Pruning Demonstrations 2013: The Benefits of Using Motorized Platforms for Dormant Pruning and the Cornell Concept for a Fruiting Wall

Mario Miranda Sazo and Terence L. Robinson

We invite all Western NY fruit growers to attend two pruning demonstration sessions scheduled for Feb. 18 and 19, 2013. We will continue learning about the benefits of proper pruning, minimal pruning, limb renewal pruning, and limb bending. This year Dr. Robinson will introduce the Cornell Fruiting Wall Concept using Tall Spindle Trees and Mechanical Pruning at the VanDeWalle site (only at the Wayne County site). At each of the pruning sites, we will have platforms for you to prune with loppers, pneumatic pruners, and a chainsaw with a pole. The use of motorized platforms has increased in Western NY in the last three years. Several growers have realized that dormant pruning can be done more efficiently, cheaper, and faster with the use of platforms (self-propelled or pulled by a tractor and single row or 2-row types).

| Monday February 18, 2013 Wayne County (9:00am-noon) | Workshop hosted by grower Scott VanDeWalle. Travel to intersection of Rt. 104 and Rt. 14 in Wayne Co., Alton, NY. Turn north on Rt. 14, and travel 0.3 miles, then turn right on Ridge Rd. and go 50 feet, then turn left on Shaker Rd., go 0.9 miles and look for the Cornell signs. |
| Tuesday February 19, 2013 Orleans County (9:00am-noon) | Workshop hosted by grower Eric Brown “Brown’s Berry Patch”. Travel to 14264 Roosevelt Highway (Route 18), Waterport, NY 14571, and then follow Cornell signs. |

One of the goals of dormant pruning, which we will stress in the workshops, is to prune the top portion of your trees to eliminate any vigorous growth that will shade the lower part of your trees leaving only small diameter fruiting wood in the upper 1/3 of the tree. To maintain high-density Tall Spindle orchards over the long term the trees must be kept narrow and columnar with the top narrower than the bottom. When Tall Spindle trees are mature, the tree height must be limited annually by cutting the trunk to a small side branch and then eliminating the upper large branches with a bevel cut to maintain the narrow columnar shape of a Tall Spindle tree. This upper tree work can be done more efficiently and cheaply with a platform. By doing this you will maximize light interception without causing excessive shading and avoid the loss of productive branches of the lower canopy. This is the time of the year to correct this!

Last year we began trials of using summer sidewall shearing to reduce dormant pruning costs and develop a fruiting wall. A long-term pruning strategy that we envision is to use annual side-wall shearing of Tall Spindle trees for 3 successive years with no other dormant pruning but in the third year to add a dormant winter corrective pruning to remove limbs that have become large and are causing internal canopy shading and poor fruit quality. Such a pruning strategy could reduce total annual pruning costs in Tall Spindle orchards by about 65% (averaged over 3 years) and result in a narrow, tall fruiting wall. At the Wayne County demonstration at VanDeWalle Orchards (Alton, NY) we will show what the fruiting wall looks like using mature Gala and Linda Mac Tall Spindle trees on M.9 rootstock comparing mechanical shearing using a vertical cutting bar positioned at one or two feet from the main trunk. Hedging treatments were applied the first week of June, first week of July and first week of August 2012.
MEETING ANNOUNCEMENT: How to Develop an Employee Handbook

Monday, March 4, 2013 9am – 2:30 pm
Monroe County Extension Office, 249 Highland Avenue, Rochester
Advance Registration Required: Limited to 30 people, $20/person or 2 people, same farm: $30.

Workshop Agenda

9 am Registration - Each Farm will receive a copy of “Writing an Employee Handbook: A Guide for Farm Managers”

9:30 Purpose of an Employee Handbook – Tom Maloney, Cornell
Are you Ready for an Employee Handbook? – Tom Maloney
A. Size of Workforce
B. Management Commitment
   • Communicate and reinforce information
   • Update handbook
   • Compliance with labor laws
   • Consistently enforce policies and rules

What is your Human Resource Management Philosophy? – Tom Maloney
A. McGregor’s Theory X, Theory Y
B. Write a Welcome Statement

Legal Issues – Tom Maloney
A. Employment at Will
B. Contract Issues
C. Discrimination
Noon - Lunch provided

Labor Laws and Regulations – Alison DeMarree
A. Work Day
B. Pay Check
C. Time Off

Rules and Policies – Tom Maloney
A. Discipline Issues
B. Discharge Issues

2:30 pm Adjourn

Please mail or fax (585-798-5191) this form and check payable to “Cornell Cooperative Extension” to Kim Hazel: 12690 NYS Rt 31, Albion, NY 14411

March 4 Workshop Registration:

“How to Develop an Employee Handbook”

Names of those attending:

1. ____________________________________ x $20.

