



FRUIT NOTES

Lake Ontario Fruit Program



Volume 14 Issue 1

January 3, 2013

2014 Lake Ontario Winter Fruit Schools

3.0 DEC recertification training credits.

Bring your DEC Applicator ID. If you need DEC credits, please arrive on time to sign the roster and plan to stay all day. DEC will not allow partial credit.

Feb 3: Niagara County CCE Training Center, 4487 Lake Ave., Lockport, NY 14094

Feb 4: Wallington Fire Hall, 7863 Ridge Road, Sodus, NY 14551

Bring your employees! The LOF Advisory Committee requested a special educational session for Spanish employees. Due to low participation in this session at the Wayne County winter schools, we will only offer the Spanish session at the Niagara school. We have arranged for a concurrent morning session for Spanish employees to learn more about various aspects of fruit production practices. Your employees can come for the morning session. Lunch is included in their registration fee. They can join the regular session after lunch if they so desire.

Spanish Session Program Schedule: In Niagara County, Feb 3, only!

- 9:00 Introduction, Use of rootstocks in the modern orchards - Mario Miranda Sazo
- 9:30 Cutting out fire blight and recognizing other pests – Debbie Breth (Anna Meyerhoff)
- 10:10 Coffee break – descanso con cafe
- 10:40 Respirator fit test demonstration - NYCAMH
- 11:15 Creating positive workplaces Cornell Farmworker Program – Mary Jo Dudley
- 12:00 Lunch
- 1:10 Continued discussion or join the main program schedule.

Program Schedule: BRING YOUR DEC APPLICATOR ID!

- 8:00 Registration and DEC credit sign-in
- 8:30 Welcome, Announcements and Introductions
- 8:40 Our vision for orchards of the future – Terence Robinson
- 9:25 Eastern Strategy for Large National Crops – Alison DeMarree
- 9:55 NY Horticultural Society Update
- 10:10 Coffee break and sponsor spots
- 10:40 Will Pre-mixed Insecticides Control Apple Maggot?
– Harvey Reissig
- 11:00 Locating and reporting new orchard pest problems
– Debbie Breth
- 11:25 30 years of Horticulture: Generalities and Specifics – Steve Hoying



Cornell University
Cooperative Extension

Lake Ontario Fruit Program
in Wayne, Orleans, Niagara,
Monroe, and Oswego Counties
www.fruit.cornell.edu/lof

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Building Strong and Vibrant New York Communities

Cornell Cooperative Extension provides equal program and employment opportunities. NYS College of Agriculture and Life Sciences, NYS College of Human Ecology, and NYS College of Veterinary Medicine at Cornell University, Cooperative Extension associations, county governing bodies, and U.S. Department of Agriculture, cooperating.

Every effort has been made to provide correct, complete, and up-to-date pesticide recommendations. Nevertheless, changes in pesticide regulations occur constantly, and human errors are still possible. These recommendations are not a substitute for pesticide labeling. Please read the label before applying any pesticide.

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| 12:00 | Sponsor spots, Lunch and visit with sponsors |
| 1:10 | Improving spray deposition and spray monitoring techniques – Andrew Landers |
| 1:35 | Controlling Scab, Mildew, and Fire blight with new and old materials – Kerik Cox |
| 2:05 | Quality Fruit for the slicing market – panel discussion, Craig Kahlke (moderator) |
| 2:30 | Stretch Break |
| 2:35 | Intro to Cover Crops to improve fruit soils – Carol MacNeil, Cornell Vegetable Program |
| 3:00 | Scale, Woollies, and Curc, plus an Invasives Update (BMSB and SWD) – Art Agnello |
| 3:30 | Adjourn, pick up DEC certificates! |

Please pre-register! You can register on-line on our new website after Jan. 9: www.lof.cce.cornell.edu

Or Mail Registration Form:

2014 Lake Ontario Winter Fruit School Registration

Please pre-register on line or by mail by Jan 29 to accommodate planning for lunch and handouts.

