redress that balance here we look at pears

For some inexplicable reason the vast majority of people wanting a fruit tree/s choose apples; nothing wrong with apples but what's wrong with a nice pear? A definition of a nice pear might be said to be one which has been brought to the peak of perfection by the right choice of variety, grown correctly in the right geographic location, facing the right aspect, in the correct position on your plot, picked when it readily parts from the tree, kept for the requisite length of time in a cool store, then brought into the warmth and eaten when the tip of the neck just yields with the thumb. The exquisitely sweet and prolific juice should run down the wrist, down the arm and off the elbow, the texture should be such that the flesh melts in the mouth - wow! Does that whet anyone's appetite? The French term Beurre is an often used prefix in the naming of pear varieties and means of a butter consistency. I remember when I was a boy the pears were always crisp like the apple we grew' it was decades later before I got to eat a 'melting' pear.

To lengthen the season, three pickings might be needed, this is the minimum. In reality, a pear gently 'rocked' with the hand in the morning, seemingly still quite fast on the tree could well be laying on the ground the following morning. For me a day off the plot in September is very often greeted the next day by some of the crops of Louise Bonne Jersey or the Beurre Hardy strewn beneath the trees. It is always the coloured (better quality) ones that drop first. September 2021 was dogged by grey squirrels pilfering the Louise Bonne Jersey on a daily basis. By the time the crop was ready to pick, only half remained. To grow pears requires a good memory, to add to that, they are not ready to pick at the same time every year, so their season various considerably; last year (2021) the mid season pears were late, in so much as they lacked the inclination to part company with the mother tree. They were in store longer, for instance the variety Glou Morceau normally picked on the last day of October/ first day of November is done by the middle of December, it didn't come into season until the third week of December. I trial over seventy varieties, so this can be some headache and most years I 'mess up' one or two varieties,

2021 the Marguerite Marillat dropped off and went unnoticed for several days – too late, the orchard's zoological collection was there well before me - damaged goods.

Contrary to apples which can be picked and eaten off the tree, pears are picked and stored a while, some varieties that drop off are ready to eat the next day, so don't discard pears on the ground because they could well be 'spot on' a day later. I think this is why people plant apples, because they don't understand pears. On the opposite end of the scale the variety Beurre Rance, which is supposed to be the longest keeping pear there is, would be picked late October and eaten March/April.

The main storage prerequisite is a brick or concrete structure, one that is insulated from severe frost and warming sunshine, a lowish constant temperature, slightly on the damp side to prevent the fruit drying out; this is probably more applicable to apples. A solid structure always radiates cold, even in Summer, place your hand on a concrete floor out of the sun – it feels cold, I store my fruit in Banana boxes or Rhino Tubs on a concrete floor as do I my potatoes and onions. None of the fruit is individually wrapped or separated,

so it requires checking periodically for storage rots.

The books tell us that pears do best in a warm spot. Having filled up my one acre plot and now having to grub out trees to try more varieties to make life just that little more interesting, I managed to get a local farmer interested in having a few fruit trees on his land, the carrot on the stick was that the trees would be free and on that basis he accepted (no comments). The place for the pears was to be in his garden, as his farm was one of the highest points in Nottinghamshire and bloomin' cold; several degrees colder than down in the village. The garden is sheltered by trees and so seemed suitable. But the plan went awry when I left him to get on with the planting; months later I went to see how the trees were doing; it was no exaggeration to say that I was shell shocked. The apple trees had been planted in a bog and the pear trees at the top of the hill. I suspect that someone had pulled rank and had vetoed the cunning plan. No use going on that they wouldn't work there, they were there and that was that; off I went, tail between legs.

Now the remarkable bit, which made me look the biggest liar on the planet, not only did the



pear trees grow, but they produced prolific crops of beautiful fruit, on this windswept plateau. I well remember in 2019 walking round one day in early Summer and telling the farmer what bumper crops he was about to have. (Had it been corn I had been referring to I think there might have been more interest shown). What was devastating was he didn't bother picking the fruit and let it all fall off, to eaten by the local wildlife. So, what did I learn from all this other than the farmer had limited interest and that my best efforts were strewn around under the trees? More importantly that pears will grow and crop where apples do. The moral is, that people that write books and indeed articles don't necessarily grow what they are writing about; so, take nobody's word for it and experiment, we all can get it wrong. When it comes to rootstocks, what the books don't tell us is that the same variety of pear will produce bigger fruit on Quince A (QA) than on Quince C (QC) root-stocks, so for exhibiting, QA is mandatory.

The form the tree takes is up to you, my preferences are pyramid (centre leader), espalier and cordons (oblique and upright) these are called, trees in restricted form. I only have one bush pear tree (Beth). My favourite mode is four tier espaliers against feather edge panel fences on a southerly aspect. This moves the geographic location down to the south of England. A wall would move my location to the continent. You can feel the heat radiated from a wall five feet away in the Summer. In Spring the wall retains the heat absorbed during the day and slowly releases it during the night, just like a night storage radiator; this gives delicate blossoms frost protection. Other than that, I prefer a panel fence, the panel needs to be a foot or so above the ground to allow cooling air to flow away. On bright Spring days the rays from the sun heat up the ground, unless it clouds over in the evening this heat will radiate back into the sky and the colder denser air left in its place may drop to freezing. In a frost pocket (low lying area) this sub-zero air lies around and damages tender plants and blossoms. Cold air will run downhill just like water, if uninterrupted. For those of you with a less than ideal plot, the varieties planted at the farm were Beurre Precose Morettini, Gorham, Concorde and Beurre Hardy.

The main pests in the amateur's garden or orchard is pear midge. The adult midges hatch out of their pupal cases in April, having laid dormant in the ground for the last ten months



Espalier pear - Charles Ernest

or so. The mated female then emerges and lays eggs on the anthers. The larvae hatch out and burrow into the embryonic fruit. They proceed to eat the inside of the fruit, the fruit eventually turns black, and the larvae fall to the ground and the cycle goes full circle. By the time the fruitlet turns black the tenants have vacated the larder. As far as I know there is not yet a pheromone trap available to trap the

male midges as there is for other fruit pests. Years ago, before we gardeners had our hands tied behind our backs, I sprayed with Bifenthrin, this annihilated them, I spend anything up to two and a half days picking off infected fruitlets, this requires to be done before the larvae leave.

So why not give a pear tree a go and see how they fare, wherever you live.

#### Adrian Bagley



A longer version of this article appears in 'Simply Vegetables' magazine. ©Adrian Bagley

## Major activities within our orchards

from our orchard manager and curator

For quite a few years I have been tending Paramor and the cordons at Ty Glyn plus maintaining a detailed inventory which has been a quiet activity for rainy days and long nights. Mike Porter has been unstinting in helping me learn and understand implications of DNA analyses, to the point that MAN is now probably the leader among orchard groups in the UK

#### Much to celebrate

Perhaps now is the time for me to start winding down and hand over to the next generation. Things are in great shape, yet there's lots of fun and learning still to be had. And an enthusiast is ready to smooth the handover.