2. ____________________________________ ________________ or 2 persons: $30.

Farm Name& Address: ______________________________

$ Amount: __________________
The **Apple Industry is Challenged** by a Changing Weather Climate, Increased National and International Competition, Higher Production Costs and Labor Shortages.

The Cornell Program Work Team is Calling for an

**“Eastern Apple Precision Orchard Management SUMMIT”**

March 14-15, 2013, Geneva, NY

Ramada Geneva Lakefront - 41 Lakefront Dr, Rt 5 and 20, Geneva, NY14456

Apple production has become increasingly complex and not all practices are equal in their impacts on business profit/loss. Identifying and improving key orchard management practices can boost the profitability of every grower operation. Have you asked yourself: “How much money am I leaving on the table by missing these opportunities and how can I better use technology to improve my profitability?” **Learn where within your business you can increase profitability by improving your precision.**

The Cornell Fruit team is organizing an **“Eastern Apple Precision SUMMIT”** of apple growers, researchers, and extension leaders from Michigan, Ohio, New York, Pennsylvania, Maine, Vermont, Virginia and other eastern production areas. The Summit will serve as a vehicle for fruit industry leaders to hear presentations on apple orchard design and precision orchard management technologies and then discuss where the greatest opportunities lie for research and implementation on farms in the EAST to increase orchard income and grower profitability.

The Summit will be held in March 14-15 at the Ramada Geneva Lakefront, Geneva, NY. The one and a half day conference will include 9 sessions followed by grower discussions, and networking time during lunch and dinner included in the registration fee.

**PRECISION SESSIONS**

State of the art presentations followed by grower discussions

**THURSDAY, MARCH 14** 8:30am – 8:30 pm

Session 1 - “What Is Precision Orchard Management”

Session 2 - “Where Are The Economic Opportunities Of More Precise Orchard Management”

Session 3 - “Precision Thinning And Crop Load Management”

(Lunch Included)

Session 4 - “Precision Nutrient, Water, And Weed Management”

Session 5 - “Efficient Planting Systems For Pruning, Thinning, And Harvest”

Session 6 (Dinner Included) - “The Orchard Of The Future! Using All Available Tools To Reduce Risk And Improve Efficiency”

**FRIDAY, MARCH 15** 8:30am – 1 pm

Session 7 - “Precision Spraying And Using Weather Data”

Session 8 - “Precision Harvest Management”

Session 9 - “Final Discussion Of Where Are The Opportunities And Rankings By Growers, Extension, And Researchers”

**SPEAKERS** are Terence Robinson, Alison De Marree, Steve Hoying, Lailiang Cheng, Kerik Cox, Art Agnello, Robert Seem, Jordi Llorens, Rod Farrow, Jim Eve, Deborah Breth, Mike Fargione, and Mario Miranda Sazo.

Registration is $125/person. Registration fee includes proceedings, coffee break both days, lunch and dinner on March 14, breakfast on March 15. Advance registration is required: deadline is March 8, 2013.

A block of rooms has been reserved at the Ramada Geneva Lakefront (www.genevaramada.com, 1-800-990-0907 or 315-789-0400) under the name of Cornell In-Depth Fruit School; the rooms will be held until March 1, 2013. The hotel rooms are $79 per city side room and $89 per lake side room.

**Registration on-line** at the Web site: http://tinyurl.com/beaeu6e

Or contact Gemma Osborne at 315-787-2248 or email at gro2@cornell.edu
Cornell Cooperative Extension Wayne County and DEC
Are proud to offer a
Pre-Exam Training and Test to Become a Certified Pesticide Applicator

Agriculture Specialists Mike Stanyard and Debbie Breth will review core concepts and commodity specific items in preparation for the exam.

PRE-REGISTRATION is REQUIRED by Feb. 22, 2013
Call 315-331-8415
Training Classes are:
1:00 pm—4:00pm
Workshop cost is: $50.00
(Additional costs for manuals and exam)
Registration Begins at 12:30pm
Cornell Cooperative Extension Wayne Co.
1581 Rt. 88 North, Newark, NY

THE CERTIFICATION EXAM
Will be administered on March 22nd
12:30 pm-5:00 pm by DEC
to Qualified Applicants.
Fee for the exam is $100 payable to DEC the day of the exam.
To register for the exam or if you have questions regarding the Certification Process please contact Chris Wainwright at the Bath DEC office @607-776-2165 ext.23

All participants must have experience working on their own farm, or through employment on another farm. Participants must register directly with DEC to take the Exam and have any questions on exam eligibility answered by DEC representatives.
This training is only for those with experience and does not qualify for the 30 hour pre-test training.

