

Blue Barrel Cider Project

Can we use any apples? Apples suitable for cider and juice

When it comes to cider you can use any apples but you'll get varying degrees of quality.

The main apple varieties used in cider making are...

- **Bittersweets** – These can vary from full bittersweet to mild bittersweet, with a full bittersweet generally being too tannic (bitter) to use as a single variety cider. Full bittersweet varieties include [Tremletts Bitter](#) and [Ashton Bitter](#). Mild bittersweets have lower tannin levels and are more suited for single variety ciders such as [Yarlington Mill](#) or [Somerset Redstreak](#).
- **Bittersharps** – Like the bittersweets you can have full bittersharps or mild bittersharps. A full bittersharp such as [Broxwood Foxwhelp](#) would be far too sharp to drink on its own but when blended will add a lot of character to the cider. Mild bittersharps such as [Kingston Black](#) or [Breakwells](#) seedling will produce a good single variety cider.
- **Sharps** – Sharps such as [Browns](#) apple are used in the same way as cooking apples however they have more body and character.
- **Sweets** – Sweets such as [Sweet Alford](#) will be low in acid and will have their own character. Sweet cider apples don't add much to the blend but have been used through tradition in certain areas. Although some are high in sugars which can produce a strong cider.

Other types of apples that can be used include...

- **Dessert** – These range in acidity, [Golden Delicious](#) are low in acid and therefore good for blending with a few cooking apples. [Russets](#) have ample acidity and are also high in sugar and have fairly nice taste of their own. [Katy](#) is a dessert apple which although is fairly acidic if left long enough has a particularly nice smell of strawberries.
- **Cooking** – Cooking apples are useful if you need to raise the acidity of a cider, [Bramleys](#) are especially high in acid but are only really good for up to 20% of a blend, any more than that can be acceptable if you are willing to wait 2/3 yrs for the acidity to drop. Bramleys can be your best friend but your worst enemy when blending, as too many and you will end up with a thin overly sharp cider but too few and you will have an insipid cider prone to spoilage organisms.
- **Dual purpose** – Similar to cooking apples, in that they are high in acid, although some such as [Blenheim Orange](#) have high sugar content making them good for raising alcohol levels.

Apples suitable for juice – The majority of apples make great tasting juice, obviously some are sharper than others however there are a few that make exceptionally good juice, these include [Discovery](#), [Katy](#), [Cox's Orange Pippin](#) to name but a few. Blending apples is also a common practice to get a really well balanced juice.

TOP TIPS

- You can purchase very good quality fruit trees from [Frank P Matthews](#) the leading seller of apple trees for a very reasonable price. If you want a broader range of cider apples including the most recent modern cider apples developed by Liz Copas at the Ashton Research Station, known as 'The Girls' then purchase these from [Adams Apples](#). Better still, graft your own.
- You can use bittersweets to make up as little as 25% of the blend with other dessert and cooking apples and come out with a decent tasting cider

Using what's available...

Not everyone will have an orchard to hand, so first step will be:

- Finding apple trees in your area (local council land, allotments, peoples gardens)
- Do a shout out – use local press to get attention or simply knock on doors
- Plant some trees – plant cider varieties that will produce good cider
- Other sources – local disused orchards, Community Orchards, Abundance projects.

What to think about:

- As far as hygiene standards go you don't want to be picking apples from someone's garden who has massive dogs or is a cat hoarder
- Avoid busy congested roadside trees or trees that have been weed killed recently.

TOP TIP

- Don't collect too many Bramleys and end up with a super sharp cider you can't drink for two years.

Picking apples

- You can pick apples for cider off the ground, because any micro organisms will be killed off in fermentation process. Also most cider makers use sulphides (sodium metabisulphides / campden tablets) to ensure there is no spoilage. Depending on the acidity of the juice, add 50 parts per million (1 campden tablet per gallon).
- If the apples are still on the tree you can either climb the tree and give it a good shake or use a pole with a hook to hook the branches and shake the apples off the tree.
- If in a public space always place a tarpaulin underneath the tree so the apples fall onto a clean area.
- You can use bruised apples and anything with up to 20% damage, no need to cut out the damage prior to pressing.
- However, avoid apples with mould growing on them.