#### **Orchard Gleanings**

#### **Paramor**

MAN is most grateful to the continued kindness of number of people. Each February Chris Ralph flails hedges very carefully, during the summer Billy Jones and his wife cut the grass and Sam Stincombe moves prunings and subsequently burns them in mid-Autumn. Since the last Apple and Pear newsletter a total of 33 trees have been planted, seven on M25 rootstock and 26 on MM106 rootstock. Two young trees died and their stumps were removed.

Regular inspection of the trees has continued. In 2020 two trees were seen to have young growth of mistletoe. As this could be a disaster for the collection if it gets established, both plants were cut back to the bark surface, and black plastic bin-liners tied securely around the branches above and below the mistletoe. This spring the plastic was removed and it seems to have stopped any growth. We will be monitoring these and other trees closely this summer. John Teiser remarked that mistletoe may be spreading faster because blackcaps, the bird that along with thrushes is most effective in spreading seeds, are increasingly overwintering as a result of warmer weather.

During the August heat wave I watered young trees and pruned stems in the nursery area. I noted with some concern that a tree next the boundary hedgerow (PA AAO4 Gipsy King). had a bad infestation of woolly aphid on its trunk and within the chicken wire mesh that holds a close surrounding grass sward. This the first time I've seen much W.A. there. As I'd been pruning with secateurs I had a squeezy bottle with meths for sterilizing tools between trees. A few squirts and the oily slimy woolly protective coat disappeared. Hope predators will find the aphids.



PA AA04 Gipsy King 11 Aug22

Tom Adams kindly led a team of five enthusiasts pruning at Paramor on Tuesday 30th August, see front cover. The Team comprised Tom, Mary, Pete, David, Tom, Monica. Of those, Tom, Pete and David are members. Working hard, we managed all of those trees needing attention (about 240, with 30 young ones still settling in). We gelled and formed three groups with 'demonstrator' and 'apprentice'. Very effective and good learning and clarity was reported.

#### Ty Glyn

Ken Lloyd flails the hedge during winter and Ainsleigh cuts the grass in summer. Sometimes thereare delights to see, other than apple trees



During the last year 61 trees have been planted, twelve removed as a result of concerns about canker, and a further one is being monitored for possible canker.

During April to June the emergence of leaves and blossom is monitored and recorded ever 3 to 4 days. Differences are amazing! Wormsley Pippin (MAN) was in leaf before 11th April, while Brabant Bellefleur reluctantly opened its leaves about six weeks later. Blossom of king fruit opened on 11th April for Winter Pearmain but not until 22nd May for Stoke Red and 27th May for Ron's Old Apple (top). Information gleaned over several years will enable pollination groups to be assigned for varieties as yet undefined; the methodology of fruitID and the NFC ten-year average is being used as a best-practice and for calibrating relative dates. The preponderance of spur or tip bearing is already being reported on our website.

Over 250 photos of blossom were taken during April to June. Some were abundant and strikingly beautiful, such as Baker's Delicious, Green Balsam, J Bunn 3, Morgan Sweet, Red Ingestrie (B), Round Winter Nonesuch, Sam's Crab, Sheep's Nose, Ten Commandments, Thomas Rivers, Tydeman's Early Worcester, Wanstall Pippin (RHS) and more. There really are marked differences in colour and intensity as the two shown here reveal.



TG A44 Kingswood Codlin 29Apr22



TG D88 Tydeman's Erly Worcester

Pruning began on 23rd June and continued whenever there were spells of dry weather. I am most grateful to Mary Shuldham and David Bussel who worked very well and quickly enabling completion by 2nd July.

## Generous offer from F P Matthews

Frank P Matthews has offered to copy the entire MAN collection at their expense, well at least that part which is near unique or of higher 'value'. Trees would be grafted onto M116 rootstock, preferred for giving protection against *Phytophthora*. They should last 40+ years. Frank P Matthews will retain the right to remove these cordon trees as their business may need so there would be no obligation to hold this collection in perpetuity just a willingness to maintain a full collection of the most unique varieties for as long and as practical as possible. All work and expense for maintaining these cordons would be borne by Frank P Matthews. MAN would be given two years notice of any substantial reduction in the number of trees held.

Choice of which varieties to conserve would be for MAN to decide; Nick indicated that he was happy that Ainsleigh should do this (guidance from Mike Porter and Trustees would be welcome). Grafting operation should be carried out in winter 2022/23 for planting in 2023/24.

Periodic additions by MAN and or FPM will be by mutual agreement. The Trustees unanimously agreed to take forward this proposal, with an opportunity to discuss the fine detail with FPM as soon as can be arranged.

#### **DNA 2021**

In 2021 MAN submitted 6 pear and 21 apple samples for DNA analysis by East Malling Research. There were a few surprises, most notably that an accession we had thought to be Claygate Pearmain is Christmas Pearmain. Now, comparing the photograph taken by John Savidge of fruit on tree TC B18 with the standard NFC photographs does indeed support the DNA match. It's a good illustration of how subtle some differences are. A few other accessions were found to have other matches. Winter Lawrence is likely to match Wyken Pippin, Keegan to be Greasy Pippin. Rosie Maple from the Welsh Perry and Cider Society matches a tree at Coed Cefn, near Raglan, also known as Monmouth early Cooker.

Ainsleigh funded a separate study of whether much more information could be obtained from DNA SSR analysis of apple varieties by complementing it with a separate analysis using the 11 marker-pairs employed in DNA analysis of pears, It nearly doubles the number of DNA fragments analysed. Last year the Museum of Cider asked Dr Thorogood of IBERS Aberystwyth University to analyse Cherry Pearmain and Skyrme's Kernel as it they were pears. They found that pear marker-pairs revealed several differences between these varieties, whereas there was only one with the apple marker-pair set.

In total 29 apple varieties were analysed for investigating whether the results were reproducible, showed matches, or supported or refuted parent/sibling relationships. Yes, was the general answer and you will be able to read all about it nextyear.

#### **Pruning course**

The Wildlife Trust for South and West Wales kindly organized a pruning course for volunteers associated with community groups. We met at the community area in Llanspyddid. The organiser had hoped for ten but late on as a result of covid, diary clashes and fickle weather, just five joined me.

We spent six hours of intensive practical work on five apple and one damson trees. Three of the ten-year old trees had become a



bit wild with low foliage and abundantly crossing branches. It was a real baptism by fire, yet the team rose to it well and left cleaner trees and with clear work plans for the next few years.

## Featured Apple - Streaked Blakeney

MAN received this from "Blewitt" of Blakeney at an Autumn Show about 2009-2010. Our records are incomplete or lost. We have tried to track down who brought the apple and where the original tree is in Blakeney, but with no success.

