

**New Varieties**

An important step in preparing for new plantings is to order trees. The word on the street is that trees may be in short supply this spring because of damaging freezes on the west coast in 2010 and 2011. Order as soon as possible to ensure that you get your first choice in variety and rootstock. If that is not possible, consider delaying the planting date until you get the best choice. Now is a good time to think about what you will be planting in 2013 and 2014, and order those trees now.

Not many new varieties have unrestricted access for planting since they are regulated as “club varieties”. An exception to this is SnowSweet, which has been evaluated at Highmoor Farm since 2003. I am satisfied with the performance of SnowSweet as a dessert apple and think it will do well in a direct market or late season pick-your-own. It will appeal to people who like sweet apples. The ripening date is the first week in October at Highmoor Farm. It is slow to color, but keeps its firmness for about three months in cold storage and much longer in CA. It is a tip bearer like Cortland but has less vigor. Winter hardiness is supposed to be superior to most varieties, so I have been testing this in Caribou at Circle B Farms with a small planting that began in 2010. It has some resistance to apple scab. We learned this from our organic orchard which was mostly unprotected during primary scab season this last year. SnowSweet has no resistance to flyspeck or sooty blotch. In years past, it developed a light purple-brown color similar to the coloring of Fuji when left on the tree too long. We have trees on M.26 and Bud.9 rootstocks, both of which have performed well with this variety.

Another new variety that is available for planting is Autumn Crisp, if you can find a nursery that is making trees. It was originally available as NY674. We have been evaluating it since 2003, but know less about it than SnowSweet. The fruit have an attractive shape and color, but poor storage potential. It ripens with Macoun, or from the end of September into early October. Its vigor is similar to Golden Delicious.

Most new apple varieties are now “club” varieties with restrictions on who can plant them and the number of growers who are allowed into the “club”. Fortunately, most new stone fruit varieties are not restricted. This year, we will be planting a new variety of plum called “Black Ice”, and last year we planted a few new peach varieties and one new hybrid called a nectaplum. As they come into production, I will keep you informed about how they perform.
**Pruning Fruit Trees**

The primary purpose of pruning fruit trees is to increase crop value. This is accomplished by increasing the sunlight that reaches developing flower buds and fruit so that fruit set, fruit size and color are all improved. An additional reason to prune fruit trees is to ensure good spray penetration for crop protection. Trees should be pruned annually in most cases, and this will make pruning easier next year. An exception to this is trees less than five-year-old which should be pruned as little as possible.

Pruning is one of the most expensive costs of growing apples because of the labor involved. Planting high-density orchards with small trees is the primary way to reduce pruning costs. A semi-dwarf tree (180 to 240 trees per acre) that has been consistently pruned each year should be pruned within 15 minutes, but with experience 10-12 minutes is more appropriate. Dwarf trees will take less time, hopefully 5 minutes or less per tree, depending on tree size. It takes me 2-3 minutes to prune a tree on Bud.9 or M.9 rootstock and about 5 minutes to prune a tree on M.26. Your pruning time will vary depending on your skill, tools, and the condition of the trees.

There are many different ways to prune apple trees, but not in commercial production where training systems dictate tree shape and structure, and the need for efficiency is critical. Detailed pruning, where many small branches are removed one by one, takes time and does not accomplish more than removing fewer, but larger branches. An exception to this is low vigor varieties such as Honeycrisp where tree size is small. Larger pruning cuts will reduce the size of a Honeycrisp tree and decrease yield. However, in most cases, removing entire limbs will accomplish as much as many small pruning cuts, and prevents us from pruning off too many flower buds.

Most of you are experts on the central leader and vertical axe training systems. However, one area that could be improved is shortening the length of upper limbs so that they are shorter than lower limbs. This is particularly important in semi-dwarf apple trees. In dwarf fruit trees, limb removal with a renewal pruning cut solves many problems such as crowding, “runting out”, and limbs getting too long or too low. Limb removal can temporarily reduce yield so be selective in when and how much you do it. There are variations in training systems and tree size, but the key steps for most situations are listed below.

**Controlling tree height**

- Tops of the trees must be reachable by a ladder and by spray materials. Prune back the tree tops to reduce the distance your sprays have to reach. The maximum height depends on conditions in your orchard and how tall you want your trees. If you cannot adequately control tree height with pruning, it is probably time to replant the orchard with smaller trees on semi-dwarfing, or preferably dwarfing, rootstocks.