TO INSURE MANUALS ARE ORDERED IN TIME ALL RESERVATIONS MUST BE IN
BY FEBRUARY 22, 2013
Name: ___________________________ Farm Name: ___________________________
Address: ___________________________
City: ________________ State: ________________ Zip: ________________
Phone: ___________________________ Email: ___________________________
Registering # of people ___________ @ $50 ea. = ____________________________
# of Core Manuals (2012) _______ @ $40 ea.= ____________________________
# of Category 21 manuals (2003-Field & Forage) _______ @ $30 ea.= ______________
# of Category 22 manuals (2003-Fruit) ___________________________ @ $30 ea.= ______________
# of Category 23 manuals (2004-Vegetable) ___________________________ @ $30 ea.= ______________

All participants will need to have the most recent Core Manual and Category Manuals
Please make checks payable to: CCE, and send to 1581 Route 88 North, Newark NY 14513

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Managing Crop Load of Apple Orchards by Pruning
Terence L. Robinson and Mario Miranda Sazo

One of the most important challenges for 2013 will be effective crop load management to guarantee good fruit size and good returns for the majority of Northeastern apple growers. The abnormal 2012 growing season which occurred in New York, Michigan, and other Northeastern apple regions resulted in a small crop and facilitated a higher than normal level of flower bud initiation last year. In most apple orchards there are many more flower buds than needed and you now have the opportunity to reduce flower bud load by using your pruning shears.

Last season the trees had a long growing season, which facilitated ample carbohydrate accumulation and reserves. We anticipate that high carbohydrate levels in the tree this spring will likely facilitate high initial fruit set if normal spring weather conditions occur. A very high initial fruit set will be difficult to thin down to the optimum crop load even with aggressive chemical thinning and may result in a huge hand thinning job or small fruit size. In addition a large crop load this year has the potential to begin a biennial bearing cycle (especially for Honeycrisp) if an excessive fruit set is not well managed via thinning (chemical and manual) this year. Lastly, a severe summer drought coupled with over-cropped trees would result in small fruit size and low returns. In this article, we suggest beginning the reduction in cropload now by the removal of excessive flower bud loads through a more “aggressive” dormant pruning as a first step to achieving an optimal crop load later with further chemical and hand thinning. You can also start imposing a more “precise” bud load per tree in a high-density apple orchard the coming weeks.

The ability to identify flower buds will be important in order to prevent the removal of too many via pruning. At this time of the year it is not easy to know which of the buds will be flowers or not (unless you use a microscope). It will be easier for you to recognize their shape by mid-March. Flower buds will be larger than leaf buds and will be swollen near the base. In contrast, leaf buds will be smaller and narrow. Apple and pear trees generally bear flower buds at the tips of spurs and short shoots. It is important not to prune off all these short shoots since they are the sites of future flower buds. Although most orchards have a very high flower bud load this year it is important for you to evaluate each block and variety before pruning to determine the severity of pruning needed.

In orchards with a high flower bud load, we suggest removing at about 30% of the flower buds per tree by utilizing mainly three types of pruning cuts: (1) limb renewal of 2-3 whole limbs by leaving a beveled renewal cut, (2) spur pruning or spur extinction for spur apple types with many weak and multi-branched spurs with short shoots (a semi-aggressive pruning technique applicable to the majority of apple growing systems), and (3) stubbing back (a more aggressive pruning technique more applicable to Gala). Our previous pruning studies have shown that the complete removal of 1-2 branches is a less aggressive pruning technique that has little impact on yield. Hence we recommend removing 1-2 branches every year. If more than 3-4 branches per tree are removed then in some cases yield can be reduced. In 2013 with the expected high flower bud load we would suggest removing 2-3 branches per tree. If there were large branches that you were hesitant to remove last year this would be a great year to remove them.