We have not been able to identify it, nor does the DNA A2426 help (a triploid that might be a cross of Underleaf x Bloody Turk, though there are four tiny mismatching marker-pairs which makes this speculative). Here's a photograph taken by Andy Bryant in support of the accreditation process last November into the Register of Local Cultivars, with name



No doubt about its quality, though, it's an excellent cooker. It's well worth getting to know better. Last November I tasted it as an eater, very much too sharp. But when cooked in the microwave with just a little water this last March, both Liz Copas and I thought it was really good, a nice fairly fine fluff, still pleasantly sharp yet with sufficient sweetness that sugar wasn't required.

And have a look at the photograph below taken on 15th March 2022. Wow! Quite a regular shape, easy to peel and fairly small core. Barely a wrinkle or sign of scab, still firm flesh.







I think it's a tip bearer, which would tally with a (maternal) parent being Underleaf, and they are both good keepers. I'm minded to grub up my Bramley's Seedling and replace it with one of these!

#### **Pollen Germination**

In the Newsletter last year, I reported on a quick and simple study of pollen germination. In this a sample of pollen was dusted from off anthers onto a microscope slide and then a few small beads of a sugar solution were spotted on top. After 18-24 hours, in many cases a thin tube could be seen to have grown from the pollen grain, to a length of a few hundred microns (a few tenths of a millimeter). This mimics what happened when a pollen grain is brushed off by a pollinating insect onto a stigma. It is the key step in fertilization.

That study had already shown what was expected: diploid varieties develop tubes whereas triploids don't. This is in line with well-known advice that triploids need to be near two diploids for the triploid to be pollinated and for diploids to be able to pollinate each other. However, the study didn't study enough varieties to give an answer whether pollen from all triploids will not germinated, while all diploids will.

This year I tried to answer the question. A total of 76 triploids (with 7 repeated more than one) and 34 diploids (three of them in duplicate) varieties were germinated. For reference, the most complete inventory of triploid varieties is that carried in fruitID Explorer v7.36; there are about 400 genotypes. My subset within these amounts to about 20%.

Generally the answer was yes so the advice is correct. But, there appear to be exceptions, and another factor to consider. Of the triploids, ten samples germinated such that were between 1 and 10 % grains having tubes at least 200  $\mu m$  long. Of the diploids samples, six showed less than 10% of pollen

grains germinating and having tubes of about  $100\,\mu m$ . Fractional failure among grains that germinated seems more frequent among triploids than diploids. In the photos taken of two samples, the diameter of view is about 1.8 mm

And the other observation? About a third of diploid samples gave only a small yield, perhaps hundreds of grains, of pollen when dusted onto a microscope slide. Most diploids gave

prolific quantities of pollen, well in excess of 1000 grains. However, triploids usually shed much less; only about 15% of samples were similarly prolific. Hence it may be that triploids shed pollen less readily than diploids and that grains are less likely to germinate when they are lodged onto a stigma.

While certain varieties may differ from the normal 'rule', it is also possible that maturity and the drying of the flower may be a reason for these differences. More work for next year!

#### Apples and poo

I have noted that the latest edition of the Tree Register of the British Isles (TROBI), Newsletter No 30, 2021/22

p12 made the following statement:

"Animals such as foxes and badgers and birds such as thrushes also move seed in their poo. In Belgium they discovered that crab apple pips may need to pass through a cow and out into the cow pat to then germinate successfully."

I asked of some of my pomological colleagues in all innocence whether they would mention this as encouraging their grandchildren to try some jelly with the Sunday roast? Beg pardon for lowering the tone a bit. But I learnt quite a bit from the answers.

John Teiser found the quotation from TROBI

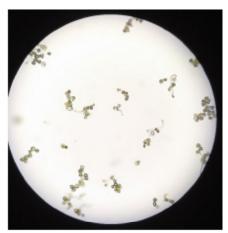


Figure 2 PA CC02 Streaked Blakeney (triploid)

to be interesting, because he thought the digestive system of a ruminant broke down the testa (the external coating) and allowed the pip to be completely digested! He thought horses and other non-ruminants spread the seeds as it was only via non-ruminants (including bears) that the seeds were efficiently separated from the pulp (the pulp inhibits germination to prevent a forest of seedlings springing up under a parent tree when fruit falls but is not



eaten) and dispersed undamaged through the poop!

Liz Copas shared a picture of two magnificent trees amidst bluebells at Lamberts Castle. Then she homed in on "happy apple seedlings" growing in a typical cow pat left by the long horns that graze a bit of 'old' wood pasture at Lamberts Castle. It was a onetime stronghold of the Dorset Durotriges tribe. Now owned by NT, it's a good place for dog walkers and scrumping for crab apples to make jelly.

Paul Read doubted that a gallop through a gut is essential to germination of any native crab or domestic apple seeds. He noted seeds of both can germinate with ease. It's a severe winter chill they need to get a high percentage germinating in year one. And Paul also made an observation he feared might be a bit pedantic, but I think fascinating. It seems widely accepted that native crab apples are woodland species, but at least where Paul lives in East Anglia they are far more regularly found in old/ancient hedges, or open sites like commons and heaths. Several papers describe M sylvestris (whatever that maybe!) to be a high light level species, or "woodland edge" trees (like White Beam). Only one notable tree I know in Suffolk is deep in a wood, in Bradfield Woods. The recent Scottish and Lake District survey found that of

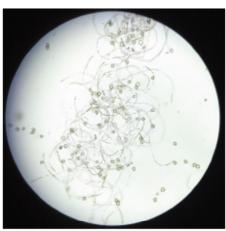


Figure 2 PA B11 Pig yr Wydd (diploid)

300 crab apple trees they investigated most were at very open sites.

Paul mentioned that the Orchard Network's project on Crab Apples is just kicking off, and will look at English wild crab apples.... It aspires to separate the native from the introduced and its hybrids. In the past Paul noted that Crab Apple Jelly was made and tested from many different varieties including the non-native ornamental species. There was a feeling that the best jelly was from ornamental cv John Downie, (now considered to be the Japanese x zumii), the most taste-free Golden Hornet (also x zumii), and the unacceptably sickly and perfumed, Red Sentinel (x robusta), with what I considered "wild sylvestris" in between.

Paul has invited us to run a competition for the best crab apple jelly!

## MAN Accreditation report of Register of Local Cultivars Meeting 8Nov21

The sixth meeting of the Register of Local Cultivars was held on Zoom on 8th November 2021; the outcome can be found at <a href="https://www.fruitid.com/#help.">https://www.fruitid.com/#help.</a> The outcome of the MAN submissions is summarized below. A total of 33 submissions were prepared, of which there was time to consider 27, all of which were accepted albeit six names were changed as recommended. A few comments on examples of the fruit are given below,

An interesting accreditation was that of the Richard Jefferies' Russet, an apple at Coate Farm where the nature writer grew up in the nineteenth century. Through a member of the RJ society we obtained scions and have been delighted to see this develop as a pleasant cooker with a striking reinette of heavy russet over a maroon flush.

