

## Notes on Fruit session with Les Bates

Explore the range of fruit available and learn about the factors which influence fruit selection, such as root stocks, flowering groups and compatibility, and learn how to care for them during establishment.

### Recommended books:

- Miles Irving – Foraging Guide
- Creating a Forest Garden: Working with nature to grow edible crops - Martin Crawford
- Woodlanders - Ian Edwards & Sara Hunt
- The Natural Garden Handbook Caroline Foley
- The Fruit Garden Displayed – Harry Baker
- Crofting Agriculture: Its Practice in the West Highlands and Islands - F. Fraser Darling

### Recommended websites:

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- Local Food Network for Scotland – <http://nourishscotland.ning.com/>
- Children's Orchard – <http://www.childrensorchar.d.co.uk/>
- Commonwealth Orchard – <http://www.commonwealthorchard.com/>
- Plants with Purpose - <http://www.plantswithpurpose.co.uk/>
- Appletreeman - <http://plantsandapples.co.uk/>

### Edible Fruits

There are some fruits that you would struggle to grow well here, unless you had a heated glasshouse, such as nectarines, peaches, kiwis and so on. There are however plenty of fruit types that you can grow well here, such as apples, blackcurrants, gooseberries, strawberries, raspberries. There are many plants which produce edible fruits and leaves, and what we grow to eat is very much a cultural habit. Les is enjoying the attention that many plants are currently receiving as “new super foods”, such as goji berries, as this is bringing a wider range of plants into the limelight. There are many besides the current faddy favourites, which Les recommends for our gardens.

An example is Amelanchier which has many names, including “June berry” and “shadbush”. This produces small black berries, slightly smaller than blackcurrants. It is a coastal plant, and grows in early successional habitats. It is often selected for gardens as an attractive shrub, grown for its flowers and the show of colours in the autumn.

Another edible berry is Aronia, also known as chokeberry. Juice from these berries is astringent and not sweet, but high in vitamin C and antioxidants. The berries can be used to make wine, jam, syrup, juice, soft spreads, and tea.

Cherry plum is a large shrub, or small tree, which produces delicious small-sized plums, which is great in jam and chutney. The cherry plum is originally from Asia and a nice addition to a hedgerow. It flowers early in the spring.

## Choosing your Fruit Trees

### Rootstocks

Fruit trees are propagated onto rootstocks. The rootstock is the most important factor in determining the vigour and eventual size of the tree. The difference in size can be quite dramatic. For example an apple tree on a very dwarfing rootstock may grow to an eventual height and spread of only 5 ft (1.5 m) while the same variety of apple on a vigorous rootstock grows into a large tree over 20 ft (6.5 m) in height and spread. The choice of rootstock is therefore very important as it will determine the suitability of the tree for the position and the form in which you intend to grow it.

Les recommends M26 as a rootstock that will produce a tree that is not too big, and not too small for a smallish garden - about 10 ft (3 m).

### Pollination

Some fruit trees are self-fertile and will produce a good crop on their own. Most however, require or will benefit from a pollination partner. The pollination partner must be a different variety of the same fruit species which flowers at about the same time and is compatible in other respects. Many suppliers will list a pollination group for any given tree, to help you determine compatibility. Some suppliers (e.g. Keepers Nursery) will offer further assistance in selecting compatible, with a “show suitable pollination partners” option for each fruit tree in the online catalogue. Crab apples flower longer, so are often selected as pollination partners.

Les recommended:

- John Downie
- Harry Baker – big purple / pink flowers, nice leaf colour, big apples (for crab)
- Wisely Crab – white flowers

### Age, size and form

Generally, fruit trees are supplied as one and two year old trees old trees. Older fruit trees become increasingly difficult to transplant. One year old trees are referred to as maidens. Depending on the variety some have branches (to use the technical term are feathered maidens) while others have little or no branching (maiden whips). Maidens have had little or no formative pruning. Two or three year old trees usually have a well developed branch structure and have had some formative pruning towards a form appropriate to their respective rootstock. It is also possible to purchase trees trained into specialised forms such as fans, espaliers and cordons.

Bare-rooted trees and bushes are cheaper to purchase than container grown fruit, and it is generally considered the best way to plant fruit trees. You should plant bare-rooted trees and bushes while they are dormant, from November to March, outside that time you would need to purchase container grown plants.

When you are purchasing your fruit trees at nurseries, check the plant for damage from cans or supports. Check also for the shape, especially for an older, more expensive tree.

## Suppliers

Les recommends Ardfearn Nurseries, as a local supplier for a variety of fruit. They buy in their fruit from growers in Cambridgeshire, so trees and bushes will be available as soon as the supplier is able to move them from the ground (i.e. when growth has stopped, and the ground conditions are good). Fruit trees need a cold period for the right length of time. Climate change bringing us warmer wetter winters will gradually change the conditions that we have, and may reduce the cold period, making fruit trees available from nurseries later.

