

Examining the potential for harvesting and making more use of the fruit from traditional orchards

A study carried out for the Three Counties
Traditional Orchard Project

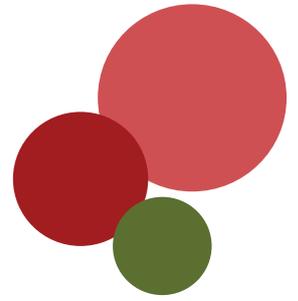
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 CommonCause
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INTRODUCTION

In parts of the country and, in particular, in the three counties of Gloucestershire, Worcestershire and Herefordshire, commercial orchards were planted to supply the demand for apples, pears, plums and other tree fruits. Changing practices and economic conditions means that many of the orchards that formed part of the UK landscape until the 1970s have disappeared. Others at farmhouse and larger commercial scales survived but were sometimes abandoned and left to their own devices. Still others remain as functioning commercial orchards. The orchards that remained and were not treated with the array of chemical fertilisers and pesticides available to fruit growers in the twentieth century have become havens for wildlife. Traditional orchards were awarded Biodiversity Action Plan priority habitat status by Natural England in 2007.

The movement to preserve traditional orchards and heritage varieties owes much to Common Ground. Since its inception in the 1980s, probably many hundreds, if not thousands, of orchards

have been brought back from the brink and new community orchards planted, often with local fruit varieties that would otherwise have long since disappeared.

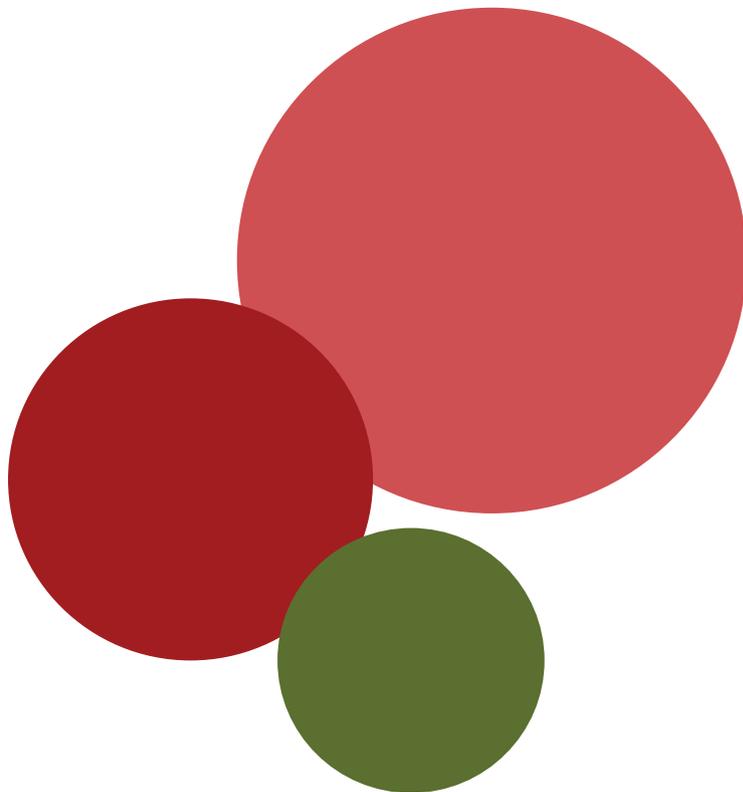
The People's Trust for Endangered Species (PTES) through their monumental Traditional Orchard Survey has identified and mapped 35,000 traditional orchards in England and 7,000 in Wales. Across the country orchard groups have emerged, many of whom have planted their own community orchards (PTES has mapped over 400 community orchard groups across the UK (National Biodiversity Network community orchard list). Orchard groups and orchard enthusiasts have led the way in identifying and restoring older traditional orchards and passing on orchard skills to a new generation. One of the appealing characteristics of orchards is that, even when maintained mainly for their beauty and wildlife value, they go on producing fruit. If left unpicked, this provides rich pickings for insects, birds and mammals.

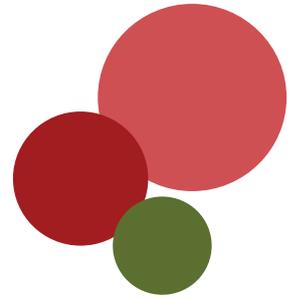
However, many believe that if orchards are to be properly maintained, there

needs to be other uses to the harvest.

In the piece of research that follows we looked at the potential for some of the fruit to be used for other purposes, both commercial and non-commercial. Having explored a number of options our research made it clear that the most financially viable options are fruit juice and cider. We found evidence of cider vinegar production alongside juice or cider but other products such as apple purée and dried apples are problematic in business terms. We understand (from Michael Bentley of Castle Fruit Farm) that these products tend to come from other countries where costs are lower.

We have divided the report into four main areas: Juice, Cider, Plums and Not-for-profit Uses. Internet searches and interviews with stakeholders have allowed us to look across the country at enterprises and community groups and national organisations to examine current trends and practices. We have focused on those aspects of juice and cider making and community group activities that provide examples of how fruit from traditional orchards can or could be used. Finally we list some recommendations for future actions to enable more use to be made of the fruit from traditional orchards.





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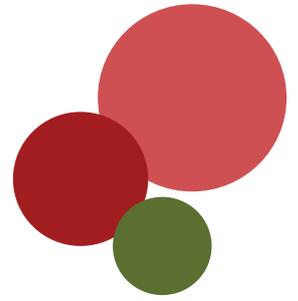
Barriers to Fruit Use

There are many barriers to using fruit from traditional orchards. Orchards may be dispersed over long distances, vary in size and quantity of fruit, fruit biennially, have mixed and unknown varieties of fruit and different ripening times, and have livestock grazing. Pam McCarthy surveyed a number of stakeholders in the Three Counties for their views and summarized them in her report “Orchard Produce Summary” (November 2017). We heard very similar concerns from the many people we talked to for this report and summarise them here:

- * Labour for picking is the number one obstacle we heard time and time again. Orchard owners may be willing to have their fruit used, but often don't have the capacity to pick and labour is too expensive and difficult to recruit for many small scale businesses.
- * Finding orchards that are accessible, easy to harvest and knowing who owns them can be an obstacle and very time consuming, especially for cider makers. Likewise orchard owners may not be internet savvy or use social media and so may not find out who is

looking for fruit.

- * Lack of information about fruit varieties means that cider makers may need to experiment before committing to a harvest.
- * Building sufficient trust with an orchard owner to allow people and groups to harvest their apples takes time and good people skills.
- * Fruit ripens at different times and therefore has to be harvested and processed throughout the season, adding levels of complexity to businesses or extended demands on volunteer time.
- * Grazing stock should be withdrawn before harvesting which is often a problem for orchard owners, especially those who rent their orchards to graziers.
- * Quality control of donated fruit can be a problem, especially fruit for making apple juice.
- * Disposal of pulp becomes a bigger and bigger problem for makers and community groups if they don't have somewhere to easily dispose of it.
- * Marketing and labelling are very time consuming for not for profit organisations relying on volunteers.



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Fruit Juice

In this section we refer mainly to apple juice as apples account for most fruit juice production. We are aware that some producers, however, also make pear juice but we did not come across producers of pear juice as a stand alone product. However much of what follows applies equally to pear juice.

We wanted to get a picture of sales or consumption of farm pressed apple juice in the UK but quickly realised there are no reports on this category of product. We thought it would be interesting to include some of our findings on the global juice market to provide a bigger scale picture. There is a rising demand globally for cold pressed juices and juices ‘not from concentrate’. This is attributed to growing awareness about the health benefits of these drinks and is particularly pronounced in North America and Europe. ([TechSci Research](#)). Marketing campaigns by high profile companies such as PepsiCo and Starbucks for their cold pressed juices will no doubt be helping to put these products in the public eye. However in the UK the

British Soft Drink Association Annual Reports 2015, 2016 and 2017 all report a fall in sales in fruit juice, describing it as a “an unfortunate by-product of the misguided campaign on sugar”.

In Europe, the UK is the third largest consumer of fruit juice by volume after Germany and France. Germany alone is responsible for one quarter of consumption of juices in the EU, 34% of which is orange juice followed by 23% apple juice. 60% of the UK market is orange juice followed by 12.5% apple juice. In France orange juice is 50% of the market, followed by mixed flavours 21% and then apple juice 11% (European Fruit Juice Association 2016 report).

Dan Keech, Countryside and Community Research Institute CCRI, University of Gloucester, highlighted the cultural differences in apple juice consumption between Germany and the UK. Many more German people are still part time land workers and have a much greater connection to the land than people in Britain. In the south of Germany many

people own orchards and often the ownership of trees is shared and there is local, small scale infrastructure in place for picking and processing the fruit. There are also a large number of commercial juicing companies. The quality of apple juice is high and the price is low. Consequently, people in Germany drink far more apple juice than in the UK, where farm pressed apple juice is expensive and considered more of a luxury, premium product.



Drovers Hill Farm, a small scale juice maker in Buckinghamshire sells from the farm and via a number of local outlets

However, UK apple juice production at a relatively small scale for local sale appears to be a dynamic market. Although market data is not available, key people in relevant sectors that we spoke to, see this as an activity on an upward trend. Medium scale enterprises are also much in evidence. The feeling is that interest in locally produced apple juice amongst consumers is still increasing. This is reflected in how common it is now to see local apple juice for sale in shops, markets, at shows and in some pubs, restaurants, cafes and served for breakfast at some B&Bs. We heard from a very small number of makers (most notably micro enterprises) that it is a crowded market and they had found it

difficult to get established or sell beyond the very local. But this could be due to marketing and distribution difficulties that these small businesses experience.