Keeper's Gift is an old tree that grew at Sedbury Park near Chepstow in the garden of the estate's gamekeeper. Fruit is probably best used as a mid-season cooker, though with little acidity and some sweetness it could be dual use

Knight Bishop is perhaps the most intriguing one we accredited this year accredited. We don't know what it was originally known as. It is an orange to red medium sized russet with a rather coarse flesh, subacid tangy flavor with some sweetness, more a cooker than eater. It was found growing as a very old tree at Elton Hall, the first home of Thomas Andrew Knight after his marriage, and two comparably old trees at Lingens Farm, formerly owned by and used as a nursey to the Bishops of Worcester

until about 160 years ago. Morphology and DNA confirms these are the same. Growing in such locations is highly suggestive that it is of historic note, but what? For that reason we've selected as a "holding name" A synthesis, Knight Bishop.

Lydney Kernel was submitted from the Forest of Dean and is a second early season cooker that is exceedingly juicy. It is recommended for juicing.

Marches Greening was found in a large orchard at Llanwrda and subsequently a second tree at Westhope in Shropshire. Morphology and DNA suggested that one parent was Northern Greening. From that we selected an appropriate name. It is subacid with a very pleasant juicy flavor, a fine cooker. Martin Nonpareil was reconsidered from a submission in 2019. Further samples and photographs showed it is indeed a very good morphological match to the description and illustration in historic literature. There are some difficulties resulting from analysis of itsDNA, since it suggests the submitted sample has parentage of Keswick Codlin x Chatley Kernel which predate the reported introduction of MN by 2 and -99(!) years. There was acceptance that provenance dates and DNA are not invariably accurate.

Nuneaton Codlin is an early season cooker with a pleasant and clean subacid slightly sweet flesh. It has strikingly cream skin, paler than that of Reverend W. Wilkes.

Pren Glas is an accession from same orchard in St Dogmaels as both Pen Caled and Pig Aderyn, thought to have been planted by the Tiron monks at St Dogmaels abbey for the purpose of cider making. The accepted name translates as "Green Wood". It is firm crisp juicy subacid with a plesasant tang more suitable as cooker or cider fruit than eater.

Two submissions were made jointly with the Museum of Cider, Hereford, as we both had

found Cherry Peramain and Skyrme's Kernel separately This proved an interesting case. Both are described in Hogg (1884), and their morphological descriptions reveals distinct though rather subtle differences. DNA showed that there was only one allele that differed among the 12 diploid marker-pairs. Using ten of the marker-pairs used to characterise pears showed a few further differences. Both varieties have been used for cider making, and Cherry Pearmain is also a pleasant eater..

A further submission was made jointly with the Irish Seed Savers Association (ISSA) of a variety to be named after Charlotte Daunt, a person who is believed to have submitted the apple to ISSA. MAN had it accessed under the names *Winter Quoining* (Ted) and *Walters 2*, for neither was there reason to claim provenance, and no interest either. This apple is a triploid which has both morphological and DNA similarities to Cornish Pine, though is probably more of a cooker.

## Post-accreditation follow-up – continuing Curation

A couple of years ago MAN accredited a variety, Wrought of Beet A2416, a mid-season eating apple with red flesh and a lovely vinous perfume that came to us via a family 'Young' from Wroughton (Apples and Pears, 2021). We had thought it was the mid-season cider variety Sops-in-Wine, described in the New Pomona by Liz Copas though not yet DNA fingerprinted. Very similar but with a few clear differences, hence it was accredited with a new name. Wrought of Beet has a rather similar DNA to the NFC accession Sops-in-Wine, so perhaps they are relatives. This year, a tree with matching fingerprint has now been identified at Ricebridge Orchrd near Thorpele-Soken, Essex, where it has the name of the US cultivar 'Winesap' but clearly it isn't that.



PA BB08 Wrought of Beet 2Oct20

#### Cox's Orange Pippin's parents found at last!

It appears that Cox's Orange Pippin parents are Margil x Rosemary Russet! - quite a red-letter day.

#### Now for a confusing bit.

Last winter we planted a tree grown from scions kindly provided by the National Trust from their re-grafting of the Tidnor Woods collection, there it is named Sops-in-tWine, [A1449]; we wanted to understand which 'Sops' is the real one. James Evans of Tamar Valley Orchards has suggests that Henry May would have had his tree from Endsleigh Gardens Nursery in Tavistock. It has young leaves that are a maroon colour, but turn green within a week or so, while the veins stay red. The DNA of this one is similar to the Polish ornamental Malus Niedzwetzkyana, a cultivar with wood stained deep red. (But I've never heard it called a Redwood!)



Now the NT tree is likely a relative of Niedz.... We'll call it Sops-in-Wine (f) for now. When John Teiser and I visited the Museum of Cider last August, they kindly let us look at illustrations prepared for the Herefordshire Pomona but which remain unpublished. Among them was a lovely painting of a ribbed red and green apple with caption 'Sops-in-Wine', it is set upon a twig among many leaves, all of which were green, including their veins. Now Wrought of Beet has green leaves, and I believe so too does the Sops-in-Wine at the NFC and that described by Liz Copas.

Please, if you have got this far, I hope that begins to clear up the confusion: there are (at least) two varieties each of two different cultivars which have variously been named Sops-in-Wine at some time. Now a bit more confusion: the Curator of the NFC thinks that their Sops-in-Wine just might be Devon Crimson Queen or that they are synonyms or something; Hogg's describes Sops-in-Wine as a late apple, not mid-season.

Now you see why curation is such fun with lots to learn and wonderful contacts to make.

Stephen Ainsleigh Rice

## **Subscriptions**

#### Background

MAN was founded in 1993 with an annual subscription of £2, which was later increased to £5. In 2005/6 it was increased to £10 and has been unchanged since. In this time inflation [CPI] has been 51.51%. Life membership has been ten times the annual membership. Subscription income only covers less than a quarter of our expenses and we have become very reliant on donations. This can't go on. The trustees have decided to increase the annual subscription and to stop offering Life Membership, though existing life membership will continue. If members who took out life membership for £20 or £50 would be kind enough to make donations to our funds, it would be very helpful and very much appreciated.

#### Proposal, for vote at AGM

That the annual subscription is raised to £20 from 1-8-2023.

- Student membership [under 25 years] is introduced for £10/year. [students will only receive communications, including Apples & Pears, by email.

  This category may be introduced during 2022/3]
- •Existing annual members who pay by standing order are requested to revise their order in good time for the payment.

### Edward 'Teddie Ball' and Herefordshire Cider

As a new member of MAN I thought that your members might be interested in some brief notes on the life of my late Great Uncle—Edward 'Teddie' Ball (1901–1997) who was a former director of Bulmers Cider in Hereford, and who was responsible for developing the Ball's Bittersweet cider apple.

