



Lake Erie Regional Grape Program **ELECTRONIC CROP UPDATE for March 22, 2012**

March 22, 2012

Dear Member,

As you are aware, we have been in the midst of our Annual Membership Drive and as a part of this process, we are updating our email list-serves. **IF YOU ARE A MEMBER AND HAVE RE-ENROLLED YOU CAN STOP READING NOW AND DO NOTHING ELSE.** If you *haven't* become a member or re-enrolled for 2012, please consider enrolling now.

Only members can receive the Crop Update so if you have not enrolled or re-enrolled, unfortunately your name will be dropped from the list-serve. Please consider enrolling now so that we can keep this important and informative publication coming to your email box! We will be doing this "switchover" the first week in April, 2012. That gives you a few weeks to enroll and not lose this valuable benefit.

If you are **unsure** of your membership status please give Kate Robinson a call or email to confirm your membership (kjr45@cornell.edu or 716.792.2800 ext 201). This includes all NY and PA members!

- **Chautauqua County 2012 LERGP Enrollment Form:** http://lergp.cce.cornell.edu/2012_Chautauqua%20County%20Enrollment%20Form.pdf
- **Out of County 2012 LERGP Enrollment Form:** http://lergp.cce.cornell.edu/2012_Full_Enrollment.pdf
- **Niagara County, NY Enrollment Form:** http://lergp.cce.cornell.edu/2012_Enrollment_Form_Niagara_County.pdf

Thank you very much for your continued interest and support!

Sincerely,
Edith Byrne

Go to <http://lergp.cce.cornell.edu/EventsCalendar.htm> for a detailed calendar of events including maps via Google calendar! Scroll to the bottom of the page for Google calendar and click on the event. Please remember to RSVP for those events that require one! UPCOMING EVENTS are also listed toward the bottom of this Electronic Update.

Please remember to let us know if you have changed or are in the process of changing your email address so we can keep the Electronic Crop Update coming to your inbox!

[Please email Edith at: emb35@cornell.edu.](mailto:emb35@cornell.edu)

Weather Facts

WEATHER FACTS: Edith Byrne

DATE / YEAR	HIGH	LOW	PRECIPITATION	<i>TOTAL</i> Accumulated January GDDs FOR THE DATE 3/21
March 21, 2012	75	61	0.00	95.5
March 21, 2011	50	30	0.60	8.5
March 21, 2010	45	33	0.00	3.5
March 21, 2009	41	22	0.00	12.5
March 21, 2008	33	26	0.00	22
March 21, 2007	47	19	Trace	18.5
March 21, 2006	29	18	0.00	8
March 21, 2005	33	31	0.11	10.5
March 21, 1998	33	27	0.00	6.5
March 21, 1991	63	32	0.04	9.5

'Game on' was the phrase that Terry Bates used when he responded to the phenology data collected this week by Kelly Link at CLEREL and the Fredonia Lab. With the growing season coming at us much faster than anyone had anticipated it looks like this will be a year where setting priorities in which production practices or done first, or at all, will be more important than ever.

Keep in mind that vineyard pests have evolved over many years with the grapevines in the area and will not be fooled even by an extremely early budbreak. If you have blocks where Phomopsis was a problem last year, the protectant fungicide application still needs to be applied at 3- to 6-inches of shoot growth.

After Friday of this week the forecast is calling for temperatures to go back into the 50's and 60's that should slow bud development, so it is time for the yearly reminder about climbing cutworm and grape steely beetle.



Adult Steely beetle

Steely beetle (*left*) is often found at the vineyard edges adjacent to brushy areas or woods. The steely beetle feeds directly on the bud, hollowing it out and destroying it. Time of susceptibility is bud swell through 1- to 2-inches of shoot growth. Scout the edges of vineyards where steely beetle has been a problem in the past and treat if damage reaches 2% bud damage or above for balanced pruned vines. For balanced

pruned vines a threshold of 2% bud

damage has been used to trigger treatment against this pest. However, for those vineyards where more buds are available after pruning, or in vineyards that have yet to be pruned, a higher threshold should be used. While both steely beetle and climbing cutworm are secondary pests they should not be ignored as they have the ability to cause economic damage quickly. As shown in the photo (*right*), steely beetle can reduce bud numbers on vines to the point where it appears a freeze event has killed the vegetation (note that a few rows over from the edge the canopy is growing normally).



