

NOTES ON WINEMAKING

Most wine books are based on other wine books. They show little originality, and are badly out of date. Some, for example, still recommend making champagne-type drinks in glass bottles; highly dangerous for the amateur; or say that storage of wine in plastic containers is unwise. I even saw one recently-published book recommending amateurs to use wooden casks for storage. This is really not on, and the persistence of such views is extraordinary. The odd way in which wine books are written probably accounts in part for the decline of home winemaking.

These notes are based on practical experience of winemaking over the period 1985-2001. No commercial winemaking book has been consulted.

Copyright Nigel Deacon, August 2001.

INTRODUCTION

Many people try home winemaking and give it up after a batch or two. This is almost always a mistake. One is not likely to achieve success at the very beginning; this applies to most activities, not just making wine...

What you will need is plenty of space. You will also need a source of fruit, a few demijohns picked up for very little at a car boot sale, some airlocks or pierced bungs, a siphon, and a couple of 2-gallon or 5-gallon containers with lids. Any winemaking shop, and many chemists, can supply the basic implements. If you wish to put finished wine in glass bottles you will need a good corking tool.

You will also need a modicum of patience and the odd hour or two of spare time. But remember that this is not an activity which needs lots of time. Once one is organized, the time required is quite minimal; in perhaps an hour or so once a month I make around 20 gallons a year plus 10 gallons of cider.

BASIC RECIPE FOR FRUIT WINES:

3-4 lbs fruit, 2 lbs sugar, 8 oz raisins, currants or sultanas, and yeast makes one gallon.

PROCEDURE

PREPARE THE FRUIT

The fruit must be free from spoilage organisms. Failure to remove them may result in the wine turning to vinegar. There are three ways of killing them:

- a) Boiling
- b) Freezing
- c) Chemical sterilization.

Spotlessly clean fruit can be sterilized by pouring boiling water over it, but fruit of winemaking grade will not be bacteria-free after doing this; boiling or freezing will be necessary. Do not use your best fruit for winemaking; the product is no better.

BOILING

Works well with dark red fruit, especially elderberries and mulberries. The juice is strained off and the pulp discarded. Not to be recommended in fruits of delicate flavour. Wines produced from boiled fruit can suffer from two drawbacks: a) very slow to clear; often a year or two: this is why you need storage space; b) less bouquet; but for making full-bodied reds it works well. Wines made in this way are often sweet and do not ferment out fully.

FREEZING

Two days in the freezer will result in most fresh fruit being reduced to the ideal state for fermentation. This works well with all soft fruit, and is my preferred method for nearly all wine. Recommended for gooseberries, raspberries, loganberries, cherries, mulberries, blackberries, also elderberries if sufficient space in the freezer is available. Wines produced in this way tend to have a stronger bouquet and clear rapidly. Cherry wines, for example, frequently clear in a month.

CHEMICAL STERILIZATION

Not recommended. A principal attraction of home-made wines is that the sulphurous after-taste of cheaper commercial wines (especially whites) is absent. If you prefer chemically sterilized wine, buy commercial.

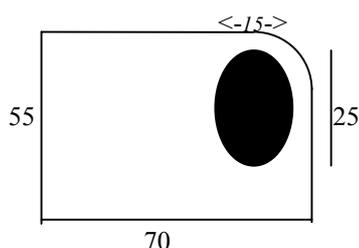
STARTING THE FERMENTATION

This is covered in detail in most wine books. My method is to place the 3lbs (or more) of prepared fruit in a fermentation bin; usually straight from the freezer but occasionally boiled (or in the case of peelable fruit, fresh-for example, banana or pineapple). Add a few pints of cold water. Meanwhile simmer 8 oz of sultanas (or, less good, raisins or currants) for 30 minutes in about a pint of water. Then pour

into the fruit mixture. Add cold water until the total volume is just over a gallon. Add nutrient and stir. Add tannin if the fruit doesn't contain any. (don't buy it-a few fruit stalks, stones or cores will do the job). Sprinkle in some yeast, or add a cupful of mixture from another brew, stir again, and then cover. After a couple of days the fermentation should have started. Stir vigorously once a day for about 4 days.