Les also suggests J Parkers <http://www.jparkers.co.uk>, however you should check what rootstocks they have and make sure it is what you are looking for, as they seem to be moving towards dwarfing rootstocks rather than M26.

<http://www.butterworthsorganicnursery.co.uk> John Butterworths Organic Nursery in Ayrshire was unusual in that it is located near Ayr, rather than the south of England, where many other fruit nurseries are. The aims of Butterworths were to produce suitable varieties, (historic and modern) of fruit trees that do well in more difficult parts of Britain, i.e. the North, West and higher altitudes. Unfortunately, John Butterworth has retired from the nursery now, although it is still possible to get in touch with enquiries.

## Focus on Apples

### Top ten Apple varieties in Scotland

The following are known to do well over a wide area, though there will be others on which further information is still being gathered. It should be noted that more Scottish varieties probably could be identified or recorded.

### Eating Apples (E)

Charles Ross, Discovery, Ellison's Orange, James Grieve (except NW) Worcester Permain

### Cooking Apples

Bramley's Seedling, Emneth Early, Grenadier (except NE) Lord Derby, Howgated Wonder (except (NW, NE)

- **Charles Ross (E)**

A mid season apple, very useful in Scotland. Keeping through October – January. Description: Attractive round to conical, orangey- red over yellow. Firm juicy flesh. Origin: Peasgood's Nonshuch x Cox's Orange Pippin – in 19<sup>th</sup> Century from Newbury in Berkshire. Named after a Scottish Head Gardener at the garden.

- **Discovery (E)**

Very successful in most Scottish regions. A good early fruit (September) but short term keeper.

Description: orange to brilliant crimson. Very tasty acidic / sweet flavours. A hardy disease resistant tree. Popular with organic growers.

Origin: Worcester Permain x Beauty of Bath (?) in 1949 from Essex, by Mr Drummer.

- **James Grieve (E)**

Well known throughout UK. Possible preference to east coast. Season September – December.

Description – round to conical, red over yellow, sharp flavour. Useful pollinator for other apple varieties can be prone to scab, so good pruning management is important.

Origin: Edinburgh in 1890s named for a Mr James Grieve of Dickson's Nursery.

- **Worcester Pearmain (E)**

Very successful in most Scottish regions, comparable to Discovery in many attributes. Description: frost resistant crimson bloom, reddish fruits, very sweet. Does well ripening on tree. Tip bearer, so not very suited to espalier form. Origin: from Devonshire Quarrendon, in 1870s, attributed to a Mr Hale in Worcestershire. Used to be grown commercially in Clyde Valley.

- **Bramley's Seedling**

Best of all cooking apples, does well in most Scottish regions. Description: vigorous partial tip bearer. Prefers sheltered drier situation, scab can be an issue in wet seasons. Origin: the original tree is still growing in Nottinghamshire, from seed planted by MaryAnne Brailsford in 1810.

**Good fruit varieties for growing in Black Isle**

- **Apples**

Charles Ross, Ellison's Orange, Discovery, Laxton's Fortune, Worcester Pearmain, Grenadier, James Grieve, Bramley's Seedling

- **Pears**

Conference, Williams Bon Chrétien (cordons)

- **Cherry**

Stella



Delicious dessert apples



Victoria plums

- **Plums**

Victoria, Czar, Merryweather, Damson

**Espaliers**

The term espalier refers to the way fruit trees are trained to grow against a wall. It makes the tree easier to prune and the fruit easier to pick. This decorative method was often used traditional walled kitchen gardens and is perfectly suited to growing fruit in the smaller garden. It can also be used as an

attractive separation or screen between different parts of a garden. Perfect for the small garden, an espalier tree has branches trained horizontally on either side of the stem to make a compact, but productive tree.

Many varieties are suitable to grow in this way, but it is a good idea to check before you purchase. You can also buy a ready-trained tree at garden centres or from catalogues during the winter time. You can also buy espaliered trees in pots at garden centres which are available all year round. These are perfect for growing where space is limited.

In the espalier system, the tree comprises a central stem and horizontal fruiting branches. It is very important to train the tree correctly in order to achieve a tree that produces good fruit on all the horizontal branches for the next 20 years or so. Do not train the branches until the sap in the tree is running vigorously, i.e. from around mid-May.

In the first year of training, you will form the first tier of the espalier, and therefore you will create a tree with three branches: the two side branches, and the upward leading branch. In mid-May, tie the two lower side branches to an angle of about 60 degrees (from the horizontal). At this stage, you can remove all other competing branches from the tree, so that growth will be concentrated in the three branches you need.