Site – Planting an orchard

- Most soils are suitable for planting apple trees although shallow or really stony soils may require more vigorous rootstocks especially if the variety is not very vigorous.
- The sunnier the site, the better.
- You have to select the variety carefully (late flowering variety) if planting at the bottom of a slope or in a frost pocket.

TOP TIP

- Wildlife, livestock and human error are the main course of failure in planting an orchard – proper staking and tree guarding is possibly the most important thing.

Rootstocks

A **rootstock** is part of a plant, often an underground part, from which new above-ground growth can be produced. The main reason people use rootstocks rather than planting from seed or cuttings is that you can get apples more quickly. It's a known quantity so you will know roughly how big the tree will grow. The rootstock will have better disease resistance than many varieties and it can be difficult to raise apples from cuttings.

- **Dwarf / Very Dwarf Rootstocks** such as M26, M9 and M27 produce a **small** tree which will restrict the growth of vigorous apple varieties and make the tree start cropping earlier. They may need more pruning and even permanent staking as these rootstocks have little or no tap root to anchor them down. Mulching or herbicide will also be required at least for the first few years. You will start to get a reasonable crop within 3-4 years when planting a first year maiden (1 year old tree).
- The most widely used **Medium Rootstock** is MM106 which produces a **medium** sized tree. They are mainly used in the West Country for the intensively grown cider orchards where the trees are grown on a central leader. MM106 will start to get a reasonable crop within 5-6 years of planting a first year maiden.
- **Vigorous / Very Vigorous** rootstocks such as M111 and M25 produce a **large** tree and are used when planting standard (20ft spacing between trees and open centred shape) orchards which were traditionally used on farms where they were grown in conjunction with livestock and pasture. These trees will produce huge crops for many years but will not get a reasonable crop until 7-8 years after planting.

Planting methods for cider apple trees

Cider apple trees are either planted as standards or intensive bush orchards.

- **Standards** – Having the main leader pruned so that you have a framework of branches with five or six main limbs which can be planted 15-20ft apart. Low input.
- **Intensively grown** – You can concentrate on a single centre leader that is encouraged to grow as tall as possible with lots of fairly short lightweight branches which can be planted as close as 8-10ft apart. High input.

Practical planting tips

- All trees need to be planted with an appropriate stake and tree guard.
- When buying second year maidens, these will either be pot grown or field grown, it is particularly important to stake the field grown trees and it's worth investing in good tree ties, stakes and tree guards or preferably chicken wire. Cheap spiral guards can sometimes injure the bark on a young tree but will still be better than no guard.
- Most soils will be suitable for planting without any fertilizer but some bulky organic matter may be required if the soil is heavy clay or overly compacted. If in doubt get some horse muck in there.

- Mulching is important to stop competition with weeds for water (and nutrients). Mulching is especially important with the less vigorous rootstocks as they will have shallow root systems and will have no tap root.
- Don't forget to water at the back end of summer!
- Keep an eye out for aphids, mildew or any other diseases in the first few years as this can set back a tree by one or even two years if left unchecked.



Buying Equipment (See page attached)

Becoming a small scale cider producer

- Register with Customs and Excise (www.gov.uk/cider-or-perry-maker-s-registration-all-uk). You will need to register online but are eligible to make up to 7,000 litres tax free due to a tax exemption law for small scale cider producers!
- Get product liability insurance
- Contact your local Environmental Health Officer and get your food hygiene certificate.
- You do not need a personal license if selling to venues that have their own license, you only need a personal license if selling direct to the public.
- Find a food standard approved premises if you do not have one at your community garden. We use another local community garden's kitchen
- Create a "brand" – design a logo (and labels if you go down the bottling route). We got a local college group to design ours as part of a competition which meant we got a free design and were supporting local young people. Decide on the tone you will use when communicating with customers and ensure your message, images and fonts are consistent.
- Get a web presence – you can design your own website using free web apps like WIX (www.wix.com) or Wordpress (www.wordpress.com)
- Speak to your local CAMRA cider representative (www.camra.org.uk/about-cider-perry) and let them know you want to be involved in beer festivals. We have entered our cider into the CAMRA competitions for two years now and have so far been awarded 2 Bronze awards and 1 Silver award which means we can now call our cider "Award Winning".
- Contact local pubs and bars and sell your cider – face to face is better than ringing around.
- Get in touch with your local cider producer's network eg www.thethreecountiesciderandperryassociation.co.uk

TOP TIPS

- Ask your local CAMRA cider rep where they source their Bag in Boxes as they may have a group of cider makers who share costs in bulk orders.
- Make a flyer which describes what the profits will be supporting

Cider or juice? The juicy decider...