H.P. Bulmer ('Percy') had married a member of the Ball family, Mildred, in 1894 so there were already connections between the two families. Edward Ball joined the Bulmers company in 1927 having achieved a First Class Honours Degree in Natural Sciences at Sidney Sussex College, Cambridge. He also took his Diploma in Horticulture, there having gained further training at East Malling and practical experience at Long Ashton. He worked alongside Bulmer's scientific expert Herbert Durham, and was made a director in 1933. He joined Bulmers at a time of decline in the existing cider orchards with much of the existing cider orchard stock in Herefordshire becoming old, with yields lessening.

During the late 1920s and early 1930s Bulmers sought to experiment with the development of new cider varieties and Edward Ball looked to a combination of Old Foxwhelp with Medaille d'Or. Medaille d'Or had been imported from Normandy by the Woolhope Club Pomological Committee and had been planted in trial orchards in Herefordshire between 1901 and 1907. Old Foxwhelp is a high quality cider apple but has a tendency to crop badly. Medaille d'Or is a high quality,

and very astringent Bittersweet, which crops well but suffers from the reputation that the wood is rather brittle and can break under the weight of heavy fruit. Medaille d'Or also has the favourable characteristic that it blossoms late, which lessens the risk of frost damage. The resulting cross — Ball's Bittersweet — using Medaille d'Or from Whettons Farm, Broxwood, and Old Foxwhelp from Warham Farm, Breinton, became a useful and high yielding commercial variety. This is a late season cider apple with resistance to scab that produces a full bodied, medium bittersweet cider.

Edward Ball also played an important part in planning the continuation of cider orchards in Herefordshire. In a paper entitled "Cider Orchard Restoration in Herefordshire; 1923–1947" (published in 1947) he forecast the requirement for significant new planting of cider apple trees over the following 20–30 year period on the basis that trees planted prior to 1923 would have become commercially unviable in 40 years' time. The paper highlighted the need for annual planting of in excess of 5000 trees during the period 1947–1951 to ensure adequate supplies of fruit in the period 1966–1981.



My personal recollections of him are limited to his later life. He lived for many years at 'Fairfield', Breinton and I remember him as a quiet, modest, intelligent man with an interest in horticulture, nature and church architecture. Devoted to his wife 'Cottie', he refused to go into hospital to have a hip replacement, since he did not want to be separated from her, despite being in considerable pain and discomfort. He is buried at St Michael's Church at Breinton, in a fitting location for a man of apples, within a stone's throw of the National Trust's Breinton Springs traditional orchard site.

Andy Ball

Material and photograph sourced from Bulmers of Hereford – A Century of Cider-Making by L.P.Wilkinson.

## Obituary - The Cherry Man Brain Stephens 1936 - 2022



Brain was a long-standing member of MAN and whilst we delved deep into all things apple-related Brian trod a slightly different orchard path. Amongst his many interests and

vast knowledge was a passion for the cherry growing, specifically the history around his home town of Bewdley and the Wyre Forest area of the Worcestershire/Shropshire border. Worcestershire was once the second largest cherry growing area in the UK, after

An extremely quiet and modest man, Brian's immense research and passion for the subject made him in my view the most knowledgeable person in the region on all things cherry and cherry orchard related, arguably his enthusiasm prevented a vast amount of information and knowledge

being lost. He too got on the DNA trail and submitted a large number of samples from ancient cherry trees around the area, for if we think apple experts are few and far between, then try and find another cherry expert. Thanks

to his determination and perseverance, many of the remaining old cheery trees have now been DNA'd, adding vastly to the knowledge of this much understudied subject.

Brian was regular attendee at MAN's annual AGMs, sitting quietly and just taking it all in. In the course of working on the Three Counties Orchard Project, I was lucky enough to spend a few days out in the field with Brian looking at a few of the remaining ancient cherry orchards as reported in A&P 2019. There are very few of the vast cathedral-like cherry orchards left and they are truly magnificent places for landscape, wildlife and trees. Brian's quest to record as much as possible about them, before they slip into history, was truly enviable. The town of Bewdley and the world of orchards and knowledge of cherries will be all the poorer without. Brian

### **Pests and Diseases**

One of the commonest themes of the messages that come into the MAN inbox are along the lines of "What's wrong with my tree?" and it does seem that 2022 has seen a wide range of pest and disease problems. Is it milder winters? Climate Change? A sign of things to come?

Whatever the reason, growing your own apple trees is not always plain sailing so here a look at a few common ailments.

Canker - possibly
the commonest
aliment of fruit
trees here in the
west of the country,
shows itself as
tips or sections
of branches dying
back or actually on
branches or trunks
as large distorted
mutations. Some
varieties are more
canker-resistant
than others.



Gcab - can be a serious
disease of apples and
pears, showing itself
as scabby patches on
the developing fruit; as
the fruit matures deep
cracks and corky areas
may develop. Will likely
be worse in seasons
where there is warmth
and humidity, so rain,
warm spell, more rain,
warm again etc. Can
seriously ruin a large
percentage of the crop.

Wooly Aphid - shows itself as small unsightly patches of white cotton woollike residues, in the midst of which can be found the small aphid that makes them. They suck sap from the bark and over time cause a knobbly scar on the bark. Hot soapy water and a scrubbing brush are the bet way to remove them,



Tented caterpillars - seem to have had a good year, they are easily spotted as their web-like tents are observed on the foliage, often including a leaf or two wrapped into the tent of their spider-like web.

Brown Rot - a very common fungal disease that can ruin a large proportion of the fruit crop, needs to be removed as soon as seen, as spreads rapidly through the fruit.



Bitter Pit - caused by calcium deficiency in the soil and shows itself as brown spots which often occur deep in the flesh, making the fruit unusable. Can be exasperated by water shortages so perhaps more prevalent in dry years.



Capsid Bug - the young fruitlets are attacked by the bug and as they develop it shows itself as distorted corky patches on the skin surface. Despite the off-putting appearance, the flesh is undamaged, so remains perfectly good if peeled.

and finally, watch out for **Mildew** - outbreaks seem to be rather weather dependent; shows itself as a fine white powdery deposit on the leaves and shoots. Often occurs late in the season but some very early outbreaks were observed this year

## and when you have sorted out the bugs, here are some more useful notes.....

#### **Guarding tip**

For those who have sheep grazing amongst their fruit trees and who have deployed the weld mesh guards [see page 11, Apples & Pears 2021], it is annoying to have to re-open the guard to nick off developing buds and side shoots, a time consuming procedure. So I developed this useful tool: a piece of a broken hacksaw blade spliced into the end of a piece of batten enables one to insert it through the squares of the mesh and nick off those unwanted buds and shoots in seconds, without needing to open the guard at all. A gentle walk around the orchard with it in hand cleaning up the trunks of the young trees makes for a pleasant activity.