**Limb removal**

- Remove limbs that are crowding other limbs. Limbs should not be right on top of each other. In a high-density system, space limbs at least one foot above each other. In a semi-dwarf tree, give them at least 3 feet of vertical space.
Limbs in the upper half of the tree should be shorter than lower limbs and growing horizontally, but not below horizontal. Head them back to a side shoot or spur if they are too long or too pendant.

Remove useless shoots. Most water sprouts will not be useful fruit bearing branches. Keep some if you need replacement branches. Otherwise, take them out. Remove shoots and spurs that grow downward. Cortland branches bear fruit at the tip, which eventually bend downward and shade the lower limbs. Eventually, they no longer bear fruit because they do not get enough sunlight, so they become useless. Prune them back to a horizontal or more upright side branch. Honeycrisp trees in the “on” year may have an overabundance of spurs with flower buds. Some spur pruning can promote modest shoot growth and lessen the degree of biennial bearing. Clusters of spurs on the undersides of branches are considered useless on any variety. This last step of removing useless shoots can be time consuming, so when you reach the time limit, move on to the next tree.

Training systems

New training systems with very close tree spacings have slightly different training and pruning requirements. The tall spindle system is the most common with trees at 3 to 4 feet apart. The ease and speed of pruning is one of its advantages, but training limbs in the first year is required to induce as much early fruit bearing as possible. To successfully control vigor with such close spacings, trees need to begin bearing fruit in the second or third year. Tying down limbs slows the growth of the shoots, promotes flower bud formation, and encourages growth of the leader. This takes time, but only needs to be done the year of planting. This will help to get the trees into production as quickly as possible which is the point of the system. If you planted a tall spindle orchard last spring, limbs should have been tied down soon after planting, but can be done now if you have not done it yet. Limbs that are low in vigor do not need not to be tied down. The most vigorous limbs should be tied down slightly below horizontal or removed if they are more than 2/3 the diameter of the leader.

When removing a limb, make a bevel cut so that part of the underside of the limb remains to grow a replacement. A bevel cut forces a bud from the underside and this will grow out at a horizontal angle.

Remove shoots that directly compete with the leader. As trees in a tall spindle system mature, regular limb renewal prevents trees from growing too far into neighboring trees, or shading lower limbs when they bend too far below horizontal. All limbs should be thought of as temporary fruiting branches that are eventually pruned off. Avoid making heading cuts since they are invigorating.

If you have questions about pruning or would like an orchard visit to evaluate and clarify pruning, please contact Renae Moran at (207) 933-2100 or rmoran@maine.edu
Upcoming Meetings

1) **Apple Pruning Workshop**  
   Wednesday, February 8, 10am to noon, Highmoor Farm, Monmouth Maine.  
   Please join us in the meeting room behind the barn for a workshop on pruning apple trees. We will be pruning small semi-dwarf and dwarf apple trees of various varieties including Honeycrisp.  
   Contact: Renae Moran, (207) 933-2100, rmoran@maine.edu

2) **Maine Preseason Apple Grower Meeting**  
   March 14, Highmoor Farm, Monmouth Maine.  
   8:30–9 Coffee, Meet and Greet  
   – Glen Koehler, UMaine Extension.  
   9:30–10:15 Dealing with Brown Marmorated Stink Bug in the MidAtlantic  
   – Starker Wright, USDA-Ag Research Service, Kearneysville, WV.  
   – Growers  
   11–11:15 Break  
   11:45–12:15 What USDA Pesticide Residue Testing Found on Apples – Glen Koehler  
   12:15–12:45 Buffet Lunch  
   12:45–1:30 New Methods for Managing Plum Curculio, Apple Maggot, and Dogwood Borer  
   – Starker Wright  
   1:30–2:15 IPM Updates and Developing Your Own Orchard Management Plan  
   – Glen Koehler  
   2:15–2:30 Break  
   2:30–2:45 Crop insurance update – David Handley, Tori Jackson, UMaine Cooperative Extension  
   2:45–3:30 Board of Pesticides Control Update – Gary Fish. Maine Department of Agriculture  
   3 pesticide applicator recertification credits