Mail? Send registration form and **check payable to "CCE"** to Kim Hazel, at 12690 NYS Rt. 31, Albion, NY 14411. Registration fee is \$20 each to cover lunch, breaks, materials and other costs of programs. At the door, the registration fee will be \$30. If your farm is not enrolled in the fruit program through CCE of Wayne, Monroe, Niagara, Orleans, Oswego, or as "Satellite" enrollee, the pre-registration fee is \$85, or \$95 at the door.

Check with your county CCE for enrollment status.

Registration Form:

Feb. 3, Niagara Co. Location _____ Spanish Session _____
(number attending) (number attending)

Feb. 4, Wayne Co. Location _____
(number attending)

Name _____

Business Name _____

Address _____

Phone _____ Fax _____

Email _____

Number attending x \$20 = submitted (CHECK PAYABLE TO "CCE")

Names attending

The 2014 Becker Forum
Building the Agricultural Workforce of the Future

January 20, 2014 – 9:00 am – 4:00 pm
Doubletree Hotel, East Syracuse, NY

8:15 a.m.	Registration and coffee	1:50 p.m.	Reforming Agricultural Immigration Policies: Current Developments - Lynnette Jacquez, CJ Lake, LLC, Washington, DC, Farm Credit East Featured Speaker
9:00 a.m.	Welcome		
9:15 a.m.	Immigration Policy and Politics 2014 - Craig Regelbrugge, Co-Chair, Agriculture Coalition for Immigration Reform, Washington, DC	2:45 p.m.	Break
10:10 a.m.	The View from Western Growers - Ken Barbic, Sr. Director, Federal Government Affairs, Western Growers	3:00 p.m.	Producer Panel: How will we staff farm businesses in the future? Moderator: Marc Smith, NYSAES and Cornell University - Sarah Noble Moag, Noblehurst Farms, Inc., Linwood, NY, Jeff Crist, Crist Brothers Orchard, Walden, NY David Zittel, Amos Zittel & Sons, Inc., Eden, NY
11:05 a.m.	Break		
11:20 a.m.	Welcoming Immigrants in our Communities – Rachel Steinhardt, Deputy Director, Welcoming America, Decatur, GA	4:00 p.m.	Adjourn
12:15 p.m.	Lunch	4:15-5:00 p.m.	Leaders Forum: How to Impact Agricultural Labor Policies - Facilitator: Paul Baker, Executive Director Agricultural Affiliates, and Director New York State Horticulture Society
1:20 p.m.	The Politics of Overtime Pay and Collective Bargaining in NY Agriculture - Dale Stein, Stein Farms, LeRoy, NY		

NYS Unemployment Insurance (UI) Changes in 2014 (from NYS45i)

Of the total amount of remuneration paid to each employee by each employer during the

calendar year, the UI wage base is the portion of that total which is subject to contributions.

The UI wage base will adjust January 1 of each year, as follows:

<u>Year</u>	<u>UI wage base</u>	<u>Year</u>	<u>UI wage base</u>
2013 and prior	\$ 8,500	2020	\$11,600
2014	10,300	2021	11,800
2015	10,500	2022	12,000
2016	10,700	2023	12,300
2017	10,900	2024	12,500
2018	11,100	2025	12,800
2019	11,400	2026	13,000

After 2026, the wage base will permanently adjust on January 1 of each year to 16% of the state average annual wage, rounded up to the nearest \$100. The state average annual wage is established no later than May 31 of each year. The annual average wage cannot be reduced from the prior year's level.

Obtaining forms:

Download the December 2013 Form

The Tax Department does not mail preprinted withholding tax forms to taxpayers. Current withholding tax forms are available for download on the Tax Department Web site (at www.tax.ny.gov).

ONLINE REPORTING & PAYMENT

You may also make payments online after setting up an account.