Some fruits contain pectin (e.g. bananas, redcurrants, apples, sloes, cherries) and this will make the wine cloudy, especially if they have been boiled. A pectin-destroying enzyme can be added with such fruit, or the wine may be reluctant to clear. It is added at the same time as the yeast (but see note at end) Do not forget to label the jar. A snap-around label which fits around the demi-john handle can be made as follows from a piece of plastic from a detergent bottle or similar;

(all dimensions in mm)



this can easily be transferred from jar to jar during racking, and sticky labels will adhere to it. Write in pencil, so that spillages don't render it unreadable.

CHOICE OF DRIED GRAPE

Failure to use some form of grape in the mixture may result in an anaemic wine. The following comments may be helpful:

Raisins are dried red grapes. Their flavour is quite strong and results in the finished wine having a strong hint of sherry in its makeup. It is most noticeable when the other ingredients have weak flavours. If you dislike sherry, raisins should be avoided.

Currants are smaller dried red grapes with a very strong flavour. They are not generally recommended, but tolerable in elderberry brews.

Sultanas are dried white grapes. Their flavour is relatively weak (though not negligible) and is not carried over too much into the product

wine. But again, unless one is aiming at something with the character of a sherry or port, 8 oz per gallon is enough. I find sultanas better than raisins or currants and use them for nearly all brews.

Those lucky enough to have fresh grapes available can use 1-2 lb per gallon instead of 8 oz. dried fruit. Grape concentrates can be used to produce excellent wines, but they are five or six times the price of dried grapes. One should not encourage extortion.

Pineapple juice is a good grape substitute; gooseberry less good.

AFTER 4 DAYS

Scoop out the fruit debris with a cooking sieve. Put on the compost heap; it is an excellent activator. Sterilize a demi-john with a weak solution of non-scented disinfectant and rinse out three times with a pint of water. A disinfectant smelling of chlorine is the most suitable. Do not waste money on Campden tablets. Using a funnel, pour the fermenting mixture into the demi-john, which should become about three quarters full, and immediately seal with a fermentation lock. For the first day or two, foaming may occur. When the fermentation starts to slow down, top up to one gallon. If any foam or other debris reaches the bung, remove it with a small teaspoon.

A good fermentation lock may be made as follows: Obtain a rubber bung with a hole in it; stick two layers of waterproof insulation tape over the hole, and make two small perforations with a pin or knife point in the tape. This bung will let gas out but will not let flies in.

After a week or so, debris will be largely settled. When the fermentation stops (or nearly stops) and the wine starts to clear, siphon or pour off the top layer into a second clean jar. Top up again with cold water. This process ("racking") is carried out as many times as is necessary, typically about three, until the wine is ready for bottling. To rack a substantial quantity in jars using a siphon you will need two empties. This means you can wash one whilst the other is siphoning. If you are concerned that racking dilutes the wine too much, top up with apple or pineapple juice rather than water. I keep a demi-john of half-fermented cider on the go for topping-up purposes, but you may not have the space to do this. Pineapple top-ups give the wine an excellent bouquet; a litre costs about £1 and contains enough for about 6 demijohns.

BOTTLING

Taste a little of the wine. It may taste very unpleasant at this stage, but you should be able to tell whether or not any sugar is left. If sweet, it is not ready to bottle. If completely dry to the taste, hold it to the light. Is it still producing any gas? If so, it is still not ready to bottle if you want a still wine. One must be patient; sometimes a wait of a year or so is necessary.