#### Pallet Guards

In the seemingly never ending battle with the sheep to get some grassland management of the orchard sward, but not have them eat the trees, the issue of guarding is an ongoing subject and in the last issue we looked at a few alternatives like weld mesh, plastic mega mesh, etc. All have a cost and a resource implication, so in times of austerity is also perhaps a time for innovation. So I give you the pallet guard. Cost virtually nothing and just requires 4 non-returnable pallets and bit of trimming with a jig saw. I think they are actually reasonably attractive and work well on trees that branch too low down to accommodate a weld mesh or mega mesh tube. The pointed picket fence look makes for an eye-catching tree guard whilst keep the pesky sheep at bay.



### A historical perspective through old books

I admit to having a rather large collection of second hand books, and particularly, books of fruit, orcharding and gardening. It a fairly cheap hobby as most of them were picked up in second hand shops, boot sales or even those free book boxes. There isn't much interest in run of the mill fruit books from decades past, as they can seem out-dated and uninspiring compared to modern, more colourful tomes. However, what interests me about these largely overlooked publications is to peruse the varieties mentioned and advocated within them. To consult their lists of "Recommended" or "What to Plant?" is to gain an insight into those varieties deemed popular or worthwhile in that particular era.

This can help with dating orchards and garden trees, as well as narrowing the possible field when it comes to identification. By knowing what was popular and available at what periods, can possibly suggest what is what when it comes to trees of different ages.

Thumbing through their pages reveals what was fashionable when, staple varieties of certain eras. For example, in his 1978 Manual of Fruit. Alan F Simmons states that Cox's Orange Pippin and Worcester Pearmain are

the two most popular commercial varieties in the UK. He also states that St. Edmunds Pippin is increasingly becoming commercially popular. How times change, and now Gala dominates everything.

Obviously, some authors will have and their personal favourites and biases based on their experiences or the region they come from. Hence, less well known or obscure regional varieties can make an appearance based on the fact an author is from the South West, the Eastern counties of the Midlands. We

all have our foibles for the locally distinct. For example, again in Simmons 1978 he mentions Lord Hindlip and May Queen, along with Pitmaston Pineapple.

Back in the 1950's and before, many fruit books carried advertisements within them or at the back as an appendix of sorts. When viewed today, some of the sprayers and chemicals being promoted are horrific, even DDT can be found in some old catalogues and books of the period.

So as a fireside winters evening activity, browsing through what seem dated and rather dull fruit books from days long gone can be an interesting insight into those times gone by and all add to the lineage of fruit history for it is that what came from where, what was once popular and fell from favour, or was simply never popular, that all makes this such an interesting subject.

Wade Muggleton



### DNA reveals yet more pear mysteries

As reported in last year's edition, DNA testing was still throwing up the odd ancient pear that seemed to have no match, suggesting it could be one of the many hundreds of varieties recorded in the past, but seemingly unknown today. One such pear was found in Upper Rochford, Worcestershire, that proved to be only the second record ever, matching a previously unknown pear from Weston Park in Shropshire and held in the national collection at Brogdale. In autumn 2020 when visiting a farm in Chaddesley Corbett, Worcestershire, several large old pear trees that could not be identified were sent for DNA testing and low and behold two of them matched the Rochford / Weston Park trees.

So from only a single record from 1958, we now have 3 other trees that DNA match them, one in upper Rochford and a pair of trees in Chaddesley Corbett. This is enough evidence to categorically state that it is a variety, one of the Warden types, those hard cooking pears,





but as to actually which one of the many historically lost Wardens, it is hard to say, there simply isn't enough to go on. Among the missing are Parkinson s Warden, Godboult's Warden, the Bell Pear, the Red and White Wardens, the Canterbury Pear and the French and Spanish Wardens, to name but a few, but which, if any of them it is, we will likely never know. As it does not match anything known today, we have the opportunity now to accredit it and give it a name of our choosing, something I am not enthusiastic about, for I would much prefer that it is one of the historical pears, but that sadly seems a piece of evidence too far.

Wade Muggleton

## Who can remember the following rhyme from their childhood?

I had a little nut tree. Nothing would it bear But a silver nutmeg And a golden pear; The King of Spain's daughter Came to visit me. And all for the sake Of my little nut tree. Her dress was made of crimson. Jet black was her hair. She asked me for my nutmeg And my golden pear. I said, "So fair a princess Never did I see. I'll give you all the fruit From my little nut tree."

Like many other nursery rhymes, this one seems innocuous at first, but when you read carefully there are quite a few oddities. Nut trees do not normally bear nutmegs or pears, and who was the King of Spain's daughter? The first known printed version of the rhyme is from "Newest Christmas Box" printed in London in 1797. Britain was by then of course a protestant country, and no (Catholic) Spanish princess had figured in British affairs since the sixteenth century, which would imply that the nursery rhyme dates from then.

An early interpreter of nursery rhymes, James Orchard Halliwell, suggested that the "King of Spain's daughter" was Juana of Castile who visited Henry VII in 1506, however more recent historian's have suggested that the poem is about Juana's elder sister, Catherine of Aragon, Henry VIII's first wife who he married in 1509. Perhaps the reference to pears is meant to represent the fruit of England, or maybe it is a reference to the potential fertility of Henry himself!!

But why nutmegs? Nutmegs were a valued culinary ingredient from well before the sixteenth century, and at the time it was thought that ground nutmeg could ward off the plague. But the only source for the spice in Tudor times were the Banda Islands of South East Asia. Local inhabitants used ground nutmeg in the same way as snuff, as an intoxicant (it was used in the USA in the same way as recently as the 1950s).

In 1511, two years after Catherine married Henry, Portuguese travellers arrived in the area and were the first Europeans to bring the spice back to Europe.

This might be just coincidence, though. Possibly. "Nutmeg" had another meaning to sixteenth century audiences!

However, there are other interpretations. Henry was not Catherine's first husband—in fact, not even her first English husband because in 1501, she had married Henry's elder brother, Arthur, and some experts have suggested that the rhyme refers to this earlier marriage.

Arthur was betrothed to Catherine in about 1488, when she was 3, and he was 2. At the age of 6, he was sent, as Prince of Wales, to Ludlow Castle in Shropshire, the administration capital for Wales and the Marches. However, he also had a hunting lodge at Tickenhill Manor near Bewdley, Worcestershire.

According to local tradition, he was "married by proxy" at Tickenhill in 1499. [Catherine was not present]. Interestingly, today in the former grounds of Tickenhill is a magnificent Spanish sweet chestnut tree which, local tradition has it, was planted as a sapling 500 years ago to commemorate the union.

The actual marriage took place at St Paul's Cathedral in November 1501. The couple returned to Ludlow Castle, but barely 5 months after the wedding, Arthur died of "sweating sickness"—possibly tuberculosis. Catherine was later to claim that the marriage was never consummated. His body was carried in state to Worcester Cathedral, where it was interred inside its own chantry. Now, on the coat of arms for Worcester city is – you guessed it, a pear, or rather three pears!