In addition to removing 2-3 whole limbs, an effective way to further reduce flower bud load is to remove some of the spurs on each branch that remains in the tree. This can be accomplished by “simplifying” or “columnarizing” each branch (secondary side branches larger than ½ the diameter of the branch should be removed leaving each branch as a long fruiting column “a long finger instead of a branch with several fingers”) to improve fruit coloring. We suggest the removal of secondary side branches or “forks” in the branch so that the branch has a single axis and is composed of spurs and short fruiting shoots but no substantial side branches. A more columnar branch covered with spurs and fruit will cast less shade on the lower part of the tree than a complex branch which has secondary and tertiary laterals. Such complex branches create a “roof” of shade for the lower branches. When columnarized branches become too long or too large in diameter they are removed through limb renewal pruning. When this branch columnarizing strategy is teamed with limb renewal pruning, narrow, slender trees with good light distribution can be maintained over the life of the tree.

In addition to this branch simplification the down oriented spurs can be removed by knocking them off with pruning loppers. This can be done quickly by “running” the loppers along the underside of the limb to knock off the down-oriented spurs.
The last technique that we recommend for effective crop load management is stubbing back pruning. This technique has been very useful with Gala which produces an abundance of lateral flower buds on 1 year-old wood. However this technique carries perils of invigorating the branch since it disrupts the natural growth pattern of an apple tree. So you must be very careful with stubbing back pruning. There are two levels of stubbing back pruning: (1) **Severe stubbing back** into older wood which often results in a vigorous regrowth response from the tree and in most cases lowers flower bud load too much on the branch that is stubbed severely. A severe stubbing back cut made in the upper part of a tree will stimulate excessive shoot growth. These shoots will develop with narrow crotch angles and will grow strongly. The response will be more pronounced with a more vigorous rootstock, more vigorous soil conditions, and a more severe cut. (2) **Stubbing back to pencil size diameter wood** on each weak fruiting branch will result in little or no vigor response but will allow the removal of excessive flower buds. This pruning technique is particularly important for mature Gala which has medium or low vigor. These trees produce excessive crops each year and the fruiting branches are bent down with cropload which results in short terminal growth the previous year. The short growth is usually small in diameter and weak and covered with flower buds which produce small apples. Cutting back such fruiting branches to the point where it has “pencil diameter” wood eliminates many small flower buds and is a very useful technique to managing flower bud load on Gala.

In the upper part of the tree canopy (the upper 1/3 portion) it is very important to remove whole limbs once they grow too long rather than shortening them back and creating permanent scaffold branches in the top of trees. By removing completely any long or large diameter branches in the top of the tree you eliminate a significant number of flower buds but more importantly you remove branches that shade the lower part of your trees. Leave only small diameter fruiting wood in the upper 1/3 of the tree. To maintain high-density apple orchards over the long term the trees must be kept narrow and columnar with the top narrower than the bottom. When trees are mature, the tree height must be limited annually by cutting the trunk to a small side branch at the optimum height which is about 90% of the between row spacing in the orchard.

In summary, we suggest the following pruning steps for orchards in the Northeast which have high flower bud loads in 2013: (1) Remove 2-3 large branches (leave a beveled renewal cut), (2) “columnarize” or “simplify” each remaining branch, (3) remove all down oriented spurs with your hands or loppers and (4) with Gala shorten back each pendant branch to the point where it has “pencil size” diameter wood.

**Pruning Vertical Axis 2013**

Steve A. Hoying

Many of you have now started pruning the older harder varieties. With the consistently colder weather we can now start on established plantings and more sensitive varieties. Most of the pruning from now on will be using the principles developed for the Vertical Axis System (518 – 642 trees/acre). Remember that this system consists of a permanent bottom tier or 3-4 scaffolds with every limb in the tree completely renewable. Here are some tips.

1. Reduce the bottom permanent tier to 3-4 limbs arranged in an X pattern angling from the tree, not straight into the row. Limbs can be redirected by selecting a side branch that is more in the direction you wish the limb to go.
2. Singulate all limbs so that there are no large side branches coming off the main limbs. This includes removing forks at the end of each remaining limb.
3. Remove all vigorous upright shoots and all weak down facing shoots from each branch. This should create a limb with all shoots nearly parallel to the ground.
4. Vigorous large fruited varieties can be pruned so that the tips of these shoots face downward; weaker and small fruited varieties should be undercut so that each branch tip is more upright.
5. Limit large branch removal to 3-4 cuts. Any limb that is more than ½ the diameter of the trunk where it inserts is a candidate for removal. Remember to use a “bevel cut”? If you have more branches than need to be removed than the number of cuts allowed, favor large branches on the east and west side of the tree for removal.
6. Finally decide how tall the tree should be and reduce the tree’s height. Consider light interception and spray coverage when determining tree height. Trees should be no taller than 90% of the between row spacing.