Benefits of Web Filing include:

- direct payment from your bank account

- instant confirmation

Completing Form NYS-45

This return and related forms are designed to be read by information processing equipment. To assist, please be sure to send us original forms (not photocopies). When entering information, please print with a black pen or type in the number(s) 0-9 or letter(s) A-Z. Do not enter dollar signs, commas, decimal points, or any other punctuation or symbols (minus signs, parentheses, etc.).

Mail your return to:

**NYS Employment CONTRIBUTIONS AND Taxes
PO Box 4119**

Binghamton NY 13902-4119

If you are not using U.S. Mail, be sure to consult Publication 55, *Designated Private Delivery Services*.

REMINDER: NYS Withholding Tax Filing Requirements

Employers paying wages or other payments subject to income tax withholding must file a return and pay the New York State, New York City, and Yonkers taxes required to be withheld.

NYS-45

All employers required to withhold tax from wages must file Form NYS-45, Quarterly Combined Withholding, Wage Reporting, and Unemployment Insurance Return, each calendar quarter.

- If you withhold **less than \$700** during a calendar quarter, remit taxes withheld with your quarterly return, Form NYS-45. See “**NYS-1**” if you withhold more than \$700 during the calendar quarter for additional filing requirements.
- Generally, employers must file quarterly, even if they did not pay wages during the quarter and have zero withholding. See Instructions for Form NYS-45 for exceptions.

NYS-1

If you withhold **\$700 or more** during a calendar quarter you must remit the tax with Form NYS-1, *Return of Tax Withheld*, within 3 or 5 business days after the payroll that caused the accumulated tax withheld to equal or exceed \$700.

- If you have more than one payroll within a week (Sunday through Saturday), you are not required to file the NYS-1 until after the last payroll in the week.
- When a calendar quarter ends between payrolls paid within a week, any accumulated tax required to be withheld of at least \$700 must be remitted with Form NYS-1 after the last payroll in the quarter.
- If you have filed at least once during the calendar quarter (using Form NYS-1) and have an unremitted balance of tax withheld that is less than \$700 after the last payroll of the quarter, remit this

amount with your quarterly return, Form NYS-45, instead of form NYS-1.

- Make check payable to **NYS Income Tax** and mail to: NYS Tax Department, Processing Unit, PO Box 4111, Binghamton, NY 13902-4111.

Reporting annual wage and withholding totals

- You are required to report **annual wage** and **withholding totals** for every employee you employed during the year on the last NYS-45 filed for the calendar year.
- Employers do not submit a copy of federal Form(s) W-2 to New York State.

Pruning Central Leader and Vertical Axis Systems

Steve A. Hoying

Central Leader System is the oldest and best understood planting system in use today. The pruning concepts are simple, build a pyramid shaped tree with long bottom scaffold branches, mid length branches in the middle and short branches in the top of the tree. The idea is to arrange branches throughout the tree that will receive as much light as possible throughout the day. By shortening branches the higher you go in the tree, the more light will be able to fall on the lower branches. Although the concept is simple, in practice it can be difficult since there is a certain amount of art involved.

Concept 1 - Construct a pyramid or triangular shaped tree by pruning branches within each tree back within this imaginary triangle. This pruning should be done by seeking out a side branch that roughly continues the extension of the branch in the same direction but does not fall outside of the imaginary triangle. The length of the bottom set of branches should be pruned to accommodate the plant spacing or the between tree distance. In other words, trees should stay in the space originally intended for them.

Concept 2 - Major scaffold limbs should be spaced along the main trunk so that when mature each tier of branches is at least 5 feet apart. There should be 3 or 4 tiers of branches in a mature tree. Scaffold branches should not be stacked one on top of the other but whorled around the main trunk as they ascend. Remove

any shoots or large branches that are closer than 6 feet to create gaps within the tree that will allow sunlight into the inner reaches of the tree. And each scaffold limb should also be thinned out so that there are a reasonable number of side branches along its length. Entire side branches should be completely removed rather than shortened through the thinning out process. First remove all fruiting wood on the top and the bottom of the scaffold limb. Then thin outside branches so that they will not interfere with each other. When this is done properly, each scaffold limb should look like a feather with side branches only originating to the sides.