3) **Marketing for Profits: Tools for Success** - Farm Marketing Webinars  
   Marketing encompasses a broad array of efforts all aimed at identifying your market and customers, satisfying your customers and maintaining your customers long term. It includes all marketing channel selections and business decisions, what to grow or produce and how it will be produced. Marketing is complex and is often the most misunderstood and least successful part of many farm businesses.  
   These webinars have been designed with the assistance of regional and national marketing experts to provide critical marketing insights for farmers and farm markets throughout the northeast. The webinar schedule is as follows:  
   **What’s Out There? Exploring Marketing Channels**  
   February 7, 10am – 11:30am OR  
   February 9, 7pm – 8:30pm  
   **Where are We and Where do we Want to be?**  
   February 21, 10am – 11:30am OR  
   February 23, 7pm – 8:30pm  
   To register for the webinars or for more information, email Diane Eggert at deggert@nyfarmersmarket.com
4) **Maine State Pomological Society Summer Meeting & Orchard Tour**  
Thursday, July 19, 2012 at Pie Tree Orchards

The summer meeting will include a tour led by Scott Miller on the interesting things going on at Pie Tree Orchard, including production of both IPM and Organic apples. More information as date approaches. For directions and more information on Pie Tree Orchard, see [http://pietreeorchard.com/about_us.html](http://pietreeorchard.com/about_us.html)

Featured speaker is Dr. David Rosenberger of the Cornell University Hudson Valley Lab. Dr. Rosenberger will give two talks on "Apple Disease Control Challenges for the Next Decade", and "Will Societal Changes Create New Opportunities or Only More Problems for Fruit Growers?"

5) **2012 International Fruit Tree Assoc. Study Tour in Quebec, Canada**

The 2012 Study Tour will be held July 26-27 in the south shore area of Montreal, Quebec Canada. It is a rare opportunity for an IFTA tour to be within driving distance. Folks who have attended previous tours around the world report that they are very educational and inspiring.

From the IFTA website at [http://www.ifruittree.org/?page=2012StudyTour](http://www.ifruittree.org/?page=2012StudyTour)

Tentative plan for tour stops:
* Agricultural research station operated by the Research and Development Institute for the Agri-Environment of Québec (IRDA) where you will see a fixed sprinkler pest management spray system and other trials.
* Orchards in Franklin, Havelock, and Hemmingford in the foothills of the Adirondacks to see some of the latest plantings, how strong measures are taken to keep the deer at bay, and an enduring hard-cider industry.
* Mont-St-Grégoire, Rougemont, and St-Paul d'Abbotsford in the Monteregian Hills area (one of which is Montreal itself) to see top notch plantings and an exceptional direct sales installation, combining apple and maple.

Learn how Quebec tree fruit growers are investing in new ways to remain competitive and deliver high quality tree fruits to Canadians and consumers around the world. Discussions are sure to include their work on the evaluation development of new varieties that appeal to consumers, pest management, and horticultural practices. Network with fellow growers as you discover why Canada is a world leader in developing and bringing new tree fruit varieties to market. Visit production areas of apple and sweet cherry varieties that account for about 77% of the value of tree fruits grown in Canada, with sweet cherry production valued at more $25 million and apples at more than $178 million.

The Montreal and Quebec south shore areas have much to offer IFTA Study Tour goes – the latest in tree fruit production, fabulous food, and generous hospitality. From cobblestone streets and historic architecture in Old Montréal, to sleek office towers and shopping downtown, Montréal and the surrounding area really stands out. It feels, looks and sounds like Europe, but it has North American smarts written all over it. Get to know fellow delegates, fuel your professional creativity, and sample the inspiring cultural scene.

More information will be posted at the IFTA website as it becomes available.
Closing Words

But I do feel a little teeny right now that I’m just about ready to start, and winter is entering. Half past autumn has arrived.
~ Gordon Parks

Cruel and cold is the judgment of man,
Cruel as winter, and cold as the snow;
But by-and-by, will the deed and the plan
Be judged by the motive that lieth below.
~ Lewis J. Bates

Autumn arrives in early morning, but spring at the close of a winter day.
~ Elizabeth Bowen

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Any person with a disability who needs accommodations for this program should contact Glen Koehler to discuss their needs at least 7 days in advance.