Always cut to an upright shoot near the center of the tree and remove side shoots that may contribute to excess shading and/or crop load in this portion of the tree.
FOCUS ON FOOD SAFETY
Press release submitted by Craig Kahlke

FDA Proposes New Food Safety Standards for Foodborne Illness Prevention and Produce Safety
Public encouraged to comment on new proposals

January 4, 2013. The U.S. Food and Drug Administration today proposed two new food safety rules that will help prevent foodborne illness.

The proposed rules implement the landmark, bipartisan FDA Food Safety Modernization Act (FSMA) and are available for public comment for the next 120 days. The FDA encourages Americans to review and comment on these important proposed rules. The proposed rules build on significant strides made during the Obama Administration, including the first egg safety rule protecting consumers from Salmonella and stepped up testing for E. coli in beef as well as existing voluntary industry guidelines for food safety, which many producers, growers and others currently follow.

The rules follow extensive outreach by the FDA to the produce industry, the consumer community, other government agencies and the international community. Since January 2011, FDA staff have toured farms and facilities nationwide and participated in hundreds of meetings and presentations with global regulatory partners, industry stakeholders, consumer groups, farmers, state and local officials, and the research community.

“The FDA Food Safety Modernization Act is a common sense law that shifts the food safety focus from reactive to preventive,” said Health and Human Services Secretary Kathleen Sebelius. “With the support of industry, consumer groups, and the bipartisan leadership in Congress, we are establishing a science-based, flexible system to better prevent foodborne illness and protect American families.”

The burden of foodborne illness in the United States is substantial. One in six Americans suffer from a foodborne illness every year. Of those, nearly 130,000 are hospitalized and 3,000 die from their illness. Preventing foodborne illnesses will improve public health, reduce medical costs, and avoid the costly disruptions of the food system caused by illness outbreaks and large-scale recalls.

These two FSMA rules are part of an integrated reform effort that focuses on prevention and addresses the safety of foods produced domestically and imported, with additional rules to be published shortly. The first rule proposed today would require makers of food to be sold in the United States, whether produced at a foreign- or domestic-based facility, to develop a formal plan for preventing their food products from causing foodborne illness. The rule would also require them to have plans for correcting any problems that arise. The FDA seeks public comment on this proposal. The FDA is proposing that many food manufacturers be in compliance with the new preventive controls rules one year after the final rules are published in the Federal Register but small and very small businesses would be given additional time.

The FDA also seeks public comment on the second proposed rule released on January 4, which proposes enforceable safety standards for the production and harvesting of produce on farms. This rule proposes science- and risk-based standards for the safe production and harvesting of fruits and vegetables.

The FDA is proposing that larger farms be in compliance with most of the produce safety requirements 26 months after the final rule is published in the Federal Register. Small and very small farms would have additional time to comply, and all farms would have additional time to comply with certain requirements related to water quality.

Before issuing the two rules, the FDA conducted extensive outreach that included five federal public meetings and regional, state, and local meetings in 14 states across the country as well as making hundreds of presentations to ensure that the rules would be flexible enough to cover the diverse industries to be affected. The FDA also visited farms and facilities of varying sizes.

“We know one-size-fits-all rules won’t work,” said Michael R. Taylor, the FDA’s deputy commissioner for foods and veterinary medicine. “We’ve worked to develop proposed regulations that can be both effective and practical across today’s diverse food system.”

Additional rules to follow soon include new responsibilities for importers to verify that food products grown or processed overseas are as safe as domestically produced food and accreditation standards to strengthen the quality of third party food safety audits overseas. Improving oversight of
imported food is an important goal of FSMA. Approximately 15 percent of the food consumed in the United States is imported, with much higher proportions in certain higher risk categories, such as produce. The FDA will also propose a preventive controls rule for animal food facilities, similar to the preventive controls rule proposed today for human food. The FDA plans to coordinate the comment periods on the major FSMA proposals as fully as possible to better enable public comment on how the rules can best work together to create an integrated, effective and efficient food safety system.

For more information:


### New Food Safety Regulations Proposed for Fresh Produce Growers

**Dr. Luke LaBorde, Department of Food Science, Penn State University**

**January 16, 2013.** On January 4, 2013, the U.S. Food and Drug Administration (FDA) released a draft Produce Safety Rule as required under the Food Safety Modernization Act (FSMA) of 2011. This proposed regulation would establish mandatory practices that farmers must take to prevent microbial contamination of fresh produce. Below are highlights of requirements FDA would issue in the final regulation.

