Understanding Fruit

- **How Pollination Works**

Why do I need to worry about pollination? Pollination is basically the transfer of pollen from plant to plant and is the key to creating fruit. Without pollination you will have very little to no success with producing fruit or berries.

Pollination is also much simpler than people think. Proper pollination between plants revolves around their bloom time.

For example, if you have one apple tree and you want to know what can pollinate it but you do not know which species you have, all you need is another apple that blooms during the same time as your current tree.

- **How To Get Started**

What should I plant? How many? We always recommend starting with something you really enjoy. The more you're excited about your fruit or berry production the easier it will be to keep up with its maintenance. Quantities only matter when in need of a pollinator, we always recommend starting with 2-3 plants for proper pollination. More than 3 can be stressful to find the correct amount of space & to keep up with!

Berries are typically the easiest edible plant to start with. Raspberries and blueberries have the least amount of disease & pest issues of the fruiting plants in VA and easily produce berries without as much pruning or fertilization as other fruit trees.

- **Pruning**

We cannot stress enough the importance of regular, annual, aggressive pruning. It is essential to maintain the ongoing vigor of the tree and to maximize the production of fruit.

First year pruning sets the eventual shape of the tree. If your tree is taller than 4-6' above ground, after it's planted, trim it down to that height. Thin out the inward growing branches and any branches which are crossing over each other. Trim off the tips of the larger branches to encourage growth. See the illustration below for a before and after look at the branches.

Any shoots or branches which come from *BELOW* the "bud union" should always be pruned – now and in the future. Brand new stems that grow out of the ground, from the root systems are called suckers. If you see them, simply cut them off at ground level. When the tree matures, suckering usually diminishes.

If your trees set fruit this first year, pick off some of the immature fruits, spacing them about 8" apart on the branches. This will encourage proper ripening, allow the spray to cover well, and improve vegetative vigor. Fruit thinning in the future is also important for the very same reasons. Less is more. If you don't thin, you will get many more fruits than the tree can handle, resulting in broken branches and small fruits. So don't be afraid to thin. The resulting fruits will be fuller and much nicer.

In later years, it is helpful to "shape" your tree. Apple, pear and cherry trees are best trained to a central leader (uppermost

upright limb). Peach, nectarine, plum and apricot trees should be trained to a vase shape (no central leader). See the drawings below which show what your mature tree should look like. As you prune, bear this shape in mind and prune accordingly. Don't be shy; it's really hard to over-prune a fruit tree.

When to Prune:

Apples and Pears - It is generally best to prune apples and pears when they are dormant. So pick a nice pleasant, sunny winter day and enjoy this part of orcharding. Summer pruning is helpful to retard growth of the tree. So if the tree is growing very aggressively and getting taller than you like, take it back in July to control this growth.

Cherries - It is generally best to prune cherry trees when the weather is hot. Do not prune in the winter or late fall or early spring. Bacterial diseases are present in all non-arid environments and are particularly detrimental to sweet cherries. These bacteria are most active in cool, wet weather. So wait until the tree has leafed out and the warm late spring weather patterns are well established – usually by the end of May - to prune your cherry trees.

Peaches, Nectarines and Apricots - The best time to prune peaches, nectarines and apricots is in the early spring. Try pruning after the last frost date for your area. At this time, most of the winter damage can be trimmed off and you will minimize the effect of late frost damage to your buds and blooms.

Plums - As plums are very vigorous growers, you will want to prune aggressively. Bear in mind that summer pruning, when the trees is still growing, will help contain the spreading nature of your plum tree. You cannot over-prune a plum tree. So do clean up pruning in the winter, to get rid of broken and dead branches and shape up the tree. Then in July, prune again to maintain a manageable size.

Common Problems

In Virginia, we have a lot of humidity and animals that make fruit and berry production difficult. While growing edible plants is not impossible it is very important to understand what can cause you to be unsuccessful.

- **Humidity**: Humidity is a breeding ground for fungal disease in every part of plants growing in VA. Keeping up with treatment for these diseases will help keep your plants happy, healthy and in production. Spraying a series of different preventative treatments on your plans/trees will keep these issues away. You can find a number of different products at different prices/quantities available at our Garden Shop. Feel free to give us a call or stop by for direction. 804.798.5472 (ext. 111)

- **Deer/Rabbits/Squirrels/Birds:** All animals will want to eat your delicious crops! An easy food source, most animals can smell and see your fruit from a distance and will be sure to get as much as they can. There are number of different ways to prevent them, the most effective being physical

barriers like netting & fencing. We also recommend mixing hot sauce in a container with water and drenching your plant regularly. Spicy coating will be very unpleasant for most wildlife (except birds, they do not have tongues) and is a great organic deterrent.

- **Insects**: While insects do not always target the physical fruit the foliage (the powerhouse of the plant/tree) and the bark can be very attractive to many common insects in VA. They can be expected to munch away, inhabit and overtime weaken the plant/tree. Just like spraying for fungal issues, you need to simply be in practice of spraying and understanding who is attacking your plant/tree.