A number of commercial orchard businesses started making juice when the price of fresh apples fell in the 1990s making imports more attractive. They discovered, in some cases to their surprise, that their juice sold extremely well and suddenly they had a constant cash flow through the year instead of only during the apple season. The advent of Farmers Markets in the late 1990s aided direct selling and the chance to hear customer feedback. Producers could take advantage of customers' interest in 100% natural, organic, the story of 'branch to bottle', low food miles, traditional and heritage varieties, fruit flavours, and more recently reduced sugar by adding water for a more refreshing drink.

Apple juice has rescued some businesses suffering from the low price of fresh fruit or from inclement weather, and helped others to diversify and expand. Some businesses have exploited add on enterprises such as cider production, equipment hire and juicing services for the public. Many are passionate about orchards and are committed to restoring and sustaining old orchards, preserving old and local varieties, natural management without pesticides, and selling direct. This often means that logistics are complex with harvesting schedules changing every year, hand picking and sorting, blending apples to obtain the right mix, coping with gluts and scarcity, managing diverse and many outlets and having a product that is seasonal and may not be available all year round. These may also be reasons why some voluntary organisations sometimes struggle to make apple juice a lucrative income stream. The examples below give a flavour of thriving apple juice businesses around the country.

Days Cottage apple juice, cider and perry is a family run business in Gloucestershire sourcing apples and pears mainly from

traditional and newly planted orchards. Together with their own orchards the farm harvests from a handful of traditional orchards within a 10 mile radius of the farm. When they started in the early 1990s Helen Brent-Smith says there was no interest in local apple juice and it was very hard to sell. That has all changed and Helen says there is now a strong market. They sell from their own shop, local farm, and health food shops and Stroud farmers market. It is a diverse business and the logistics are “massively complex” says Helen. It only works because of their long term commitment to traditional orchards, experience with what works, and their range of products, outlets and services throughout the year including a juicing service (which helps with cash flow), training courses, grafting new trees, and a juice and cider product range based on traditional varieties.

Apple Cottage, in Hertfordshire, make award winning apple juice, cider and perry. They say that the health and sustainability of their orchards and the restoration of old orchards is a priority. They use only local, unsprayed fruit, minimise food miles, make single as well as mixed varieties of juice and emphasis the health benefits of apple juice in their marketing. They are passionate about not wasting fruit and provide a juicing and very comprehensive equipment hire service, and will purchase bulk bins of apples from local growers. They proclaim on their website that they “hate to see unwanted apples go to waste” and “pick your apples. Don’t waste them just turn them into cider”.

Helford Creek Apple Juice and Cider in Cornwall has orchards planted with old varieties of Cornish apples. Their trees are unsprayed and they have bee hives to help with pollination. The juice is made from their own apples and the cider from their own and cider apples from other local orchards. Their juice is only available in retail outlets in Cornwall - their labels carry the ‘Made in Cornwall’ logo.

Ringden Farm in East Sussex has had

orchards since the 1950s. New owners expanded and replaced trees in the 1960s and cold stores and pack houses were built to handle the volume of fruit. The family business considered juice in the 1980s when prices for fresh fruit were fluctuating, but it wasn’t until a big hail storm devastated their crop in the 1990s that the family decided to make a batch of apple juice. The juice sold well and convinced the owners of the demand for freshly pressed apple juice. From producing 1000 bottles in a whole season in the 1990s, today the farm produces 8,000 litres a day and they employ four full time staff using traditional pressing methods and slow pasteurization. They have a range of over 20 single variety apple juices, many award winning, and a dozen fruit blends including strawberry, black current, plum, and elderflower.

Clives Fruit Farm in Worcestershire has a similar story. When the value of fresh apples and pears collapsed in the 1990s, they turned to juicing. Initially they contracted out the pressing, then purchased a press to make juice on site, upgrading their equipment and expanding their capacity in 2010. They describe their product as “100% juice, no added water, chemicals or sugar like most commercial apple juices”. Clives Fruit Farm is also a ‘pick your own’ and they offer cherries, plums, apples & pears all grown in traditional orchards around the farm. They have 100 acres of orchards split between two holdings.

Welsh Farmhouse Apple Juice is made on a family farm in the Brecon Beacons. Apples are sourced from local organic orchards with old and traditional varieties of apples, some with trees planted by the farmer’s grandfather. The apple juice enterprise was added to the farm business to help make the farm a more viable family business and provide employment for the owners’ son. The juice is sold to restaurants, pubs, cafes, B&Bs, through farmers markets, farm shops and local shops. It has been very successful, expanding in size and employing not only their son but part time labour

picking and processing. They have had to source more apples and are doing so mainly from people who have bought a property with a small orchard and have surplus apples, helping to sustain these orchards and adding new varieties to their range. Important selling factors for the business are its local provenance, organic status, and the stories that go with old varieties of apples made into single variety juice.

Juicing services

Across the UK there are numerous businesses offering juicing services to individuals or groups. These seem to fall into two main types: those providing juicing services for individuals as part of their own juice or cider business or as an add-on to a farm shop, and those that provide juicing as their main business. Prices per 750ml bottle of pasteurised juice vary from £1 to £1.75 with many charging extra for labeling. The main clients seem to be people with fruit trees or small orchards in their gardens. People we spoke to offering this service say it is a successful and growing activity. For example, Day Cottage, Apple Cottage, Clives Fruit Farm and Ringden Farm all offer a juicing service as well as running their juice businesses.

The motivation by these businesses is often a desire to help people use their fruit, reduce wastage, and rejuvenate old orchards and trees as well as to create an additional income stream. The range of services offered by these fruit farms is often wide and flexible to suit people with different circumstances and quantities of apples. Pruning and orchard management training and services are also often on offer.

Apple Juice Equipment Hire

Juicing equipment hire appears to be common throughout England and the enterprises we have spoken to all say there is a big and growing demand for the service. Apple Cottage in Hertfordshire offer one of the most comprehensive equipment hire we've come across. They upgraded and expanded their hire offer for the 2018 season, including harvesters (hire cost is

£150 a day plus fuel and delivered complete with a machine driver) small and large presses, electric mills, manual scatter, bulk containers, pasteurisers, bottles and lots more. For those using the pressing service on the farm, lightweight, stackable boxes can be picked up for a deposit to make it easier for people to handle their apples. Also available for hire are juice extractors for plums and damsons. The general drive seems to be to make it as easy as possible for people not to waste their fruit.

Juicing services that are stand-alone

We spoke to a number of enterprises for whom juicing is their main activity. Richard Paget of My Apple Juice in Wiltshire employs five people full time throughout the harvest season providing this service for individuals. He spends the rest of the year pruning fruit trees, making elderflower cordial and in the early summer attends shows selling their own apple juice. Now in his ninth year, having started small, he pressed 60,000 bottles of juice last year. He uses a 90 litre and 120 litre hydropress and a 100 bottle capacity pasteuriser. His focus is on reducing the wastage of garden fruits and he also works with community groups.

Chiltern Ridge in Buckinghamshire has approximately 1500 clients per year (and some return several times during the season) and produce about 100,000 bottles of apple juice per year. Labelling can be customised.

At Upper Neatham Mill Farm in Hampshire people can bring their apples for juicing or hire the equipment on site and press apples themselves for a day rate including training on how to use the equipment. They can leave the waste pulp behind or take it with them. The farm also offers a weekend course in cider making.

Mobile Juicing

The Apple Pressing Service in Newton Abbot, Devon, is unusual in the UK in that it has a mobile juicing unit which it takes to people's orchards or gardens. A fuel fee is applied for clients outside a 10 mile radius of Newton Abbot. Apples are



Transformez vos
fruits et légumes
en un délicieux jus !

Appelpom mobile juicing facility in Belgium goes to orchards, villages and towns to turn fruit into pasteurised juice

washed, crushed and pressed on site and the juice is taken back to their premises in tanks to be bottled and pasteurised. Clients collect the bottled juice, with a certificate of pasteurization and traceability log, or have it turned into cider. The business is in its 4th year and they cannot keep up with demand, turning people away. While this is still a small scale operation, bottling up to 650 litres in a day, compared to the orchard based services above, it provides a very convenient service for both small orchard owners and people with a few trees.

Nearby in France, Belgium and Germany mobile juicing units are common. All the equipment to wash, press and pasteurise are carried on a trailer or within a lorry. Mouvipress in Normandy for example, goes from town to town throughout the autumn (visiting some places more than once). Customers book in advance and they tend to have three types of customers: individuals who bring their apples to a public location, often a car park in a garden centre, people who have orchards that the juicing facility goes to, and community groups and schools that can book a visit from Mouvipress to their establishment, or bring their apples to the public location. Pressi-mobile in Brittany, and Appelpom in Belgium operate in roughly the same way. Such facilities can convert apples into pasteurised juice

in 15 minutes. The juice is returned to the customer in 3litre or 5litre pouches or bag-in-box containers. Applepom told us that in Belgium they started by going to villages and small towns and producing juice for the local councils and parishes for consumption in children's nurseries and schools. From here they progressed to juicing for individuals and orchard owners.