Concept 3 - There should only be 3 or 4 scaffold branches at each level. Remove excess branches taking into account their position within the tree. The bottom set of branches should be in an X-pattern angled roughly 45 degrees to the tree row and meeting the branch from the adjacent tree. It only makes sense since this will give the tree the longest branch and maximize the fruiting area of these limbs. Also take into account branch vigor and fruitfulness, choose limbs that are productive without a lot of bare wood and not overly vigorous or upright.

Concept 4 - Tree height should not be allowed to become too high to spray or exceed 80% of the distance between rows. For example if the row spacing is 20 feet, trees should only be allowed to be 16 feet in height. If there are

special circumstances such as an inability to spray to 16 feet or for U-Pick orchards that must be kept shorter, trees can be shortened even more but realize that this will reduce yield. It is important to reduce tree vigor in the top of the trees by making “calming cuts”. This means that severe heading cuts should be avoided if at all possible. Again find an alternate upright limb or branch that can replace the original leader and absorb some of the vigor.

Concept 5 – Remove unproductive wood or wood that will not produce high quality apples. Limbs that are weak, hanging underneath main scaffolds, upright limb shoots or suckers without spurs of fruit buds.

Special Problems and Solutions

Broken Limbs – Cut back to first useable side shoot along the branch or remove completely.

Not enough Scaffolds – Leave shoots or suckers along the main trunk to begin to form scaffold branch –spread, tie, head and encourage to fill in blank spots.

No fruiting wood along the branch. – Usually caused by shading or overpruning. Use upright suckers to renew fruiting wood by cracking or bending shoots over to promote fruiting.

Too Strong Upright scaffolds – Replace upright scaffolds with weaker ones or if the scaffold is still flexible spread with a nail tipped spreader to a 45 degree angle. This can be accomplished on a stiff branch by undercutting 1/3 the diameter then spreading.

Poor Fruit Color and Quality – Thin out limbs and scaffolds or transform into Palmette Leader or replant!

The Vertical Axis system was developed to address the problem of the excessive time it took for an orchard to reach mature bearing. Central Leader systems sometimes took 12 years to fill their space and reach maximum yield. When fewer trees are planted per acre, fewer bushels are produced early in the orchards life since it takes longer for widely spaced trees to fill the space allotted. Increasing tree density reduced the amount of

time necessary to fill an orchard’s canopy volume. The traditional structured tree concept of Central leader allows trees to outgrow their space and mature yields can be quickly reduced. A change in pruning scheme is needed to prevent trees from outgrowing their space. The originators of the Vertical Axis found that using the limb replacement concept reduced branch length and retained and increased productivity. This system is based on **limb renewal** (replacing limbs completely as they get too large).

Concept 1 – The Vertical Axis planting system has a tall thin canopy structure so that the orchard at maturity becomes a wall of fruiting wood. The only permanent wood in the tree is the central trunk and one bottom tier of scaffolds.

Concept 2 – Permanent bottom scaffolds need to be established shortly after planting and managed so they remain productive and are moderately vigorous. These scaffold limbs should be in roughly an X - pattern with limbs originating at a 45 degree angle from the main tree row maximizing the branch length yet still allowing for equipment movement between rows. Three or four scaffold limbs are sufficient. These limbs should be relatively flat and should be aggressively flattened during the first 3-4 years with spreaders to weaken them and make them productive. Scaffolds are shortened to fit the available space by choosing a side branch that is weaker and points in the same direction. Alternatively, two cuts can be made choosing a side branch heading away from the primary direction with a second branch that heads back in the original direction. The objective is to shorten the scaffold limb, reduce the vigor, and maintain productivity. Any hanging part of a limb that interferes with herbicide applications should be cut allowing a clear area beneath the tree.