TYPES OF BOTTLE

a)GLASS

I used to use this for dry wines which I made in small quantities and intended to keep for longer than three years (elderflower, mulberry and banana, for example). I never use glass now apart from wine for giving away; it takes too long. However, if you must use glass, get a decent corker-the sort with a long lever-otherwise corking becomes a tiresome, difficult chore. Warm the corks in water on the stove for a minute or two to soften them. Leave the bottled wine upright for a day or two for the corks to harden, then cover with clingfilm and tape round, or rub the top of the corks with vaseline and drip candlewax until it seals. Lay the bottles down if you wish, but if they are properly sealed this is not necessary. Mine are nearly all stored upright, and the corks never dry out: if properly sealed, they can't. Note that sweet wines should only be bottled in plastic. Refermentation may cause explosions and flying glass unless chemicals are used to kill the yeast.

b)PLASTIC (SCREW-TOP)

I use this for most of my wines, especially those produced in larger quantities. These bottles are also useful for ciders. A demijohn will fill completely two two-litre bottles, or four one-litre bottles. The most suitable are those used for lemonade and tonic water. The smaller ones (half-litre) can be used for beers; more on this later. Obviously one does not serve wine from plastic containers at the table any more than one keeps a dustbin in the kitchen. But a two-litre bottle will fill three decanters (or one decanter three times) and this can be done the day before use.

There are advantages to using plastic bottles:

- a)Ease of sealing;
- b)No danger if gases build up and the bottle bursts (glass bottles can explode like grenades);
- c)Sparkling wines can be made easily, or even fair imitations of champagne.

They are also rather larger than standard 750 ml wine bottles; a gallon of wine consequently takes up less space in storage. They will store upright or flat, but should be allowed to stand upright for a week or two before use, to allow sediment to settle. If used more than once, the tops and the screw threads of the bottles must be sterilized in disinfectant; this is where bacteria hide. Pour some disinfectant in a bowl, pour some more in each bottle and loosely screw on the top. Invert the bottles in the bowl and leave for a few minutes.

SPARKLING WINES

Add to a dry wine in a plastic bottle the necessary quantity of sugar. Replace the top, shake briefly, and return to store. When the bottle feels hard to the touch it will be sparkling. When very hard it will be like champagne. A heaped teaspoon of sugar in a one-litre bottle will produce an almost-dry sparkling wine. If a sweet sparkling wine is required then the quantities should be doubled or tripled. Bear in mind that the fermentations induced in the bottle in this way will continue until all of the sugar is used up. Sweet sparkling wines will therefore burst the bottles if not drunk promptly or de-gassed. Typically, the "priming" process, as it is called, takes from a fortnight to a month, depending on the temperature. In a cold basement or cellar it would probably take about a month; a working kitchen in winter, about a fortnight; in a hot summer a week might suffice. The method will become obvious after a few batches have been made.

Glass bottles cannot be recommended for bottling sweet wines or for the production of sparkling wines or champagne, for reasons of safety. You have been warned.

Sparkling wines (or elderflower champagne-see below) are best drunk chilled; the fizz lasts longer and the taste is less sweet.

APPLES

Apple wine is rather unremarkable. Better to turn it into cider. Use windfall apples or, as a second choice, good quality ones. Basic recipe: 4 lbs apples, 1 lb sugar, yeast to 1 gallon water. You don't need an apple press. Cut the apples into slices, discarding grubs and cores, place in bags in the freezer. Since water expands as it freezes this will pulverise the