Richard Paget of My Apple Juice in Wiltshire (see page 9) has recently acquired a mobile facility which he is currently using at his premises, but plans to take it 'on the road' in 2019. Richard acquired the juicing facility from Voran in Austria. He told us that Voran have produced 250 mobile juicers and estimates that there may be as many as 300-400 such facilities in northern Europe.

Swopping apples for juice

A number of the businesses that produce apple juice and offer a juicing service also allow customers to donate their unwanted apples in return for their branded juice or cider. Customers usually receive about 20% of the juice or cider made from the apples. In some ways this doesn't make a great deal of sense for people with apples since they could just as easily have all their apples made into their own juice. However, it comes into its own if the organisation making the juice is a not for

profit raising funds from juice sales to preserve traditional orchards and wildlife. It is also a business model that is proving very popular and successful with small-scale craft cider makers since many people do not want the trouble of making cider.

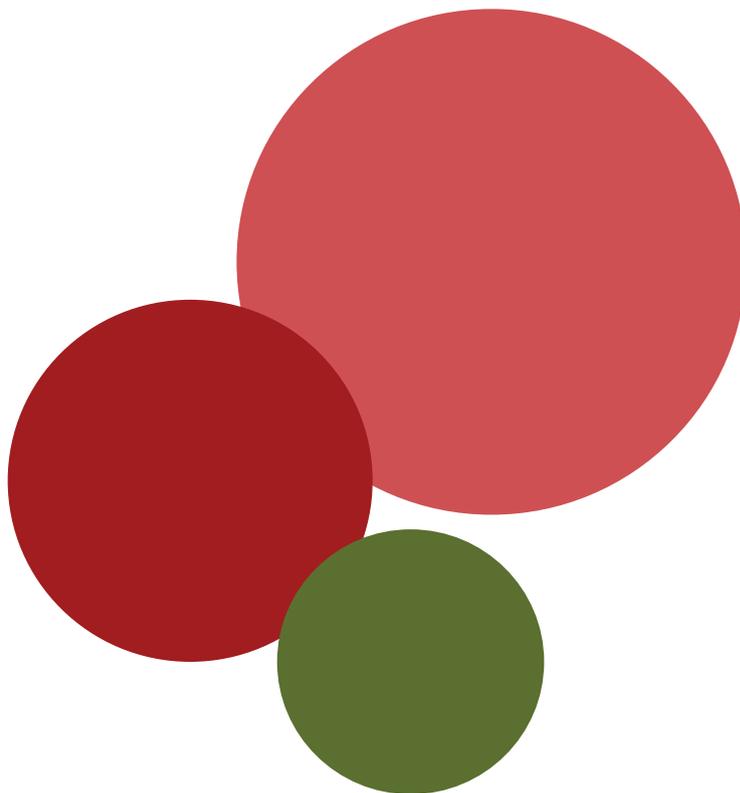
Conclusions

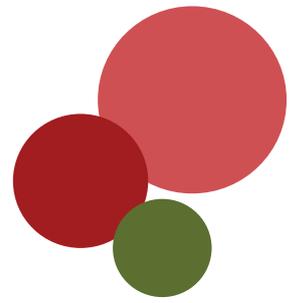
At a national, regional and global level there is customer demand for healthy, unadulterated, fresh fruit drinks, a trend which even soft drink giant PepsiCo is exploiting. Small scale, farm pressed, often single variety apple juice appears to be a vibrant market with customers willing to pay a premium.

The unique selling point of this product is that it is made from just one ingredient – and if that ingredient is local, has a story to tell about its heritage, comes from an orchard that is a habitat for wildlife, is handpicked and pressed using traditional methods then it has value. There are examples of fresh fruit growers around the country that turned to making apple juice in response to the low price of their fruit. They have built financially successful businesses often managing the distribution of their products to local shops and

outlets and selling direct through farmers markets. Many of these business people are also very passionate about preserving the traditional orchards in their locality and are aware and concerned about the quantity of fruit that goes to waste in back gardens or in old neglected orchards. Juicing services, equipment hire, advice and training have become popular additional offers, with lots of talk of upgrading and expanding equipment, even if these sidelines add layers of complexity to the business. This may be because these services fulfill both business objectives and ethical concerns to reduce food waste.

The key point here is that juicing services are available and are commercially successful, so if people with orchards want to process their fruit they can so long as they are able to pick and transport the fruit. Mobile juicers are an exception at the moment in the UK, but if this service also proves financially viable it may expand making it even easier for owners of small orchards to make use of their fruit, or as we will see (page 26), to offer the fruit to fundraising groups such as schools.





4

Cider

To try and gain a picture of what is happening currently in the UK with regard to cider, and specifically craft scale production, we consulted producers, distributors and the Westons Annual Cider Report which analyses trends in the production and consumption of cider in the UK. The aim was to try and find out whether more fruit from traditional orchards might be used in cider production and to set this in the broader context of cider trends.

The first thing to emphasise is that cider is a generic term for quite a range of drinks which have in common that they are produced wholly or partly from apples or pears. The latter is known as perry or pear cider. The Westons report contains a graphic that illustrates the variety of ciders available in the UK.

The graphic indicates that craft and artisan cider represent a broad spectrum in terms of methods used and the variety of the final product on a spectrum which Westons describe as 'traditional' at one end and 'contemporary' at the other. We return to this variation theme in

the section on types of cider below.

Overall, Westons Cider Report 2018 indicates that cider grew 3.5% in value and 2.2% in volume overall in the past year. While pear cider continued its decline in 2017, losing over 20% volume, 'crafted cider' grew by 17%. Working out what is happening at the smaller-scale end of the market is problematic however. As Gabe Cook (known as 'The Ciderologist' and author of the book "Ciderology") pointed out, the global figures for cider can't really reveal what is happening in the small-scale craft cider production world. The Weston Cider report, author Matthew Langley confirmed, only picks up on-sales (bars, restaurants) if the producer has 500+ outlets, though off-sales (in shops) should include the statistics for all cider sold. On the other hand, producers, distributors and websites we consulted felt strongly that the number of craft cider producers is on the increase. A quick trawl of the internet reveals the large number of cider producers who have set up in business in the last decade.

WESTONS UPDATED SEGMENTATION

It is over four years since we last reviewed our segmentation. Since then, both the cider marketplace and the cider brands that make it up have moved on. It is therefore time for a refresh.

We have now moved to a simpler, channel neutral, segmentation. Left to right, it recognises cider brands positioning from traditional through to contemporary and top to bottom describes the brands positioning on a sliding scale from artisan through to commodity.

CIDER SEGMENTATION



It is an inverted pyramid to acknowledge the nearer to a commodity a brand gets the harder it is for a cider brand to flex a traditional or contemporary positioning.

Source: Weston's Cider Report 2018

A trend that everyone seems to agree on and the statistics bear this out, is that the popularity of fruit ciders is on the increase. It was suggested that this may go some way to explaining the waning in the fortunes of perry because some perry drinkers may have switched to fruit cider. Fruit ciders are based on apple juice to which another fruit, usually a berry in some form, and often flavouring and sugar, has been added. Actual content of fruit ciders is not required to be shown on its labels but as [this article](#) reveals, they can be low on apple juice and high on sugar content and calories. Often sparkling and sweeter than other ciders, they appeal especially to many younger drinkers according to [an article](#) in The Grocer.

Some cider makers we spoke to don't regard fruit ciders as properly cider at all. For tax purposes, fruit ciders are not classed as cider but instead fall into the

category of 'made wine' which attracts a higher tax liability. Though views vary, they are still on an upward trend and one that many cider makers are taking advantage of, including craft cider makers using pure juice from locally sourced fruit.

Small-scale craft cider producers

We have focused our research on the small-scale craft sector of cider production as it is a growth area and has close ties in many areas to traditional orchards, a feature emphasised by cider makers we spoke to. Large and industrial scale producers source from large commercial orchards or buy in apple concentrate or pulp from other countries. We have not separated out makers of perry, but we note that though overall figures suggest a decline in perry drinking, many of the small scale cider makers offer perry as well as apple cider.

In this report we use small scale and craft in a fairly loose way – we didn't

systematically gather data on amounts of production. However a number of producers noted the system of taxing cider and how it influences volume thresholds, which is useful to bear in mind. Cider makers of less than 7,000 litres do not pay tax. If they produce over 7,000 litres, they are liable for tax on the whole of their production. This means that many producers stay below the 7,000 threshold or have to make the leap to a much larger scale of production to ensure tax liabilities are offset by sufficient growth in sales.

This year some large scale producers such as Bulmer (a subsidiary of Heineken) have ended their contracts with some apple growers meaning more apples from commercial orchards are looking for buyers. An over supply of cider apples due to trees planted in the nineties coming to maturity combined with potentially cheaper apple concentrate from elsewhere appears to be the cause. However the rise in craft cider production indicates a healthy demand for fruit from local traditional orchards and an interest in finding new sources as we shall see below.

Craft cider production tends to be very localised. Producers use local apples and sell locally and that is at the heart of the appeal to consumers. On the other hand some distributors are promoting craft ciders to a new generation of young, urban drinkers and sourcing their products from across the country. Alice Churchward of The Real Al Company, who distributes craft beers and ciders to 'quality pubs, restaurants and bottle shops' mainly in London, told us that so-called 'traditional', still, sometimes high alcohol cider does sell but her sales of this have plateaued, while fruit ciders and other keg ciders (with added CO₂) are definitely on the rise. The world of cider production is developing in new and innovative directions and we look at some of these below.