Wait until the second week of August, and only then, lower the two side branches to the horizontal. If you lower the branches to the horizontal position too early in the growing season, the upright vertical leading branch will absorb all the nutrients and the first tier of the espalier will be too weak in future years.

During the last week of August, remove all surplus upright growth from the espalier frame work. Then cut a notch in the upright branch above the first horizontal tier, at a height corresponding to where you would like the next tier to be formed the following year. This is usually about 18 inches above the first tier. The depth of the notch should be about a third of the thickness of the upright branch. It stimulates the tree to produce branches at exactly that point.

The following year, build the next layer of the espalier, following the same routine as the previous year. The following August, establish the final tier of the espalier, selecting two branches and training down to a 90 degree angle. The tree should be fertilized with either a tree feed such as "Growmore", or a home made feed such as comfrey and / or nettle.

During the growing season (May-October), keep the area under the tree canopy free from weeds and from grass in particular. Only prune in the winter once the tree is in full production and therefore is in need of spur replacement.

### **Protecting trees with natural insecticide & fungicide**

Elder spray kills aphids, small caterpillars and is useful as a fungicide for mildew and (blackspot on roses), or scab on apples roses. The toxic agent is hydro-cyanic acid, so in preparing the spray use an old saucepan. Gather 450g (1 lb) leaves and young stems of elder prefer-ably in spring when the sap is rising. Place in the saucepan and add 3.3 litres (6pt) water. Boil for half an hour, topping up as necessary. Strain through old tights and use the liquid cold and undiluted. It will keep for three months if bottled tightly while still hot.

Apple tree scab: Grow any member of the onion family around the base of the tree. Chives work the best. You can also make a tea from chives and use as a spray on your apple trees to help protect from scab.

To protect your trees against codling moth, coat a ring of wax around the trunk of your tree to stop them crawling up.

Sage is an antiseptic herb. You can make use of the properties of this herb to protect your fruit by making up a "tea" which can then be sprayed on the ground surrounding your fruit to get rid of pathogens

If you apple trees show signs of scab, don't compost the leaves and apples – these should either be incinerated or added to the council green garden waste recycling.

### **Planting Fruit Trees into Lawn**

Dig 1 meter diameter around where you want to site your tree. Remove the turf. You should consider adding some blood fish and bone to the soil – this should be mixed with compost. Since this was once lawn, there will be no leaf litter layer, so you will need to add some leaf mould. If you are putting in more than one fruit tree to your lawn and once, you will need to have them at least 8 feet apart. Water in the trees – soak the roots overnight.

The graft must be above the soil level. This is also why it is a good idea to keep the grass down, so that no roots from above the graft try to take hold. Never plant it any deeper than where it came out of the ground – look at the colour of the bark as a guide to help determine what was previously in the soil. Apply some mulch to keep the moisture in.

### **Soft fruit bushes and canes**

#### **Pruning Gooseberries**

- A gooseberry bush becomes tangled and unhealthy without pruning.
- Good management means keeping the centre open to air and sunlight, leaving a few, regularly-spaced, main branches.
- In winter, prune out dead or diseased stems, and any crossing in the centre.
- Cut back to a young shoot.
- Thin overcrowded areas and prune drooping stems to an upright side shoot.
- Shorten new growth by half to maintain an acceptable size.

#### **Pruning brambles / blackberries**

- Bramble /blackberries and hybrids such as loganberries and tayberries are all pruned in the same way. New canes grow one season and fruit the next, after which they are exhausted and can be removed.
- The problem is that generations overlap, so a plant will have one-year-old canes bearing fruit, mixed with the next season's stems making their early growth.
- To prune the plants, cut out the fruited canes at ground level and replace them on the wires with the new ones.
- If there are not enough of these new canes to cover the whole area, retain the best of the old canes, shortening any side shoots to one leaf.

#### **Pruning blackcurrants**

- Blackcurrant bushes need constant renewal to ensure heavy crops. Older branches will bear fruit, but quantity and quality decline with age.
- For this reason new bushes are planted deeply so that the plant produces vigorous young branches annually from below ground.
- These are then used to replace older ones cut out after harvest.
- Each year remove about one third of the oldest stems - the bark is very dark to the point of being black - and any that are weak or very low.
- Always cut back to ground level or to a strong new shoot.
- You can combine pruning with picking the fruit, or wait until winter.

### **Pruning strawberries**

- Although not normally associated with annual pruning, strawberry plants produce a number of runners bearing young plantlets.
- These should be cut off to conserve the plant's energy unless you want to propagate new plants.

### **Pruning raspberries**

- Summer-fruiting raspberries behave like blackberries, fruiting on one-year-old canes that are cut out after harvest and then replaced by the young canes.
- Autumn-fruiting varieties, however, are cut to the ground in late winter to make way for new canes that will grow from the base and fruit the same year.