fruit very effectively. Remove when frozen solid; place in fermentation bin. Add about a gallon of cold tap water for each 4lb of fruit. Add a few spoons of sugar and some yeast. As more apples become available, freeze them. I use whatever windfalls appear, slice them up and place them in the freezer each morning before going to work. Don't use a food processor; we are not making apple sauce. When frozen solid, add the sliced apples in batches to the mixture. Add the rest of the sugar. Stir each day. Keep a label on the top of the bin to keep track of how much fruit/sugar have been added. When appropriate (a few days after the last addition) scoop out the apple debris with a cooking sieve - and put on the compost heap. Pour the raw cider into demijohns and continue the fermentation. When it has almost stopped, siphon or pour the cider off the sediment, into clean jars, and top up. Store in demijohns; do not bottle until a month before required. At that point, pour into screw-top plastic bottles containing 1 heaped tablespoonful of sugar for each litre. Leave a two-inch gap at the top of each bottle. This will make it easier when opening and will avoid fountains of froth. Unscrew cautiously and slowly. It may take a few minutes for a bottle to de-gas sufficiently to pour it into a glass. As with sparkling wines, one can tell when the cider is ready to drink by the hardness of the bottle. Store them vertically, standing on a flat surface. Any bottles which fall over in store are on the point of exploding (the bottoms have bulged out); approach them with caution, slacken the tops and use promptly. If, on the other hand, you like non-gassy cider (I prefer it) then don't add any sugar when bottling.

Two points: the cider should clear fairly quickly, but will not reach the full brightness of commercial cider (do not be put off by this; commercial ciders are clear only because they have been chemically adulterated and filtered); secondly, ciders are much better if made with acidic apples. Brews without acid are rather bland. I usually include in my ciders at least one of the following to add acidity:

- a) Crab apples, sliced & frozen as before. The amount can be anything from a handful to a couple of pounds per gallon depending on the must's acidity.
- b) Quinces of the "japonica" type; half a dozen per gallon; the seeds removed and the quinces frozen with the apples;
- c) Some under-ripe apples. These can be used as early as mid-July and need only be an inch and a half in diameter.

- d) Malic acid or citric acid (less good) bought from a chemist
- e) lemon juice.

If you use e) the clarity of the cider may be lower.

Other fruits (damsons, lemons, slightly underripe blackberries) can supply the necessary acid.

In the absence of proper cider-apples varieties (and very few have access to these), Bramleys or other cooking apples make a good brew. Eating apples can obviously be mixed in. Allington Pippin and James Grieve are good because of their high acidity; Laxtons are good because of their rich flavour but make poor cider used on their own. Other fruits can contribute; one of the best ciders I made contained 10% over-ripe peaches, and another good brew contained more plums than apples and was coloured bright red. Use what is available; there is no point in chasing ideal ingredients when improvisation might produce a better result.

BEERS

Excellent beers can be brewed from kits, more cheaply and with less trouble than from raw ingredients. Such ingredients require specialized equipment including a large capacity water boiler. "Mashing" is also difficult. Unless one wants to go through the whole process, the procedure is as follows:

Add malt/hop extract to 5-gallon container; add two or three kettles of boiling water poured over. Stir in 2 lbs (or 1-kilo bag) sugar, then add cold water to make 5 gallons. Add yeast (specialized beer yeast, not wine yeast) sprinkled over the surface. Cover. It should be fermenting strongly in 24 hours. Leave it for about 10 days, covered, resisting the temptation to stir it each day. Beer is more prone to spoilage than wine because of its lower alcohol content, so it should not be exposed unnecessarily to the air. After this time, siphon into 5 demi-johns fitted with fermentation locks.

The beer will keep in this state for months without damage. It still contains residual quantities of yeast. To give it a good "head", bottle into screw-top half-litre plastic bottles, priming each while still empty with a level

teaspoonful of sugar. I bottle just eight at a time, which takes about ten minutes.

FAVOURITE RECIPES FOR WINE

ELDERFLOWER

Use a pint of petals and 8 oz sultanas plus lemon juice and thinly pared rind. A wine with an excellent bouquet. This wine can be improved by using white grape concentrate rather than sultanas.

A non-alcoholic "elderflower champagne" can be made by adding to six elderflower heads a gallon of water and 1.5 lbs of sugar plus the juice and thinly pared rind of one lemon and one tablespoonful of white wine vinegar. Leave overnight, scoop out the debris, and pour the liquid into plastic screw-top bottles. This is ready when the bottles go hard; usually about a fortnight. Left for three weeks they will sometimes explode.. Do not leave them in a place where your popularity might be affected.