Innovation in Cider Production

How craft cider makers source their fruit, the kinds of cider they produce, and the

ways they market it and communicate with customers, are all areas that are undergoing change. We have looked at each of these below to provide context for the connections to be made between cider production and traditional orchards and where relevant we have highlighted specific links.

Sources of fruit: traditional orchards, abandoned orchards, gardens, swaps, and online resources for fruit offered or wanted

Sourcing fruit for cider making is straightforward for those who have their own orchards but for many new entrants this isn't the case, and even for those with orchards, new ways of accessing fruit are opening up.

Tim Andrews, who makes Orchard Revival cider in Gloucestershire, is one of what appears to be a growing band of part-time, but highly motivated, skilled and professional young cider makers. These may be people who have other employment but nevertheless are producing and selling cider via local pubs, shops, shows etc. He and other recent entrants may be representative of a new wave of makers who are not farmers, do not own orchards, so need to source from elsewhere, and have the environmental principles to favour sourcing from sustainably managed orchards. Asked how he and other similar cider makers find orchards, Tim Andrews, replied that they 'drive round looking for them'. He sources apples from a number of orchards, and usually repays the owner in kind, tending the orchard where required and with cider. The main reward for the orchard owner he says, is often not the cider, it's 'seeing their orchard having a role, and being looked after'.

Tim Andrews noted a number of barriers (see above) but the biggest challenge, he said was 'gaining the trust of the orchard owner'. Tim's comments are key we think in what they reveal about the transaction that goes on between the growers and those who make use of the apples, particularly as the orchards which are

the focus of this study are no longer, or never were, solely commercial orchards.

Big Nose and Beardy is a cider company based in East Sussex, a county which ten years ago had very few commercial cider makers. They are one of a growing number of makers, many established in the last decade. Of the 14 tonnes of apples processed this year, 9 tonnes came from donations from gardens and local old commercial orchards. Volunteers help pick the fruit; and some apples are donated direct to their premises. Volunteer pickers are rewarded with a picnic meal and cider. Orchard owners and those who donate fruit from their gardens receive gifts of cider in ‘a loose arrangement, no weighing’. The rest of the fruit is bought from local commercial orchards. Phil Day of Big Nose and Beardy said that ideally, they would like to expand beyond the 7,000 litre threshold and collect a lot more fruit from ‘forgotten orchards, the ones that are doing nothing’. He particularly enjoys the sociability of the picking days which are ‘much more interesting than just buying in fruit’.

Expansion can mean modifying fruit sourcing methods. SeaCider, also in Sussex now sell half a million pints of cider per year, mainly to the North. They used to buy apples from Sussex orchards and press them themselves. But as the volume of cider production increased so did the enormous quantities of pulp which even the local farmers couldn’t deal with. Now they are supplied with juice direct from a Kent fruit farm.

Keith Orchard, maker of Orchard Cider and Perry in the Wye Valley, has been making cider for 20 years and used to have his own orchard but now sources from traditional orchards. His preference is for older orchards from which he can source cider apples of all the requisite kinds (more modern orchards he said tend to have mainly bittersweet apples as the sharps are more likely to be biannual and thus a less certain yield). He adds Bramleys for sharpness. He noted that people no longer

want to pick apples and would favour the creation of a picking service that organised pickers to harvest and take apples to central collection points. This idea was echoed by other cidemakers we spoke to.

Thirsty Cross Cider in East Lothian is at the forefront of the craft cider movement in Scotland. The company is keen to use fruit



from overlooked or abandoned trees and orchards and each year run an appeal for apples. Their “Bucket for a Bottle” media campaign has brought in apples from across the country from schools, commercial and farm orchards and the general public.

David Lingran runs the Cotswold Fruit Company which produces cider, perry and juice (including Gloucester Orchard Trust’s Trust Juice – see section on Community Initiatives). He also offers an apple for cider swap and emphasises that the Bushel and Peck brand is made from fruit that might otherwise go to waste, and “By using fruit from traditional orchards, by attaching some value to the fruit from the orchards, we are making our own contribution, however small, to their survival and the ecosystems they shelter”. All his apples come from Gloucestershire, and most from within 5 miles of the businesses. David will collect if nearby and will pick in exceptional

circumstances if the orchard is accessible, a good variety of apples or pears, and easy to harvest. David noted that an on line market place would be useful for identifying where buyers could source particular varieties of apples. If a cider maker is willing to travel then distance is not a problem. Collection areas could be developed. He also thought that a hiring service for picking/harvesting apples might be useful.

Swapping apples for juice or cider has become a very popular model and we found examples all over the country. Some businesses, like the Garden Cider Company in Surrey, source all their apples from local, donated garden apples. They began in 2010 and each year 4,000 customers bring spare apples in return for cider. So far this year they have taken in over 70 tonnes of fruit.

Trenchmore Farm in West Sussex produce a sparkling farmhouse cider called “Silly Moo” made entirely from Sussex apples. In addition to their own cider apples, this year they took in 9 tonnes of donated apples in exchange for 2000 bottles of cider.

Saxby’s Cider in Northamptonshire was created by an arable farmer who decided to diversify into cider in 2011. He planted a new orchard and has a mix of 3,500 cider and dessert apple trees which he blends in his cider, embracing as he says both traditional and modern techniques. They won Great Taste awards in 2017 (for their plum cider) and 2018 and the business continues to grow. With growing demand for apples, they source from orchards in Northamptonshire and Herefordshire and also run a “Bucket for a Bottle” campaign appealing to the public for eating apples in return for cider. They also appeal for volunteer apple pickers and set picking times and dates.

Other cider makers we came across operating swaps as part of their business model include John Hancox Cider in Glasgow, The Random Apple Company, Macclesfield, Hawkes London Cider, and the Guernsey Roquette Cider Company.

A note of caution about apple for cider swaps is that cider makers often require specific varieties of apples, depending on the type of cider they are making and the consistency they aspire to in their product. In the Three Counties the majority of cider is made from cider apples and we found no examples of apple swaps in this region except for the Cotswold Fruit Company and Clives Fruit Farm who make cider using a mix of apple types, including dessert apples. We spoke to James Forbes, chairman of the Three Counties Cider and Perry Association and owner of Little Pomona Orchard and Cidery in Herefordshire, who told us that he didn’t know of any apple swap schemes, most probably because cider makers in this area almost exclusively use cider apples.

Apples from back gardens are often cookers, and large proportions of Bramleys for instance may make the cider too acidic. Sussex producers of Silly Moo Cider no longer take them and they also avoid early season dessert apples by starting their swap in October. However if the cider makers are also making apple juice then these apple varieties can be diverted into juice production. David Lingran of Cotswold Fruit Company (see above) does exactly this. He makes Bushel and Peck cider and perry and also presses apples to make Humblebee and Trust Juice. For some makers, such as Big Nose and Beardy Cider, variation has been made into a virtue and a feature of their product.

Matching orchards up with cider makers (and others who would like fruit) has been attempted through online resources. Orchard Link, a community group in Devon, set up Harvestline where people can offer or ask for spare fruit. Initially the aim was to be a local market place for Devon, but the site attracted participants from all over England. A modulator, Tim Walker, checks postings and removes any international ones. Otherwise people are left to contact each other and make their own arrangements. As a consequence they don’t know how much trading is happening. All postings are taken down

at the end of the season. There were 50 – 60 postings this year and the numbers have been increasing each year. Tim suspects that when people make contact with each other, they strike up a long term relationship and do not need to return to the market place. Tim thinks there could be a national online market place given the response from all around the country, but equally it would be good to encourage local exchanges to minimize transport.

GOT set up a similar resource, the Marketplace, but this is no longer operating. Jim Chapman of Hartpury Heritage Trust thought that one of the problems with it was that people posted availability of fruit when it was already ripe, too late for potential users to make the necessary pre-visits and arrangements for harvesting. Another issue may have been that cider makers needed more information on the varieties of fruit on offer. Other factors might include the geographical scope.

James Forbes of Three Counties Cider and Perry Association suggested an annual database of orchards, apple varieties and ripening times. He described how a cider orchard in Herefordshire (with very old, tall trees) lost its contract this year with Heineken and posted their story on a forum which was picked up by a journalist and the narrative spread through social media. As a result they managed to sell their entire crop of 30 to 40 tonnes to craft cider makers. This example demonstrates the powerful role of social media, even in this case which happened almost by accident, in helping to link those who have apples with those who need them.

Megan Gimber of the PTES Orchard Network felt there were lessons to be learnt and that if adequate staffing was in place to ensure the information was up to date and the site navigation was improved it would definitely be worth establishing an online fruit marketplace. Megan also came up with the idea for a graphic to illustrate to orchard owners the different ways they could deal with the fruit from their trees, which could

form part of an online resource. Gabe Cook thought that a good online marketplace could be useful given the increasing demand from craft cider makers for fruit from traditional orchards. However it was also pointed out to us that not all owners of traditional orchards were in a position to make best use of online resources. People on the ground would also be needed to make the links, gather the information needed about fruit varieties and ripening times and help build relationships of trust between owners and would be users.

Types of Cider

As mentioned earlier, cider is a broad term. The legal definition requires that cider contains a minimum of 35% apple juice. Many of the craft cider producers we researched, however, promote the fact that their cider contains a much higher percentage (often 100%) apple juice.

After that, craft cider producers are enormously varied in the methods they use and the types of cider they produce. Some are keen to preserve what are regarded as local traditions, while others are experimenting with new approaches. Some do both.