**Worker Health and Hygiene** - Farm and packinghouse workers who harvest or handle fresh produce, and their supervisors, must receive training on personnel hygiene and health conditions that can increase the risk for food contamination. Growers are required to show proof of training by keeping written records. Toilet facilities have to be readily accessible, kept reasonably clean, and supplied with toilet paper. Hand-washing stations must be close to toilet facilities and supplied with potable running water, hand soap, and clean single use towels.

**Agricultural Water** - Growers must be able to demonstrate that the water they use for irrigation, pesticide preparation, cooling and washing, etc. is safe for its intended use. Maximum average E. coli levels of 126 cells per 100 milliliters have been proposed for irrigation water that can contact the edible part of the crop. Water used for post-harvest operations face more stringent standards; no detectable levels of E. coli are allowed.

**Biological Soil Amendments** - At least a 9 month interval (270 days) would be required between application of raw animal manure to produce fields and harvesting if there is a possibility that the manure may contact the produce. Composted animal manures can be applied from 0 to 45 days before harvest depending on whether or not it can contact the crop. Growers, or commercial compost suppliers, must provide proof through laboratory testing that the composting process was adequate to make it safe to use. No human waste is allowed on fields except in the case of sewage sludge biosolids that are treated according to already existing regulations. Growers must show that they have taken adequate measures to prevent contamination. If animals are allowed to graze in areas intended for produce growing, the waiting period specified for application of raw manure (270 days) would apply.

**Wild Animals** - FDA recognizes that it is impossible to keep all wild animals away from produce fields. If the situation is out of control and there is a reasonable probability that wild animals can contaminate produce, growers would be required to monitor their fields for signs of animals and take some kind of preventative measure to keep them out or discourage them from entering.

**Equipment, Tools, and Buildings** - Equipment and tools need to be kept reasonably clean. Sanitation standards for packing buildings requires good water drainage, control of dripping condensation, a pest control program, and regular clean-up of trash. Partially-enclosed packing buildings are acceptable if the grower or packer takes precautions to prevent birds and other pests from becoming established in the buildings.

**Here are some important points that need to be made about the proposed rule.**
The proposed rule covers only fresh produce that is sold commercially. It does not apply to produce used for personal consumption, such as home gardens.

The focus of the new regulation is on fruits, vegetable, nuts, herbs, mushrooms, and sprouts that are typically eaten raw, not commodities that are generally cooked or further processed. For example, potatoes, eggplant, winter squash, beets, and beans for drying are exempt.

Not all farms that grow fresh produce are required to comply with the rule.

Farms with gross food sales under $25,000 are exempt.

Farms with gross food sales over $500,000 are generally required to comply.

Those with total sales of between $25,000 and $500,000 may or may not receive exemptions, depending on what kind of marketing channels are used.

For instance, if a farmer sells more than half of his/her strawberry crop directly to consumers, such as at a farmers market, farm stand, as a CSA, or if he/she delivers it directly to a grocery store or restaurant, they are exempt from the regulation. However, to receive this exemption, these kinds of direct sales must be to buyers in the same state as the farm, or if out of state, no farther than 275 miles from the farm.

If a crop is mostly sold through wholesale outlets, such as through distributors, warehouses, or fresh-cut processors, the farm is not exempt and is covered under the rule. Exemptions can be cancelled if FDA determines that a farm may be a source of contaminated produce.

And finally, keep in mind that growers of any size who sell at least some of their crop through wholesale marketing channels, even if technically not covered by the federal regulation, have been facing and will to continue to face standards at least as stringent as anything in the final FDA regulations. Remember, this is a proposed rule. It is not a final regulation. This means that growers have an opportunity to comment on any part of the rule they do not understand or object to.

The draft ruling is available for viewing at http://www.fda.gov/Food/FoodSafety/FSMA/ucm304045.htm. The public will have the opportunity to submit comment on the draft rule until May 16, 2013. Before this date, FDA will be holding public meetings to explain the proposal and to provide additional opportunity for input. There are two ways to send comments. You may submit comments through the internet at http://www.regulations.gov. Once you are on the site, follow the instructions for submitting comments. For written comments, you may fax them to FDA at 301-827-6870 or mail them to:

Division of Dockets Management (HFA-305)
Food and Drug Administration,
5630 Fishers Lane, rm. 1061
Rockville, MD 20852.