PEACH/NECTARINE

An excellent wine. Should be light in character and colour and with very little tannin.

ELDERBERRY

Heavy, rich red wine. Add some tartaric acid ('grape acid') or malic acid ('apple acid') for an improved bouquet, or half a pound or so of other more scented fruit (raspberries, strawberries, or even banana). Tartaric acid and malic acid can improve the bouquet of a wine by a natural process called esterification. Citric acid, or lemon juice, can do this but not to the same extent. Cherries contain lots of malic acid; these also will improve the wine's character; say a few ounces added per gallon. I keep a stock of these in the freezer.

A lighter wine can be made by decreasing the amount of elderberries and substituting with apples. Elderberry/blackberry or elderberry /blackberry/apple mixtures are also very good. Elderberries are high in tannin so this need not be added separately.

BLACKBERRY

Bright red wine a little more fruity and less port-like than elderberry. Add lemon juice/malic acid/tartaric acid for acidity, or some crab apples. I have found that a mixture of 2lb blackberries plus a pineapple (or 1 litre pineapple juice) makes a good brew even without sultanas or raisins.

LOGANBERRY

Similar to blackberry wine but lighter in colour. The flavour is excellent and the bouquet is a little stronger.

STRAWBERRY

A good wine which takes about three years to reach its best; very young strawberry wines are bland and somewhat disappointing. Remember to add enough acid. The wine is better if blackberries are added.

MULBERRY

Mulberries are harvested by gathering up windfalls or by shaking the tree. They will not drop off until overripe, and most mulberry trees are too large for easy access. The fruit must be sterilised thoroughly by freezing or boiling because much of it will have been walked on by fruit flies. A couple of bananas will improve the brew.

The wine which results is rich in flavour and bouquet; red to deep red-brown, and often resembles sherry. It can take a long time to clear, and I leave it for at least 3 years before drinking. The flavour of mulberries is strong, and this wine is one where raisins can be used without spoiling the flavour. Tannin additions are unnecessary. But not everyone will like this one; mulberries are an acquired taste.

APPLE WINE

See previous comments. It is not really worthwhile to brew apple-only wines. Eating or cooking apples are best mixed with other fruits or turned into cider. Crab-apple and blackberry is worth making; the wine produced is a light bright red and a good summer wine to drink with meals. Surprisingly, crab apples are a better wine ingredient than ordinary apples. Most of their acidity disappears when the fruit breaks down, and wines made from them have a better than average bouquet.

CITRUS WINES

Reputedly good, but I cannot get them to clear, and now no longer make them. Orange and blackberry is very good, but my last two batches took over a year to clear. I recently found that citrus fruit is high in pectin so this probably accounts for it.

BANANA WINE

A good use for cheap, over-ripe bananas from the local fruit shop or market stall. The wine is

pleasant and light with a good bouquet. Don't forget to add plenty of acid and some tannin. Best after two or three years.

GOOSEBERRY WINE

Better when made from unripe gooseberries. The fruit is prepared by placing in the freezer for two days. This is one of the few wines where dried grapes can be omitted, especially if a sparkling wine or champagne is made. For a still wine I would include them, but in lower quantity than in other fruit wines.

Riper gooseberries have a stronger scent, and if used, this aroma carries over into the wine. It disappears on prolonged storage, i.e. several years in the bottle. Some types of gooseberry can be used to make wine of widely differing types: for example, a "hock", a rose, and a red can all be made from the red gooseberry "Lancashire Lad", depending on when the berries are picked.

Gooseberry champagne, made from unripe gooseberries, sugar, yeast, water and nothing else is excellent.