Many cider makers are producing still cider, fully fermented, with nothing added and as a result relatively high in alcohol. Tim Andrew's Orchard Revival Cider is generally 6-8% for instance. Alcohol levels can be reduced by adding water (we were told this is sometimes referred to as 'brook apples') or apple juice. The addition of apple juice has the effect of sweetening the cider which broadens its appeal to those who prefer a sweeter cider. It also means that the final product is still made of 100% apple juice. 'Backsweetening' with sugar is practised by Big Nose and Beardy, with some of their batches. They also pointed out that they leave the cider to go through a double fermentation which results in a smoother taste. Trenchmore Farm (Silly Moo cider) have orchards with over 19 varieties of traditional cider apple trees. The fully fermented cider is

blended with the juice from Sussex grown eating apples. The result is what they call a marriage of East Coast and West Country cider styles. It is slightly sparkling.

Thistly Cross Cider in Scotland, are experimenting with novel production methods and ingredients to make a cider that is styled as 'refreshing' and is low in alcohol. Scottish apples, including heritage cider apples, are pressed on the farm, fermented with champagne yeasts and matured for at least 6 months. The result is a 'gently sparkling cider'.

Chalkdown Cider, in Hampshire, use a method which includes secondary fermentation in the bottle to produce a yearly total of 9000 bottles of naturally sparkling cider which they market as 'an alternative to champagne'.

Sandford Cider in Devon have infused cider with hops – perhaps to appeal to the beer drinker (a combination we came across more than once) and also produce raspberry, ginger and elderflower ciders, in addition to more traditional ciders.

Annings in Devon are keen, according to their website, to keep the tradition of West Country cider alive and supply traditional cider to pubs but also produce a range of fruit cider such as Pink Grapefruit and Pineapple, Sour Cherry and Botanicals.

Once upon a Tree Cider are looking at co-operating with a strawberry and raspberry grower to produce 'co-fermented' fruit ciders. This is not a cheaper option, as Liz Waltham pointed out, but she sees this as a more 'genuine' product.

Saxby's Cider in Northamptonshire has a mix of 3,500 cider and dessert apple trees which he blends in his cider, embracing as he says both traditional and modern techniques. They won Great Taste awards in 2017 for their plum cider and the business continues to grow.

Perry (the pear equivalent of cider) has declined in popularity in recent years as noted above. However we would like to highlight the fact that many cider makers

we came across also make perry. A'Becketts in Wiltshire have planted a range of perry pear trees in order to start making perry in addition to their other drinks. Some perry makers are keen to find new sources of pears. Apple Cottage in Hertfordshire posted this message on their website: We require Perry pears for our Perry project. So if you have Perry pear trees or even an orchard of them, give us a buzz. We always struggle to get enough Perry pears in a single season. This message, appearing online, also points to the growing potential of evolving forms of communication in sourcing fruit as well as communicating more generally with makers, growers and customers, as we note in the next section.



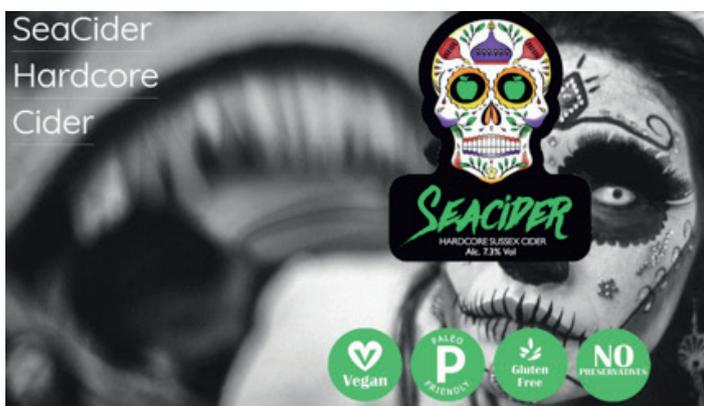
Marketing and Communication : the significance of labelling, branding and the rise of social media

The rise in popularity of craft cider, we were told, probably benefited from the major marketing campaigns of the big cider makers, which transformed the image of cider and introduced it to a younger market. The rise in the number and success of smaller cider makers probably also owes much to new methods of communicating with their customers, with their potential volunteer pickers and those providing apple donations. Trenchmore Farm, who produce Silly Moo cider, said that people

who bring apples to swap have a loyalty to the product and buy it for family and friends. Picking days are a chance for people to experience the countryside and be a ‘farm labourer’ for a day. There is much in the media about the ‘experience’ economy and how we are spending less on buying things and more on doing things and then telling the world about it in social media. Some cider businesses are already taking advantage of this.

Websites are increasingly professional, sophisticated and easy to navigate. Online sales are available from many producers. Social media is used routinely by producers to promote and sell and by consumers to connect with each other. Alice Churchward, when asked how she finds producers, said that Instagram was one of her main sources. Social media is used to connect members of the cider community with each other as well as customers. Facebook has numerous groups devoted to cider and perry including ‘The Promotion of Real Cider and Perry’ group, administered by Tim Beer of Marshwood Vale Cider, in Dorset.

Cider makers recognise the importance in promoting their product, of the image they wish to convey, their backstory, description of ingredients and methods and the actual people involved. Each batch of Big Nose and Beardy cider has a different name and its own story on its labelling.



From SeaCider’s website

The importance of the image conveyed by labelling was emphasised by Alice Churchward.

Though rustic images remain much in evidence, some cider makers have moved far away from images of rural idylls in their marketing. SeaCider is an example of a very different approach, appealing to younger, urban drinkers.

Alice Churchward told us that for young people ‘branding is everything’. This is reinforced by CGA reports indicating that ‘52% of late-night consumers aged 18-34 years uploaded an image of what they were eating or drinking on ‘a night out’ to social media’. (Imbibe online). Alice said that images of ‘horses and carts’ were definitely out and that ‘innovative and contemporary and experimental’ is what sells. Labelling that featured ‘pin-ups’ is also a no-no and led to the withdrawal of a cider from one London pub. Asked if a cider that had wildlife-friendly, sustainable orchard credentials might be popular, Alice thought that definitely yes, this could be a selling point amongst her clients and could even carry a premium ‘if the packaging is right’.

Conclusions

Craft cider making is on an upward trend. Our research indicates that this could have a very positive impact on the use of orchard fruits since the makers of craft cider are often passionate about the source of their fruit, and its environmental and heritage credentials.

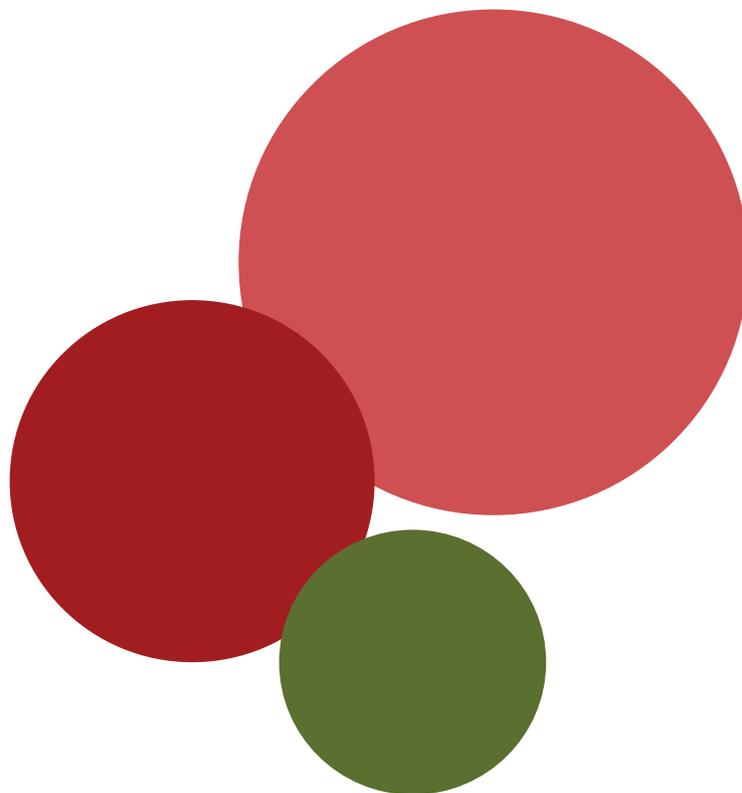
The innovations we came across in terms of how fruit is sourced point to some possible ways more fruit could be salvaged for productive use. These include: swapping apples for cider, volunteer picking days organised by cider makers, and picking apples in exchange for orchard management. Several cider makers pointed out that picking apples themselves was not cost-effective and suggested that some kind of regional-based picking service would be really useful, with apples going to a place from which cider makers could collect the apples. Some cider makers told us that they were actively seeking fruit from traditional orchards but that there was no way of easily knowing how

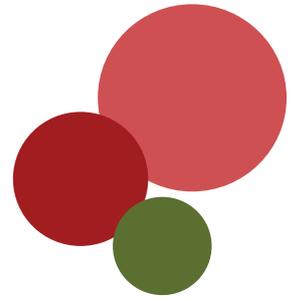
to locate them. Given the difficulties some makers told us about finding orchards or apples, a well run online 'market place' could be useful in connecting orchard owners with cider makers.

The innovations in the types of cider being produced indicate a vibrant cider market at the local and regional level with the sourcing of apples and pears from traditional and, more broadly, local orchards being a major selling point. Craft cider's specific appeal for many consumers, including urban customers, does seem to rely on its links with locality, traditional orchards, and the skill and dedication of those who produce it. The same impetus that has fuelled the value people place on the traceability, environmental credentials

and local sourcing of their food, seems to apply for many people also to their preference for craft ciders. This indicates that if other barriers can be overcome, the currently unused fruit could have a value.