All written submissions received must include the Docket No. (FDA-2011-N-0921)

Final 2013 GAPs Training In Upstate NY
Online registrations available now for the final workshops in Penn Yan & Long Island

These 2-day Good Agricultural Practices workshops are for those farmers who are being required by buyers to provide third party verification of their food safety practices and for farmers thinking about moving in this direction. With the Food Safety Modernization Act draft FDA regulations just released on January 4th, the timing of these workshops is paramount. Although the 2-day workshops will cover the vast majority of what most 3rd-party audit companies require, it will be geared towards the new Harmonized GAPs standards that Wegmans and many other retailers are requiring.

These are sponsored by Genesee Valley Regional Market Authority (except the Long Island training), Cornell Cooperative Extension, Cornell University, the Produce Safety Alliance, and the New York State Department of Ag & Mkts.

1. March 6-7, General GAPs training for all fresh produce growers, location: CCE-Yates, Penn Yan.

To register or for more info, go to http://cvp.cce.cornell.edu/, events listings on the right side of the home page.

2. March 13-14, General GAPs training for all fresh produce growers, host CCE-Suffolk, Riverhead.

For more information and updates, see : http://www.gaps.cornell.edu/eventscalendar.html
Registration info will be up approximately 4-5 weeks before the workshops. For more info, contact Craig Kahlke at cjk37@cornell.edu or 585-735-5448.
FDA Food Safety Modernization Act
PROPOSED - Sec. 105 Produce Rule - Compliance Decision Tree for U.S. Growers of Fruits, Vegetables, Nuts, Mushrooms, Herbs, or Sprouts

Attention. Being "exempt" or growing produce that is "not covered" in the regulation does not automatically result in exemption from the marketplace or buyer requirements. Farmers' market managers or others, for example, could require GAPs, third party audits, and/or adherence to the regulation for vendors or suppliers. Visit the Produce Safety Alliance website to find GAPs educators in your state who can help you implement food safety practices to meet GAP requirements (www.producesafetyalliance.com).

**Start Here**
Are your farm's TOTAL FOOD sales OVER $28,000? (average of past 3 years sales)

- Yes
  - Are SOME of the produce you grow specifically exempted by Sec. 105 of the Produce Rule? (1)
    - Yes, one or more
      - No, some of my produce is not on the exempt list
    - No
      - Are your farm's TOTAL FOOD sales OVER $500,000? (Exempt + Non-Exempt produce) (average of past 3 years sales)
        - Yes
          - You MUST COMPLY with FSMA Sec. 105 Produce Rule
        - No
          - Are MORE THAN 50% of your farm's TOTAL FOOD sales to "qualified end-users"? (2) (average of past 3 years sales)
            - Yes
              - Your farm IS EXEMPT from the FSMA Sec. 105 Produce Rule
            - No
              - No

**Minimum requirements for all U.S. food farms**
While some farms may be "exempt" or grow produce "not covered" by this Rule, ALL U.S. farms must still comply with minimum federal requirements, such as the FDA Food, Drug and Cosmetic Act, that protect consumers from consuming contaminated (adulterated) food. Note: FDA can withdraw your exemption if your farm products are linked to a food outbreak.

In addition, when a box, package, or individual product label is not required by federal food labeling regulations, such as is currently the case for produce on display at a farmers market - farmers will in the future be prominently displaying, at the point of purchase, the name and complete business address of the farm(s) where the produce was grown. That information can be on a label, poster, sign, flyer, etc. or, in the case of Internet sales, in an electronic notice.

**Compliance Phase-in Scope and Timing**

The amount of time farmers have to begin complying with the Produce Rule depends on the dollar amount of TOTAL FOOD sales from that farm each year:

- **Very Small Businesses**—a very small business is defined as having, on a rolling basis, an average annual monetary value of food sold during the previous three years of no more than $250,000. These farms would have **four years after the effective date** to comply, for some of the water requirements, they would have six years.

- **Small Businesses**—a small business is defined as having, on a rolling basis, an average annual monetary value of food sold during the previous three years of no more than $500,000. These farms would have **three years after the effective date** to comply; for some of the water requirements, they would have five years.

- **Other Businesses**—other businesses would have to comply **two years after the effective date**. For some of the water requirements, they would have four years to comply.

**Notes:**
(1) Exempt produce includes produce that receives commercial processing that adequately reduces the presence of microorganisms of public health significance (e.g., green beans that will be canned) or that is rarely consumed raw, specifically arrowroot, arrowroot, artichokes, asparagus, beets, black-eyed peas, bok choy, brussels sprouts, chick-pea, collard greens, crab apples, cranberries, eggplant, figo, ginger root, kale, kidney beans, lentils, lima beans, okra, parsnips, peanuts, pinto beans, plantains, potatoes, pumpkin, rhubarb, rutabaga, sugar beet, sweet corn, sweet potatoes, taro, turnips, water chestnuts, winter squash (acorn and butternut squash), and yams.