MIXED FRUIT

A good table wine can be made by emptying the freezer of unused fruit once a year, and mixing it together in one large brew. Mixed soft fruit is the most successful. Don't include rhubarb. Similarly, don't add too many gooseberries, as these will swamp other flavours, and don't use plums or damsons; these are best kept for adding to cider brews or treating separately. Plums are sometimes oily when fermented, and brews containing them can be difficult to clear. "Plum Cider" is worth making if plums are available; the recipe is as for apples but a cupful of orange juice should be added per gallon if the brew shows signs of oiliness.

CHERRY WINE

Cherries cost a fortune to buy in winemaking quantities and this is not usually a viable option. In any case, eating varieties are not the best to use; Morellos are better. But ornamental cherry trees, particularly the ones planted by local Councils in and around parks and elsewhere, often carry heavy crops of fruit, especially those with white blossom. Last year I rose early on six successive mornings and picked about 35lbs. in a few hours. In my area the red-blossomed ones carry no fruit, and July-fruited (from about July 7th-21st) have the best flavour. They vary in size and colour; all make good wine which clears rapidly but

the small black varieties are really the best. Use 4lbs per gallon rather than 3 to allow for the stones; 5lbs will change the wine's character to that of a sherry. Place them in the freezer for two days before use. There is no need to stone the fruit. On day 2 of the fermentation, put on rubber gloves and squeeze the fruit in handfuls, then let it drop back into the mixture.

JAPONICA QUINCE WINE

Quinces must be boiled or frozen before use. Their flavour is pleasant but overpowering, and although they can make a good wine they are best used in moderation (8 ozs or so per gallon maximum) in conjunction with other fruit or as an ingredient of cider. My method of preparation is to slice off the sides and the ends using a sharp knife and a breadboard; the seeds and cores are then easily discarded.

GINGER WINE

Use 1lb fresh root ginger per gallon; slice and pass through the mincer along with 1 lb sultanas. Add 1 kilo sugar; then a kettle of boiling water. Stir; top up to one gallon. Add pectolase when cool, and nutrient. This wine virtually makes itself and clears very quickly.

DRINKING THE WINE

a) LONG-TERM STORAGE

If you have adequate storage facilities-say a cellar, garage or basement capable of holding a couple of hundred bottles- try to leave all wines for at least 18 months or so before drinking. Keep dark if possible; red wines are bleached to some extent by light. Most wines, particularly the reds, will improve for several years, and the initial harsh tastes of elderberry, blackberry and mulberry especially will become much softer and mellow. Five-year-old elderberry/ blackberry/ apple wine when well-made is almost indistinguishable from good quality Australian or French reds. Other five-year-old wines (strawberry, mulberry, banana) are better in flavour than mass-exported grape wines.

b) DECANTING

It is vandalism to unseal a bottle of wine and to drink it straight away. This applies to any wine. To take a commercial example, a good Auslese (a high-class German white wine) is better if opened the day before use, poured off the sediment into a decanter, then placed in the 'fridge until the next day. (If the original bottle needs to be used at table, it should be rinsed

out; the wine poured back into it and taken out of the fridge an hour or so before use). A really good wine of this type will improve perceptibly for several days, after opening, if properly stored, and will keep in excellent condition for about a fortnight before it starts to deteriorate. A friend of mine with a good wine cellar used to reckon that the best German wine improved, after opening, for about the same number of days as its age in years. The same principle applies in some measure to all wines, whether commercial or home brewed. When a bottle is opened, it takes time for the volatile compounds in the wine to be released, and for the final traces of harshness to disappear. Opening a wine the day before it is needed will almost always result in a significant improvement in flavour. Proprietors of eating houses will not thank you for telling them.

A further point is that undecanted wines are unsuitable for transporting in the back of the car if they are to be drunk that day. The sediment is disturbed and the wine when opened will be below its best. If a red, it may be undrinkable. If invited to a friend's and taking wine specifically for the meal (especially home-brewed), decant it first. And make sure that the host has not already decanted enough wine from his own stocks. He may prefer to use that and save yours for another occasion.

c) THE CORRECT TEMPERATURE

Whites are best served slightly chilled (not refrigerated), after several hours on the cellar floor, or at least a cold floor. Ice buckets are an affectation which does nothing useful for a wine. Reds are best at room temperature.