There is something of a campaigning zeal apparent amongst makers and this comes through in their marketing and close connections with consumers through apple swaps, picking days and festivals. Social media, contemporary images and branding are paramount in spreading its appeal, but so too is the connection with the land, tradition, environmental values and craftsmanship. These bode well for the future of craft cider and for the furthering of connections between makers and traditional orchards.





5

Plums

Some of the orchards in the Three Counties were once commercial plum orchards. Jim Hartman of the Hartpury Heritage Centre explained that these were planted for jam making, at a time when sugar, grown in the colonies, was cheap. Since then, there has been a steady decline in the commercial value of these orchards and it is 20 years since any have supplied professional jam makers. It is a similar story in the Clyde Valley, southeast of Glasgow. The Clyde Valley is Scotland's single biggest and most concentrated orchard area due to its sheltered environment. There is a predominance of plum and damson trees planted in the late 1800s for fresh fruit and jam. With changes in shopping habits, supermarkets and jam makers importing fruit, most of the orchards are no longer commercial and the majority of the fruit is not used.

We know that plums are harvested by community orchard groups for jam making, chutney, plumbago etc. Plums pose particular problems because they do not store well and so commercial use is limited.

However we were interested to see that one cidemaker, Saxby's in Northamptonshire has won an award for their plum cider, pointing perhaps to a new use for some plum juice. An owner of a mainly damson orchard that we contacted, Caroline Zeunie who was one of the beneficiaries of the Three Counties Orchard Project, explained that she now farms for the wildlife value of the fruit and is content that apart from the few plums she harvests for family and friends, the rest provides rich pickings for badgers, wasps and other wildlife.

In the Clyde Valley, most of the stakeholders agree that in order to revitalize the orchards a commercial value has to be found for its fruit, particularly through added-value products. The Scottish Agricultural College (SAC) was commissioned to research these marketing opportunities and some of their conclusions may offer inspiration for the Three Counties (2013, SAC Food & Drink CAVLP Orchard Products Market Study prepared for the Rural Development Trust Ltd). Their key findings and recommendations were:



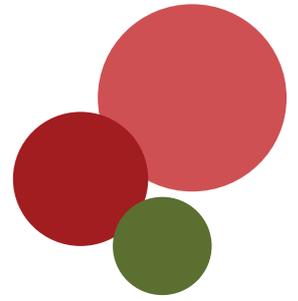
Plums are used in fruit cider by Saxby's

* The amount of fruit available for commercial use is small due to the average size of individual orchards. Commercial use of the fruit would require co-operation amongst growers to provide sufficient volume of fruit to make processing worthwhile.

* The fruit 'collective' would need to collaborate with existing businesses that are willing to take on each product and help with processing, marketing and distribution. These businesses will generally want to deal with only one point of contact and expect minimum quality standards.

* An enterprise structure will need to be developed that meets the needs of business partners, orchard owners, and customers.

We talked to Edward Thompson of Pixley Berries in Herefordshire who are producers of pure, not from concentrate fruit juices amongst other products. They don't usually do contract juicing but in order to juice plums for example, they would need a minimum quantity of 25 tonnes of fruit, delivered to one point at the same time, and meet the company's traceability and other standards. First and foremost, of course there needs to be demand. These criteria together may prove too hard to meet for plums sourced from traditional orchards scattered around the Three Countries. But the principle might be worth exploring with commercial enterprises specialising in juice, jams and preserves in the region who are interested in the provenance of fruit from traditional orchards or who offer contract processing.



6

Community Initiatives and Fundraising

In this section we focus on activities that operate at the community, not-for-profit level. We have included not-for-profit juice and cider making, orchard fruits as sources of fund raising, and orchards as therapeutic spaces.

Orchard groups play a significant role in sustaining traditional orchards – and sustaining public interest and passion in orchards and local fruit. It could be said they underpin the success of the commercial ventures by continually raising the profile and importance of orchards and all they have to offer even if the orchard groups themselves are not equipped to make major inroads into the unused fruit in traditional orchards.

Nevertheless we found that there is frustration that the fruit from traditional orchards is not being made more use of. Time and again we were told that since such groups depend on volunteers, their capacity to harvest and process fruit depends on the right people being in place to recruit, support and organise volunteers. In addition, many not for profit

organisations lack the skills, time and capacity required for significant marketing, distribution and sales of products.

Funding for orchard group activities is less available than in the past. Sources such as the Lottery Local Food Fund have come to an end. This means that we cannot depend on orchard groups to harvest and make use of the unused fruit from traditional orchards.

However, we came across dynamic groups and individuals that demonstrate ways of making use of fruit from traditional orchards by making and selling juice and cider, from new partnerships with groups such as the gleaning network, engaging in new ventures such as training in cider making, and making use of orchards for therapeutic and educational purposes.

Not-for-profit Juice and Cider Making

Below we look briefly at the activities of orchard groups who demonstrate different ways of supporting the use of fruit from traditional orchards. Some of their activities are income generating. Income derived

from services or sales of orchard products may be enough to cover the staffing costs of the key people involved or to replace and expand equipment. These organisations are largely dependent on volunteers for most of the labour involved. The profits, if any, are ploughed back into the group's funds and used to meet the group's aims.

Colwall Orchard Group

Colwall Orchard Group (COG) is in Herefordshire. Pam McCarthy informed us that COG was in some ways the model that led to TCTOP, in testing the idea for community organisations using volunteers to co-operate and promote better management in traditional orchards which are privately owned. COG uses volunteers to collect and harvest apples from local, privately owned traditional orchards in Colwall. It stores and sorts the fruit and uses a juicing service to press, pasteurize and bottle the juice ready for sale. In previous years the apples were sent to Pershore College for juicing, for the last two years juicing has been carried out by Orchard Origins (see below). COG pay for this service and then sell the juice for a profit at the local shop and cafe and at events. It only uses three or four local outlets and this is a calculated decision. They do not have storage space for apples and bottles or continuity of supply for more outlets.

Orchard Origins

Orchard Origins in Herefordshire was launched in 2012 with a grant from the Big Lottery Fund's Local Food scheme. They are a Community Interest Company (CIC), wholly owned by the Herefordshire Wildlife Trust. As a CIC they can trade as a business so long as all their assets and profits benefit their social and environmental aims. These are to conserve the vulnerable habitats of traditional orchards and improve people's wellbeing and skills through orchard management. They are working with the mental health charity, Herefordshire Mind, offering volunteering opportunities in orchard management skills. Orchard Origins raise staff funds through grants and

offer a comprehensive orchard maintenance service, juicing service and equipment hire, and sell apple juice, apple verjuice and cider vinegar through at least 12 local retail outlets. In the longer term, they aim to be self-financing and not rely on grants. With Herefordshire Wildlife Trust underpinning the organization and enabling it to apply for substantial grants at the moment, Orchard Origins can concentrate on building up its money-making enterprises to support its longer term sustainability.

Brighton Permaculture Trust

Brighton Permaculture Trust (BPT) has a strong orchard theme in their work. BPT manage two old traditional orchards with the help of volunteers, and harvest the apples from these orchards to make into juice, cider, and preserves. They have linked up with FareShare who supply food banks and source apples from the Gleaning Network. The Gleaning Network organise their own volunteers to pick apples and other fruit. Since perishable apples can be hard to distribute on time, some are passed on to BPT to juice.

In 2015 BPT launched a crowd funding appeal and raised over £12,000 to build their "Fruit Factory" where they process orchard fruits. The Fruit Factory is in a public space where people can stop to watch the process and try the juice. Bryn Thomas told us that juicing fruit is not just about making money but is part of their campaign to raise peoples' awareness that orchard fruit can be made into a delicious drink.

BPT's Stephan Gehrels has been experimenting with cider making. Starting with apples picked by volunteers from their orchards and urban gardens, they bought in third grade apples from a local commercial grower, and then this year from a cider apple orchard that had lost its contract with a big producer. They are about to acquire an alcohol license, so they can sell the cider throughout the year, and especially on summer and autumn weekends when they regularly juice apples at the Fruit Factory. They are learning year by year

how best to make this work and how to assess the cost effectiveness of recruiting and organising parties of volunteers. This year, as their pressing equipment is fairly small scale, they opted to have all the cider apples juiced at nearby Ringden Fruit Farm (see above) rather than press it themselves, saving a large amount of staff time. They raise enough money from sales of juice and cider to cover their staff costs.

Orchard Link

Orchard link in South Devon was set up in 1998 by a group of orchard owners, cider makers and fruit enthusiasts, all determined to reverse the decline in traditional South Devon orchards. It is a membership organization with no paid staff. They offer technical advice and support to members, who pay an annual fee of £12, and training courses in tree pruning, grafting, cider making and the planning and planting of new orchards. The less experienced can also learn from those with more knowledge at Orchard Link's regular open meetings. There are 160 members, growing each year.

Tim Walker was clear that if orchards are to be properly maintained, there needs to be a value to their harvest. Orchard Link hires out presses of different sizes, mills and pasteurisers to members so that they can add value to their produce. In addition, cider and juice makers and orchard owners with surplus fruit can contact each other through Harvestline, an on-line market place. Harvestline was primarily set up as a service for members in and around Devon. However, after receiving posts from growers all around the country, from both professional and small orchard owners seeking to sell apples, Orchard Link has opened Harvestline to anyone willing to travel in the UK.