Concept 3 – Keep tree height at 90% of the distance between the rows. The best way to accomplish this is to encourage fruiting along

the main trunk at the top of the tree that allows the weight of the apples to bend the leader below the horizontal and sometimes even break it off. Usually, a smaller and weaker upright shoot will originate near where the leader bends and can easily be made into the new leader by cutting off the drooping original leader leaving only the new weaker upright shoot. Try to choose the new leader so that it stays as close to above the original trunk as possible. In trellised trees, this height is easily maintained just above the stake or wire since the stake holds the tree trunk in place.

McIntosh and Gala and a few other vigorous varieties are resistant to bending. The best approach with these varieties is to wait as long as possible even if the height exceeds that which you want. Keep the leader very thin by removing any side shoots. This will allow sunlight to pass by the leader and not be blocked by it. When these shoots fruit they will bend and can be shortened as described above. A second approach is cut them off 2 feet below the desired height. A vigorous tree will respond by growing many new shoots the following summer. These can be pruned to a single shoot during summer pruning or the following dormant pruning. This shoot should be of medium vigor without side shoots and hopefully with fruit spurs that will produce apples and bend and weaken it in subsequent years.

Concept 4 – Other than the permanent scaffolds and leader, all other limbs on the tree should be renewed when they become too vigorous or long or if they are spaced too closely together. The rule of thumb is removing any limb that exceeds 1 inch in diameter above the bottom scaffolds. Usually this will amount to removing 1-3 large branches per tree per year. These limbs should not be cut close to the trunk rather a small lip on the bottom of the branch left to ensure that secondary buds hidden there. This is called a “shelf cut” or a “bevel cut”.

Concept 5 – The remaining branches on the tree should be thinned out and cleaned up by removing older, larger, and more complex spur wood and upright shoots that will not produce high quality fruit. Since these branches tend to bear very heavily, they often layer themselves one upon the other and should be cut “up” to lateral shoots that do not lie on top of the wood below.

Special Problems and Solutions

Managing tree height – Cut back to fruitful upward shoot or remove top and manage follow-up.

Maintain fruiting wood in the lower part of the tree – Do not summer prune, remove large upper branches only to allow more sunlight into the lower canopy.

Improving fruit size in Gala through pruning – Stub back and/or spur removal.

Farm Food Safety Training with GAPs – Last workshop scheduled until Fall 2014!

For details on what this is and other details, see fruit notes issue 22 (GAPs Canandaigua).

February 27-28th, 2014 at the Civil Defense Center, 7220 State Rte. 54, Bath, NY 14810

The link to Cornell Vegetable program website where there will be registration info:
<http://cvp.cce.cornell.edu/>

**Lake Ontario Fruit Program
Cornell Cooperative Extension
12690 NYS Rt. 31
Albion, NY 14411**

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- Farm Food Safety Training with Gaps – Last Workshop scheduled until Fall 2014!
- Mark These Dates on Your Calendar Now

Mark These Dates on Your Calendar Now:

- | | |
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| Jan. 20 | <u>2014 Becker Forum: Building the Agricultural Workforce of the Future</u> , Doubletree Hotel, East Syracuse, NY - We recommend registering online ASAP for lower registration costs |
| Jan 21-23 | <u>NYS Producers Expo</u> , OnCenter in Syracuse |
| Feb 3 & 4 | <u>Fruit Schools</u> : Feb 3-Niagara, Feb 4-Wayne, Details Inside! |
| Feb 22–23 | <u>IFTA Cherry Short Course</u> |
| Feb 23-26 | <u>International Fruit Tree Association Annual Meeting</u> , Kelowna, British Columbia More info: www.ifruittree.org |
| Feb 27- Mar 1 | <u>IFTA Post-Conference Tour</u> – northern Washington Orchards |
| Feb 27 - 28 | <u>GAP Training</u> : Steuben Co. |
| Mar 25 | <u>Horticultural Symposium</u> for Fruit Growers in Geneva – watch Fruit Notes for more information |