IS WINEMAKING WORTHWHILE?

Those who regularly brew and drink their own wines find many supermarket wines harshly flavoured and sulphury. Cheap wines induce headaches in cases of over-indulgence, perhaps because of the chemicals they contain. (Many commercial wines are treated with sulphite prior to bottling to stop them blowing their corks, for example.)

Notwithstanding the previous remarks, the situation in English supermarkets has improved a lot over the past few years, and moderately priced decent wine from the Continent and elsewhere is more affordable than ever before. But cost is not the primary reason for home-brewing. Obviously we are not in competition with the Rheingau or the top French producers; some of their wines are unsurpassable and we

must not get too impressed by our own efforts. But wines can be made, with a little effort, which compare well with all but the very best commercial wines. The process of gathering the fruit and setting the process going is an interesting one. And nothing can compare with the unique flavour of some of the best "country wines".

UPDATE.....

BASIC RECIPE

I now use 4lbs fruit per gallon rather than 3 and find the wines are a bit fruitier.

PECTOLASE

I have stopped using pectolase and the wines appear to be exactly the same as before, most of them clearing within 6 weeks. Apparently most fruit contains pectolase anyway. Boiling destroys it - which explains why wines made from boiled fruit take longer to clear.

RACKING

I have disposed of my plastic tubing and pour the contents of one jar into another rather than siphoning. It's quicker and cleaner. The dregs are poured into another jar, allowed to settle, and kept for topping up. You might have to rack slightly more frequently but this is no hardship.

NUTRIENT

I have not used this for several years. If grape concentrate or sultanas are used at a half pint or half pound per gallon there's probably more than enough nutrient there to keep the yeast happy. If you do any second fermentations (putting in more sugar and fermenting on the same fruit pulp) the wine usually turns out to be paler and sweeter. Doing this can be useful in years when there's less fruit, but it's no good for making dry wines. The yeast will not be able to ferment out all of the sugar.

CIDERS

Cider is probably the one home-brewed drink which is undisputably better than commercial. I consider July cider the best, perhaps because early underripe apples are sharper in flavour, but apples are often scarce in July. If not enough are available one can make up the shortfall with cherries, which are plentiful in this area, or overripe peaches/nectarines, frozen solid as before, or as a last resort, a

litre of apple juice - preferably English- from the local supermarket.

The commonest fault with a cider is that it is too bland. This is almost always due to a lack of acid, when when eating apples are used in the brew. Remember that commercial cider apples are almost inedible when picked off the tree; they are extremely sharp, bitter, or both. The fermenting mixture should be sweet but very sharp to the taste when the crab apples, quinces, damsons, or whatever, have started to break down. If the taste is bland, more acidity and possibly more tannin is needed. It is OK to use the basic 4lb of apples, set the mixture fermenting for a fortnight or so, remove the fruit, taste for acidity, and then to add the crabs or other acidic fruit in a second batch or a few at a time. They are removed when the acidity is judged to be just right.

WINES WHICH NEVER CLEAR

Occasionally one makes a wine which will not clear. Get rid of it as follows: to each gallon, add a litre of apple juice, some lemon juice and a little more sugar and make up to 2 gallons, then pour into screw top plastic bottles. This will make an acceptable cider.

Comments are welcome on any of the above.
Email address: suttonelms@ukonline.co.uk

ACKNOWLEDGEMENTS

I am indebted to my winemaking friends in Broughton Astley, especially the late Ted Stanhope, for some of the information contained above.

Nigel Deacon, Croft , Leicestershire. 5th edition. August 2001.

Wine2.wps.doc/harddisc