Orchard Link received Heritage Lottery funding to support their work with 26 community and traditional orchards. The funding was particularly important for setting up a website through which their income streams are automated, reducing staff administration time and

increasing their sustainability. All courses and equipment hire is booked and paid for online and individuals posting on Harvestline follow up contacts without any intermediary. This means that Orchard Link cannot know if fruit sales are taking place or what impact the market place is having. There were 50 to 60 postings in the 2018 season and the numbers have been increasing each year. Tim thinks there could be a national online market place given the response from all around the country, but equally it would be good to encourage local exchanges to minimize transport.

Gloucestershire Orchard Trust

Gloucestershire Orchard Trust is the leading charity dedicated to traditional orchards in Gloucestershire. It is a membership organisation, owns traditional orchards, and runs orchard skills training days. Martin Hayes who manages GOT's orchards, runs regular orchard sessions for vulnerable adults and young people and volunteers – they help with orchard tasks, including harvesting. The fruit from their orchards is donated to the Cotswold Fruit Company who keeps 80% for their own commercial cider and juice enterprises, and return 20% as juice to GOT with no exchange of money. GOT sell "Trust Juice" in small 250ml bottles to a number of outlets and on market stalls, including a farm shop at a local motorway service station. It is what Alison Parfitt and Martin Hayes of Trust Juice call "closing the circle between growing the apples, picking the apples, selling the apples, and putting the money back into projects to do with apples".

The Brendon Orchard Co-operative

The Brendon Orchard Co-operative in Somerset was established in 2007 and is run by volunteers. Their main and financially most successful enterprise is the hiring of apple juicing equipment. They received grants for equipment and have premises to store these for an annual peppercorn rent. They hire someone between September and December to manage the equipment and the income is used to pay for insurance, overheads, and

the manager's wages. The Co-operative also runs community pressing days. These give people a taste of what is involved in pressing and pasteurising and many of their hiring customers have attended a community apple-juicing event. Brendon Orchard Co-operative also make their own apple juice to raise funds for their other activities. However Dave Topham questioned whether it is sustainable since they have found that it takes a great deal of organisation and volunteer time to pick, press, pasteurise and label bottles, they have to bulk buy bottles to keep the price down and returns on sales are small. Interestingly, the Brighton Permaculture

Trust faced similar issues and opted to use a commercial juicing service for their cider apples. Colwall Orchard Group also use the juicing services offered by Orchard Origins to make juice ready for sale.

Orchard Fruits as Sources of Fund Raising

We came across examples of charities, schools and community groups harvesting orchard fruits to turn into juice to raise funds.

Farnborough Hill School in Hampshire makes over a thousand bottles of juice a year from fruit pupils pick from their orchard. It is made into juice by Hill Farm, a commercial fruit orchard and juice maker, at the remarkably low price of £1 per bottle. The school sells the juice to parents and teachers and each year chooses a charity to donate the profits to.

The Mobile Juicing Facilities we investigated in France and Belgium all promote the fundraising potential of juice making, even including guidelines on how

best to collect and package the fruit and the profit to be made from different amounts and case studies of local schools, choirs, etc who have funded specific activities with their juice. For instance, in the graphic below, Mouvipress in Normandy shows the different amounts of profit to be made from 3 tonnes of apples depending on the amount of juice yielded (60% or 70%), their fee (which is according to the amount of juice made) and the selling price.

Quantité de pommes	Rendement	Volume Pressé	Prix de notre prestation	Quantité de Pouch-up	Choix Prix de vente Pouch-up (3L)	Bénéfice
3 tonnes	60%	1800 L	2000 €	600	6€	1600 €
					6€50	1900 €
					7€	2200 €
	70%	2100 L	2200 €	700	6€	2000 €
					6€50	2350 €
					7€	2700 €

Pressi-mobile, in Brittany, cited the example of a community choir that part financed the making of a record through apple juice. They needed to raise 22000€. Each of the 200 singers managed to source two sacks of apples that Pressi-mobile turned into 6500 litres of juice. Each choir member had to sell ten pouches of juice at 10€ each. This yielded a profit of 12000€.

Chiltern Ridge juicing services offers reduced rates for PTAs, scouts, etc and produces an information sheet for community groups. Franca Donker told us that they have five schools as well as numerous charities and community groups who come to them regularly – they even produce their labels. One of their customers, The Sunnyside Trust, is an organisation that carries out horticultural activities with adults with learning disabilities. Natasha Mann of the Trust said that if the opportunity arose to pick fruit for juicing from an orchard with fruit to spare in their area they would be 'really really interested'. This suggests that links between traditional orchards and organisations

carrying out horticultural therapy is worth exploring further, see below.

Orchards as Therapeutic Spaces

Traditional and community orchards, gardens and natural green spaces more generally, can be the setting for activities which have physical and mental benefits.

Ruth Jarrard of Green Gym, part of the Trust for Conservation Volunteers (TCV), was keen on the idea of apple harvesting which could fit in with the Green Gym ethos, but pointed out that where a staff member and minibus was required, a fee of £350 a day was normally payable. TCV's nearest base is in Bristol, which also makes some of the three counties area too far for them. However she was very interested in the idea of exploring joint fundraising for an orchard-focused project. TCV has been instrumental in the creation of Racehill Community Orchard in Brighton which has 200 trees planted since 2013 on an abandoned allotment site. Their members have dug a pond, created paths, and helped in all aspects of managing the site.

Social Prescribing is an idea that is increasing in popularity. It is a means for doctors to refer patients to organisations that offer activities such as cookery, gardening, sports, etc. The evidence is now well established that patients suffering from a broad range of physical or mental challenges can benefit from outdoor practical activities in a supportive environment. Dr Christa Beasley, former chief clinical officer of the Brighton and Hove Clinical Commissioning Group, who heads up a surgery in Whitehawk, the most disadvantaged part of Brighton, is very clear about the benefits for a range of patients. Two support workers are now in post at the surgery. A staff day was held at the local Racehill Community Orchard, within walking distance of the surgery to acquaint them with the orchard. Since then, in what appears to be a very innovative initiative, plans are underway with Brighton Permaculture Trust to recruit a coordinator to work with a group of patients to create

a small orchard and garden next to the surgery. This post will be paid for by surgery funds. Patients are also offered the opportunity to volunteer at Racehill Orchard and trips to the orchard have been arranged with families from the next door children's centre and nursery to encourage participation in outdoor recreation.

Horticultural Therapy has a long history and is in some ways the inspiration for the gardening aspect of social prescribing. Hereford Community Farm, for example, operates for the benefit of participants who have a disability, mental health challenges, learning difficulties or dementia. They have their own traditional orchard which has gradually been brought back into use. They press apples, prune the trees and have mown paths through it. The therapeutic value, Julie Milson told us, is partly in working in the orchard and partly just enjoying it and the wildlife it supports including owls and woodpeckers.

The Sunnyside Trust in Hemel Hempstead whose clients have learning disabilities, and have apple juice from their own orchard made by Chiltern Ridge, mentioned above, were interested in exploring links with other traditional orchards in their area. Orchard Origins in Herefordshire are working with Herefordshire Mind offering volunteering opportunities in their orchard and are open to the idea of working in other traditional orchards.

Gleaning for Food Banks

Gleaning is the age old practice of going through crops after the main harvest, collecting the left over fruit and vegetables that is uneconomic for the farmer to harvest. Gleaning groups now exist across the country. In Sussex, there are regular gleans in several commercial orchards. The fruit is passed on to Fareshare, an organisation that supplies foodbanks with food that would otherwise go to waste. Some fruit goes to the Real Junk Food Project that runs a popular restaurant in the centre of Brighton.

The Worcester Gleaning Group, headed

up by Daniel Daye, can, he told us “often pull together a working party of six or eight people, for a few hours of picking. A normal gleaning event for us might be five people for two hours, resulting in maybe 250kg of apples. Our group then usually distributes the produce to local charities around Worcester”. A constraint Daniel noted is that ‘once the apples start coming, potential recipients can become very quickly overwhelmed with produce’. To overcome this they are hoping to work with The Old North Stables, within Transition Worcester, to juice, pasteurise and bottle gleaned apples, and sell enough to cover costs, donating the remainder to the usual recipients. This is a fledgling idea that they hope to realise in the coming year. This echoes what is happening in Sussex, where Fareshare in Brighton pass on some fruit to Brighton Permaculture Trust for juicing.

talks. They may not be the answer to significantly increasing the amount of fruit used but they have demonstrated the possibilities and are leading the way for new ideas and enterprises.

Some groups are using orchard fruits to make juice, cider and preserves, demonstrating how orchard fruits can have a value and be made into consumable products. The sale of these products may also help to raise funds to help finance the work that they are doing. Collaborating with other volunteer groups such as the Gleaning Network can bring in parties of volunteers and more sources of fruit.

Orchard groups can help facilitate links between orchard owners and those looking to source fruit. Some have created online ‘market places’ including Harvestline, established by Orchard Link in Devon, which may have the potential to be replicated in other counties or expanded to embrace users throughout the country.

The examples of fruit harvesting and juice production for fundraising given above demonstrate that there is ample scope and infrastructure (juicing services) for community groups, charities and schools to make juice to sell for fundraising purposes.

Horticultural therapy is well established and serves a dual purpose of delivering physical and mental benefits and helping with orchard management and harvesting. There is interest from people we talked to for establishing links with more traditional orchards.