Many sources state that the pears appeared on the coat of arms after a visit to Worcester by Elizabeth I in 1575. Apparently, she admired a black pear tree growing just outside the city walls (she also visited her uncle's tomb in the cathedral). But pears are a local crop, and Worcestershire, Gloucestershire and Herefordshire are traditional pear growing areas.

The association of Worcestershire with pears may date to the time of Agincourt in 1415 when, apparently, Worcestershire yeomanry carried a black pear symbol on their shield. Incidentally, the black pear is a species of Warden pear, the main ingredient in the Warden Pie mentioned in Shakespeare's King Lear.

Sheila Leitch

(Hugh Williams') Mysteries of Mercia Facebook Group. 24/1/22)

### Notice of the AGM

Notice is hereby given that the 27th ANNUAL GENERAL MEETING will be held at the Cider Museum, Pomona Place, Hereford HR4 0EF on Saturday 19th November 2022 at 11am. Coffee will be available from 10.30am.

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

Joining instructions can also be found on the website at https://www.marcherapple.net/membership/agm-2022/.

#### **AGENDA**

- 1. Apologies for absence
- 2. To receive and approve the Minutes of the 26th AGM held on Saturday 19th November 2021
- 3. Matters arising
- 4. To receive and approve the Trustees' Annual Report 2021-22
- 5. To receive and adopt the Annual Accounts 2021-22
- 6. Election of Directors
- 7. To determine to appoint Examiners for Accounts 2022-23
- 8. Changes to our Articles of Association require a special resolution passed by a majority of not less than 75%. Special resolution: To consider a proposal to amend the Articles of Association to allow Annual and other General Meetings to be held online, by telephone or on a hybrid basis (with some people meeting face-to-face and others joining virtually).

As well as the temporary restrictions imposed by COVID-19, MAN's membership is widely distributed and new developments in technology are making it more possible to include our remote members.

- 9. To consider a proposal to hold meetings of the Board of Directors in any way that best suits their collective circumstances and convenience, with the ability to hold meetings in-person, by video, via e-mail or any other recognized method of communication. See Item 8
- 10. To consider a proposal that the annual subscription be raised to £20 from 1st August 2023.
- 11. Open Forum where Trustees will be available to answer questions
- 12. Any other business

Our visiting speaker at around 12.15 p.m. will be Dr David Marshall, who will talk to us about 'Apples and People – the astonishing global story of the apple'.

The current Directors and Trustees are Peter Austerfield, Jackie Denman, Nick Dunn, Sir Andrew Large, Andy Pillow and David Smith. Nick Dunn will be retiring as a Director to pursue a project with the Royal Horticultural Society, which will leave just five Directors where in 2019 there were nine. We are appealing to more 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. For simplicity, we propose co-option for the first year and election by the membership subsequently.

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

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

#### **PROXY VOTING**

If you are not able to attend the AGM but would like to vote on any motions, you may do so by exercising a proxy vote. A form is available which has to be signed and returned to MAN's Registered Office, to arrive 48 hours before the AGM.

#### Our speaker

'Apples and People' is a partnership between the Brightspace Foundation, the Museum of Cider and the National Trust in Herefordshire, helped by a panel of some of the world's leading apple experts. Ongoing online digital engagement is a prelude to a programme of exhibitions at four sites in Herefordshire in 2023. Dave Marshall represents the Brightspace Foundation on the programme board and is also Chairman of Board of Trustees of Hereford Cider Museum.

At a time when Marcher Apple Network needs more than ever to engage with new and different people, 'Apples and People' is an expression of the depth of that connection across time and place. Symbolising global connectedness, individual achievement, happenchance, and people and nature working closely together, the apple we eat today offers us hope as well as nourishment. See https://applesandpeople.org.uk/

## Marcher Apple Network Trustees' Annual Report and Financial Statements for the period 1 April 2021 to 31 March 2022

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 29th November 2014. 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 (to 20/11/2021), Jacqueline Denman (Chairman), Nicholas Dunn, Sir Andrew Large (President), Andrew Pillow (Company Secretary and Treasurer), Michael Porter (to 20/11/2021), Stephen Ainsleigh Rice (to 20/11/2021) and David Smith.

Mike Porter, Stephen Ainsleigh Rice and James Chapman expressed their wish to retire as Trustees at the 2021 AGM. As required by our Articles, just one further Director, Jacqueline Denman, stood down and was reelected at the 2021 AGM.

## ADDITIONAL GOVERNANCE MATTERS - TRUSTEES:

The Marcher Apple Network, along with many organisations, continued to be impacted by the coronavirus pandemic during the year. Trustees held two meetings by Zoom, in July 2021 and March 2022.

The Futures Working Group completed its round of virtual meetings in May 2021 and reported back to Trustees at their July 2021 meeting. The report will be made available through the website, but the overarching proposal was to separate the operational functions of MAN into two areas, each supported by a new Working Group:

- 1. Technical (maintenance and recording of the collection); and
- 2. Public facing (audience development and engagement).

Each Working Group to be co-ordinated by a named member of the Association, not necessarily a Member of the Council (ie the Board of Directors), and each to include a minimum of two Directors/Trustees.

Trustees recognise the importance of providing a connection between the two areas through increased opportunities to access, handle and learn about varieties in the care of the collection.

The decision to run a hybrid AGM was carefully considered and recorded to demonstrate good governance. A limited number of in person places were made available by kind invitation of F P Matthews, complemented by unlimited remote places. In the event, of 15 members attending, just one chose to attend in person. The level of interest and willingness to contribute to discussion about the future of MAN was heartening, as was the number and encouraging content of emails that followed the meeting.

## ADDITIONAL GOVERNANCE MATTERS - MANAGEMENT COMMITTEE:

For many years, day to day activities of Marcher Apple Network [MAN] have been run through a Management Committee with powers delegated by Trustees. During 2021/22, members have included Peter Austerfield, Sheila Leitch, Wade Muggleton (Secretary), Andy Pillow, Stephen Ainsleigh Rice (Chair), David Smith. Some Trustees are members of the committee with specific responsibilities, but all have been welcome to attend.

As with the Trustees, in-person meetings were considered out of the question. A virtual meeting was held on 8th June 2021 with adhoc discussion between Committee Members continuing as necessary to keep on top of operational matters. Committee members received detailed reports of continuing activity required to keep the collection and its records in good order. Despite various attempts to identify members willing to become involved, concern remains about the diminishing number of volunteers.

Discussions over the previous year about lack of capacity and duplication of effort had made clear that it was no longer viable to maintain both a Management Committee and a Board of Directors, a view supported by the Futures Working Group. At their meeting in March 2022, Trustees withdrew the powers covering operational matters that had formerly been delegated to the Management Committee in 2014, taking the first step in enacting a decision to wind up the

Management Committee.