- There are a lot of dedicated cider drinkers who have a passion for it Eg. Beer and Cider festivals, the rise of the micro pub etc. This has meant an increased demand for cider throughout the UK.
- If you have your hands on lots of beautiful varieties of apples then juice can be a good option as selling single variety juices does have a market, but if like us you'll be using a mixture we have found cider is the better seller.
- On a stall we'll sell 20 bottles of cider to every 1 bottle of apple juice.
- The mark up on cider is much more than apple juice, so generates a bigger profit.
- There is less work involved in cider than making apple juice because apple juice needs to be pasteurised which is a lengthy process.
- There are public health risks with apple juice that do not affect cider (eg. patulin) making cider a safer drink to make. Patulin is killed in the fermentation process, whereas it is not through pasteurisation. Juice needs to be tested prior to selling; your local environmental health officer will be able to do this for you.
- Some groups working with recovering alcoholics, young people or some faith groups will prefer to stick to juice for ethical reasons.

Finances

- Starting off small and building up is a good way of getting practical experience and gives you time to attend talks, go on courses and meet and learn from other cider makers.
- We were making cider for a couple of years before we decided to start selling it to the public.
- So far this year we have made over £10,000 which was from 3500 litres of cider produced. This has paid the wages of one of our staff which means we now only need to source funding for our other worker. Funders have been really interested and keen to learn that we are generating this much income ourselves and this has helped us secure more external funding as we can prove we are more sustainable.

Prices

- Currently (December 2015), 1 litre of cider in the Midlands fetches around £2.00 - £2.50
- We charge £2.50 a litre which is the top end but have had no problem shifting it as people are aware it is for a good cause and that it is local.
- We can make more profit if it is bottled as bottles fetch between £4 and £5 a litre. Obviously this is more time consuming to bottle and label plus there is the added expenses of packaging, labour and processing space. However it still works out more profitable especially if you are dealing in small quantities of apples.
- It is easier to sell Bag in Box cider as this is currently the preferred type of packaging that pubs and festivals request.

Selling direct to public

- To maximise profit the best route would be to sell directly to the public through markets, running your own bars and selling from your premises.
- We currently don't have a personal license but plan to get one in the New Year. This involves a small fee and going on a one day course (www.gov.uk/guidance/alcohol-licensing). You can

sell at markets without a personal license by applying for a temporary events / alcohol license and you are allowed to up to five of these a year.

- Mulled cider at the Xmas markets was fetching £2.50 a cup which works out as roughly £7.50 per litre!
- It's worthwhile having other things on your stall to make it look good and entice people in such as a range of your cider bottles, apples, honey etc.

Final costs

- Bag in boxes cost around £3.50 - £4.00
- Bottles per pallet 24p a bottle and caps 0.02p each
- Labels depending on style 10p - 14p per bottle
- If you were to make the maximum allowance of 7000litres depending on what format you sell it you can make somewhere in the region of £17,000 to £28,000+ per annum.
- This figure compared to the amount of potatoes you could grow on your community garden is considerably more!
- The whole process is fun, exciting, rewarding for everyone involved as well as beneficial for the environment on a local and global scale.
- You will only succeed if you really have a passion for it because it is a labour of love and the overtime and hours spent taste testing, blending and more taste testing has to be done to ensure you have a fine product.
- So get involved, get started, even investing in a small basket press and hand scatterer you'll end up with more juice than you know what to do with and these bits of kits will be used for many years to come.



HAPPY APPLE-ING ☺

Produced by Summerwood Community Garden (Nottingham Blue Barrel Cider) for Growing Together, December 2015 (www.bluebarrelcider.com)