(2) A qualified end-user is either (a) the consumer of the food or (b) a restaurant or retail food establishment that is located in the same state or, if located out of state, no more than 275 miles away from the farm.

V. Nickerson, E. Bihn, L. Castro

The commercial fruit industry of western NY has been generous with donations to the Cornell Cooperative Extension - Lake Ontario Fruit Program. With input from the CCE Executive directors of the partner counties, we have decided that an effective use for these donations is to purchase 2 or 3 NEWA-connected stations, RainWise MKIII SP1 with wireless transmission of data available in realtime. The data will be incorporated into NEWA at www.newa.cornell.edu. Please complete application and return to CCE-LOF, 12690 Rt 31. Albion, NY 14411

We will select the cooperators based on the answers in the application below:

1. Are you enrolled with the CCE-LOF program in your county?
   _____yes, every year   _____most years   _____no

2. Do you currently use NEWA weather data for fruit production information?  _____yes  _____no
   If yes, what type of info do you access?

3. Where is the closest NEWA station to your farm at this time?

4. Estimate how many acres of orchard is in a your neighborhood within 5 miles?

5. Are you willing to be responsible for the weather station and conduct the necessary maintenance in a prompt manner when necessary?

6. Do you have access to broadband internet?  _____Yes  _____no

7. Please identify your Internet provider

8. Do you have a router and do you have access to an empty port on that router?  _____yes  _____no
   (If there is wireless access such as Verizon wifi or off a wireless router; we can modify this with the purchase of another piece of equipment to get a physical port for the weather station.)

9. How far is it from your proposed site to the place where there is internet access?

10. Will you allow access by a CCE representative to the weather station for any necessary repair or calibration?  _____yes  _____no

Name_________________________________ Farm Name_________________________________
Address___________________________________________________________________________
Email _____________________________ Cell phone______________________________________
Lake Ontario Fruit Program
Cornell Cooperative Extension
12690 NYS Rt. 31
Albion, NY 14411

Contents:
• Pruning Demonstrations 2013
• How to Develop an Employee Handbook- Workshop, Mar 4
• Eastern Apple Precision Orchard Management “SUMMIT”
• CCE Wayne County & DEC Pre-Exam Training and Test
• Managing Crop Load of Apple Orchards by Pruning
• Pruning Vertical Axis 2013
• Focus on Food Safety
• New Food Safety Regulations Proposed for Fresh Produce Growers
• Final 2013 GAPs Training in Upstate NY
• FDA Food Safety Modernization Act
• Looking for Cooperators for NEWA Weather Stations
• Educational Event Calendar

Educational event calendar:
Feb 18, 19, 2013: Pruning workshops
Wayne County - Monday, Feb. 18 (9am to Noon) - Workshop hosted by grower Scott VanDeWalle.
Note: This activity will be followed by a mini-tour visiting the use of other motorized platforms at nearby grower farms in the afternoon.
Orleans County - Tuesday, Feb. 19 (9am – Noon) - Workshop hosted by grower Eric Brown “Brown’s Berry Patch”.


March 4: The Labor Management Meeting on Developing & Using Employee Handbooks will be in the Lilac Room, Monroe County Cooperative Extension, 249 Highland Avenue from 9:30 am until 3 pm.

March 13 and 18: Pesticide Applicator Exam Preparation Class at Wayne Co. CCE. Classes run from 1:00 pm – 4:00 pm each day. Workshop cost is $50.00. Pre-registration is required by Feb. 22. For more information please contact Beth Claypoole at 315-331-8415.
New core manual is needed if taking exam!
March 22: Certification Exam at Wayne Co. CCE. To register or if you have questions regarding the Certification Process contact Chris Wainwright at the Bath DEC office at 607-776-2165.

March 14-15: In-Depth Fruit School – “Precision Fruit Production Summit” in Geneva. The Summit will serve as a vehicle for fruit industry leaders to hear presentations on apple orchard design and precision orchard management technologies and then discuss where the greatest opportunities lie for research and implementation on farms in the EAST to increase orchard income and grower profitability. Register online at the Web site: http://tinyurl.com/beaeu6e

March 19: LOF Advisory Meeting, Monroe County CCE, Rochester, NY, 9:30 AM to 2:30 PM.