#### **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 2021/22

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 in the Welsh Marches, including several 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 6 new members. Membership stands at 306, including 25 dormant members. The 16 positive responses to the survey undertaken in February 2021 were followed up by members of the Management Committee to all members, leading to a number of specific offers of help. For example, Andy Bryant has been kept busy photographing examples drawn from MAN's collection.

Not all of the usual round of shows took place during the year, but there was a definite increase in activity over the previous year. MAN was able to mount a presence at Leominster Apple Fair and the Autumn Apple Day at the Shropshire Hills Discovery Centre Due, while contributing 66 apple varieties to the display at the Big Apple Harvestime weekend, and

continuing to offer a 'hands off' identification service, taking in apples by post, from emailed photographs and from orchard visits. 18 sets of apples collected from visitors to the Shropshire Hills and Big Apple events were subsequently identified and owners notified. Although MAN felt unable to attend the Malvern Autumn Show, they were there 'by proxy' in the Orchard Pavilion, where Trustees Nick Dunn, Jim Chapman and Jackie Denman were representing other organisations.

In 2021, MAN submitted 6 pear and 21 apple varieties for DNA analysis by East Malling Research, although the results were delayed into the following year. 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 was responsible for 27 of the 55 varieties submitted to a virtual meeting of the Adjudication Panel on 8th November 2021, for accrediting varieties for accession to a National Register of Local Cultivars. Two were in collaboration with the Pippin Trust and one with Irish Seed Savers Association. All were accepted. A further six were carried over to the next scheduled meeting. This achievement represents an enormous body of work over many years, on the part of Ainsleigh Rice and Mike Porter. A full listing of all MAN's accreditations since the process began in November 2018 can be found on the website.

## 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 continuing presence of coronavirus (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, most 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 the 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. With regulations easing over time, visits to inspect orchards of particular interest have become more possible. 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 3 was circulated to members in Autumn 2021, using a combination of post and email, depending on expressed preference. Opportunities have been taken to maintain contact with members using Mailchimp, including a Spring Newsletter in April 2021.

The Wildlife Trust for South and West Wales organised a pruning course for volunteers associated with community groups, with input from MAN. Marcher Apple Network is a member of PAVO — the Powys Association of Voluntary Organisations.

#### **ACHIEVEMENTS AND PERFORMANCE**

Practical activity has been maintained throughout the year, either delivered or managed by our voluntary orchard manager, Ainsleigh Rice. 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 Accession Policy have been prepared.

#### **ORCHARDS**

In total, 33 trees have been planted this year at Paramor and 61 at Ty Glyn.

All the standard trees at Paramor were pruned by July 2021, and all summer pruning at Ty Glyn was completed in August 2021 through 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.

Nick Dunn and Ainsleigh Rice worked together to prepare a specification for the evaluation of any sites arising in future for a potential sister orchard at Paramor.

#### **GRAFTWOOD AND PROPAGATION**

During winter 2021/22, Paul Davis grafted 9 trees for Paramor, 38 for Ty Glyn, and 3 for the cordon row at F P Matthews. Of these 31 are from outwith MAN. About 90 of the trees grafted by Paul Davis and Tom Adams in winter 2020/21 for MAN, and 55 of those for third parties, made weak growth during 2021. These were retained by the nurseries to grow-on before delivery next winter.

A total of 16 sets of scions were taken from MAN trees for propagation elsewhere within MAN for various reasons, such as replacing diseased or dead trees, copying a couple of varieties only present at Tredomen, and ensuring we have valuable varieties in duplicate, preferably triplicate, the most appropriate of which are progressively being grafted onto M25 rootstock for longevity.

The cost of the trees for MAN and FPM collections is included as an accounts accrual. 8 more trees were grafted on M25 rootstock for the National Trust at Berrington Hall, and MAN also supplied 25 sets of scions to members.

## COMMENTARY ON THE ANNUAL ACCOUNTS

COVID-19 continued to have an inevitable impact on income during the course of 2021-22, but it was donations that saw the biggest fall. Trustees are aware of the urgent need to diversify sources of income in order to address MAN's reliance on the generosity of a single donor. Sales of books and CDs exceeded those in 2020-21. As the costs of running and maintenance costs have increased, the net effect has been a reduction in the amount available to carry forward at the end of the year. It is clear to all that a shortfall of incoming resources over resources expended is not sustainable for MAN, although it can be managed from reserves in the short term.

Jackie Denman

Chair of Trustees of Marcher Apple Network

#### APPLES AND PEARS

is the Newsletter of the Marcher Apple Network
Charity No 1095151 Company No 3787303
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# Marcher Apple Network Trustees' Annual Report and Financial Statements

## for the period 1 April 2021 to 31 March 2022 Statement of Financial Activities for the year ended 31st March 2022

	ACCIVICICS IOI GIT	c ycar t	chaca o	130 IVIAI CI
	Unrestricted	Restricte	d Total	Total
	Funds	Funds	2022	2021
	£	£	£	£
Incoming Resources				
Annual Subscriptions	1,325		1,325	1,399
Apple ID	2,385	-	2,385	55
Gross Bank Interest	13	-	13	55
Donations	3,280		3,280	13,500
Life Members	100	-	100	300
Misc. Receipts	-	-	-	665
Speaker Fees	-	-	-	-
Grants Received	-	-	-	-
Events	100	-	100	-
Sale of Books & CD's	1,436	-	1,436	1,335
Sale of Trees	972	-	972	416
Peelers	-	-	-	-
Grafting/Pruning Courses	-	-	-	-
Juice Sale	-	-	-	-
Closing Stock	8,167	-	8,167	9,050
Total Incoming Resources	17,777	-	17,777	26.768
Resources Expended				
Direct Charitable Expenditure:	40.050		40.050	40.7E4
Running and maintenance costs	12,353	-	12,353	10,751
Opening Stock	9,050	-	9,050	8,781
Total Resources Expended	21,403	-	21,403	19,532
Net Incoming Resources	(3,626)	_	(3,626)	7,237
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Fund balances brought forward at	78,658		78,658	71,421

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

75,032

at 31st March 2021 Fund balances carried forward

at 31st March 2022

#### Balance Sheet as at 31st March 2022

75,032

78,658

	<u>As at 31/03/2022</u> £	<u>As at 31/03/21</u> £
Fixed Assets:	<u>_</u>	_
Tangible assets	40,153	40,289
Intangible assets		
	40,153	40,289
Currect Assets		
Stocks	8,167	9,050
Debtora due within one year	3,157	
Short term deposits		
Short term deposits		
Cash at Bank & in Hand	31,209	33,041
	42,648	42,091
Creditors:	[7,769]	(3,722_
NET CURRENT ASSETS(LIABILITIES)	34,879	38,369
TOTAL NET ASSETS	75,032	78,658