Partnerships with the Gleaning Network could provide volunteers for harvesting, fresh fruit for food banks and other community food outlets and a source of picked fruit for juicing by orchard groups.

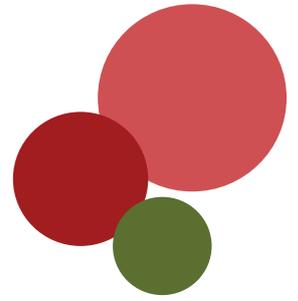
All of these activities depend on information gathering and introductions being made, and relationships of trust being built up between the orchard owners and the group.



Apples and Plums picked by Sussex Gleaning Network

Conclusions

Above is a flavour of not for profit organisations and the ways in which they are promoting the use of fruit from traditional orchards through restoration of old orchards, equipment hire, community juicing days, training, demonstration, and inspirational



Conclusions and Recommendations

There are many positive trends and initiatives taking place across the country that could have an impact on using underutilised fruit from traditional orchards. These include: the popularity of craft cider and local juice production and consumption, fruit for juice or cider swaps, the widespread availability of juicing services, equipment hire and possible introduction of mobile juicing facilities. There is also potential for orchard fruits to be harvested and used through initiatives such as therapeutic outdoor activities, fundraising for charities and schools, community production, and food banks.

We have attempted below to outline practical actions that could be taken to enable more use to be made of fruits from traditional orchards. In some cases people with appropriate skills would be required to carry out roles and activities which could go some way to overcoming the barriers outlined at the beginning of the report. There are also opportunities for partnerships between not-for-profit volunteer organisations and commercial

enterprises, and collaboration between small scale commercial enterprises.

We are aware that there is less and less grant funding available and also aware that it cannot be assumed that organisations dependent on volunteer staff will be able to deliver these roles. Solutions may be found working in partnership with bigger organisations.

We have divided our recommendations into three main areas: commercial opportunities; the establishment and maintenance of an efficient online 'wanted and offered' resource; and the promotion of orchard fruits for community use.

Actions to further commercial opportunities

- * Needs assessment survey of small-scale cider and juice producers
- * Support collaboration between community and processing businesses and social enterprises for contract processing, distribution and marketing.
- * Encourage collaboration between smaller orchards to supply fruit processing

businesses

- * Explore potential for small scale processing businesses (such as cider makers) to set up shared picking and transport services and collection points for fruit.
- * Explore investment in mobile juicing facilities to maximise fruit use over a dispersed rural area
- * Expand use of social media and branding to reach new markets
- * Research further the operation of volunteer picking days and swaps in return for cider or juice

Online orchard fruit ‘wanted and offered’ service.

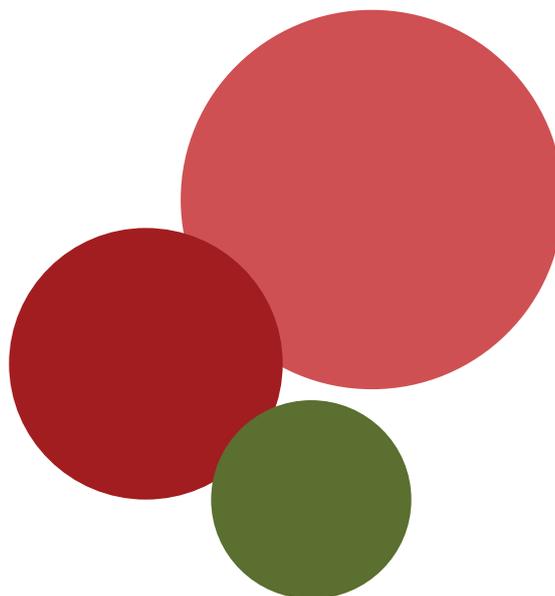
- * Research online resources for those who have fruit to offer and those looking for orchard fruits.
- * Evaluate the current resources and identify successful features, design elements and geographical scope.
- * Either create a new resource or expand on an existing resource that can have national scope.
- * Staff to modulate and update service and the information it contains
- * There is a role for orchard groups to help identify traditional orchards in their

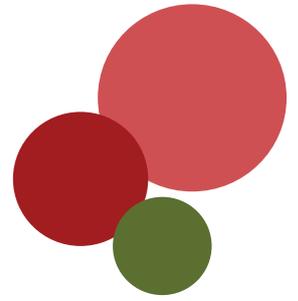
areas and work with owners to include their information on the data base if they want their fruit used

Community engagement staff with orchard knowledge

- * Promote orchards and orchard fruit to potential conservation, therapeutic and fundraising users, and food distribution groups including:
 - ◇ Therapeutic horticulture groups
 - ◇ Exercise/conservation groups such as Green Gym
 - ◇ NHS social prescribing initiatives
 - ◇ Schools, charities, etc who could raise funds through sales of apple juice
 - ◇ Gleaning networks and food banks
- * Facilitate links between orchard owners and these groups.
- * Deliver sessions in the orchards for these groups; teaching skills such as how to pick fruit, and ensuring health and safety.

Finally we attach a list of all the enterprises and organisations we consulted so that further details and links can be explored.





Enterprises, Organisations and People Consulted

*A'Becketts Vineyard, Cider and
Apple Juice, Wiltshire*

Annings Fruit Cider, Devon

*Appelpom, Belgium, Mobile Juicing
Facility. Mme. Fabienne Tedesco*

Apple Cottage Cider, Hertfordshire,

Apple Pressing Service, Devon, Di and Paul

*Bentleys Castle Fruit Farm,
Gloucestershire, Michael Bentley*

*Big Nose and Beardy Cider,
East Sussex, Phil Day*

*Brendon Orchards Co-
operative, Somerset, Dave*

*Brighton Permaculture Trust, East Sussex,
Bryn Thomas and Stephan Gehrels*

Chalkdown Cider, Hampshire

*Chiltern Ridge, Juicing Service,
Buckinghamshire, Franca van den Breut*

*Clive's Fruit Farm, Juice and
Juicing service, Worcestershire*

Clyde Cider, John Hancox

*Clyde Valley Orchards Co-
operative, Duncan Arthur*

Colwall Orchard Group, Pam McCarthy

The Ciderologist, Gabe Cook

*CORE Equipment, Juice, Cider
equipment, Daniel Tomlin*

Cotswold Fruit Company, David Lingran

*Countryside and Community
Research Institute, University
of Gloucester, Dan Keech*

Crabbs Bluntsay Farm Cider, Dorset

*Days Cottage Farm (juice, cider and perry),
Gloucestershire, Helen Brent-Smith*

*Dr Christa Beasley, Wellsbourne Health
Centre, Brighton, Social Prescribing*

*Drovers Hill Farm, Juicing service,
juice and cider, Buckinghamshire*

*East of England Orchard
Group, Norfolk, Karen*

Farnborough Hill School,
Hampshire, Gill Chapman

Frank Matthews Plant Nursery, Nick Dunn

Garden Cider Company, Surrey

Gloucestershire Orchard Trust, Ann
Smith, coordinator, and Martin Hayes

Hartpury Heritage Trust, Gloucestershire,
Jim Chapman and Mattias Pihlwret

Hawkes Cidery and Taproom, London

Helford Creek Apple Juice, Cornwall

Hereford Community Farm, Julie Milsom

Hollow Ash Pressing Service, Herefordshire

Humblebee Apple Juice and Cider, see
Cotswold Fruit Company, David Lingran

Little Pomona Cidery and Orchard,
Herefordshire, James Forbes

My Apple Juice, Wiltshire, Juicing
Service, Richard Paget

National Association of Cider
Makers, Michelle Hickman

National Biodiversity Network,
Community Orchard Finder

Natural England, Chris Wedge,
Orchard Advisor

Norfolk Scrumpers, Hempnall

North Cumbria Orchard Group

Once upon a Tree, Cider,
Herefordshire, Liz Waltham

Orchard's Cider and Perry,
Gloucestershire, Keith Orchard

Orchard Link, South Devon, Tim Walker

Orchards Live, North Devon

Orchard Origins, Herefordshire,
Julia Morton

Orchard Revival Cider,
Gloucestershire, Tim Andrews

Pearson's Cider, Gloucestershire,
Mike Pearson

People's Trust for Endangered Species,
Orchard Network, Megan Kimber

Pixley Berries, Herefordshire,
Edward Thompson

Pressi-Mobile, Brittany, Mobile
Juicing Facility, Monsieur Cleres

Random Apple Company, Cheshire

Ringden Apple Juice, East Sussex,
Chris and Lesley Dench

Roquette Cider, Guernsey

Sandford Cider, Devon

Saxby's Cider, Northamptonshire

SeaCider, East Sussex

South Lakeland Orchard Group

St Ives Cider, Cornwall

Sunnyside Rural Trust,
Hertfordshire, Natasha Mann

The Real Al Company, London,
Alice Churchward

The Promotion of Real Cider
and Perry Group

Silly Moo Cider, Trenchmore
Farm, West Sussex, Rachel Knowles

Three Counties Cider and Perry
Association, James Forbes

Trust for Conservation Volunteers
/ Green Gym, Ruth Jarrard

Trust Juice, Martin Hayes, Alison Parfitt,,
David Lingran see Cotswold Fruit Company

Upper Neatham Mill Farm, Hampshire

Westons Cider Report 2018, Westons,
Herefordshire, Matthey Langley

Worcester Orchard Workers

Yorkshire Wolds Apple Juice

You and Yours, BBC Radio 4, 21.9.18 on
large cidemakers cancelling contracts

Zeunie, Caroline, Orchard owner