Scouting for climbing cutworm should take place in vineyards with a history of damage from this pest, vineyards with lighter, sandier soils, or those that had poor weed control last year as this can dramatically improve the habitat for climbing cutworm. Climbing cutworm does its feeding at night and moves down into leaf litter or into areas of vegetation on the vineyard floor during the day.



Climbing cutworm habitat

We have seen in the past that vineyards that have weed growth up to the base of the vine are much more prone to damage from climbing cutworm than are vineyards that have a weed free strip under the row. However, not all vineyards with weed problems will have cutworm problems so scouting is important to locate areas that require treatment. Scouting for climbing cutworm will involve looking for the distinct damage or the shoots being fed on and “cut” off the shoot (see photo right). As with climbing cutworm, the more buds that are left on the vines after pruning is completed the higher the damage threshold should be raised.



NYS IPM Fact Sheets for Grapes (including climbing cutworm and Steely Beetle can be found at:

<http://nysipm.cornell.edu/factsheets/grapes/default.asp>

And to make sure that the materials you purchase get where they need to be, at the rate in which you intended, and when you want them applied, take some time to get your sprayers in top running shape for the growing season. Dr. Andrew Landers has some great tips on how to get your airblast sprayer (the tips are useful for other types of sprayers as well) in Chapter 7.1 of the 2012 New York and Pennsylvania Pest Management Guidelines for Grapes. This information can be found on-line at; <http://ipmguidelines.org/Grapes/Chapters/CH07/default-1.aspx> The next step in the process will be to calibrate your sprayer prior to the first application. In Section 7.4, Andrew provides the information needed to calibrate Airblack, Kinkelder, Ag Tec and boom sprayers. This information can be found at <http://ipmguidelines.org/Grapes/Chapters/CH07/default-4.aspx>.

Wanna Host a Coffee Pot Meeting?

The Lake Erie Regional Grape Program Extension team is getting geared up for the upcoming Coffee Pot meeting season and are looking for locations in Chautauqua and Cattaraugus Counties in New York and Erie County, Pennsylvania (all the dates in Niagara County have been filled!) The team will bring the coffee and doughnuts, all that is required from the ‘host’ is a place that will allow participants to get out of the elements in case of inclement weather. Past hosts have commented that the best thing about hosting a Coffee Pot meeting is it gives them the push they needed to get the shop cleaned up. If you are interested please give Kate a call at (716) 792-2800 x201 or send her an email at kjr45@cornell.edu.

NEWA Update:

Station Location	DD Accumulation from Jan 1.
North East Lab	97.5
Harborcreek	110
North East Escarpment	Currently off line
Portland Route 5	91.6
Portland (CLEREL)	95.5
Silver Creek	81.2
Sheridan	91.9
Versailles	86.7
Ransomville	68.5

GRAPE CULTURAL PRACTICES: Jodi Creasap-Gee, Ph.D.

Lake Erie Temperature: <http://www.erh.noaa.gov/buf/laketemps/LakeTempsMar.php>

I have had a few questions about the current temperature of Lake Erie and bud break, so I dug a little to find some information and see whether there were any correlations. The lake temperature will affect bud break, in that the lake temperature affects the air temperatures, which affects bud break.

Warm winter = warm lake = warm spring = early bud break.

This is one of the warmer winters in the record for Lake Erie temperatures; on March 21, 2012, the temperature of Lake Erie was 39°F. The years when the temperature of Lake Erie on March 21 was 35°F and above were: 1953, 1973, 1983, and 1998. The average lake temperature on March 21 seems to be around 32-33°F, so what does that mean for bud break? Well, there is no correlation between bud break and the lake temperature (*see graph*).

And really, it's all a moot point because bud break is already upon us.

(This is what happens when one starts the Crop Update article a week ahead of time.)

AND SO – the 2012 growing season begins....

A quick walk in the vineyard will reveal that these warm, sunny days have, indeed, encouraged buds to swell – in most varieties. Of course, Concord and Niagara are far along (see picture from Bates), and some of the hybrid and *vinifera* varieties are showing signs of bud swell.

As usual, Kelly Link has been out regularly over the past week to record where we are in terms of grapevine phenology (*See the table below*).

2012 Phenology data (Many thanks to Kelly Link for her efforts to get this data)

Location/Pruning level	Friday, March 16	Monday, March 19	Wednesday, March 21
Fredonia/ Balance 30+10	10% buds at stage* 2.0	3% at 2.5, 35% at 2.0	20% at 2.5, 42% at 2.0
Portland/120 nodes	>21% at 2.0	16% at 2.5, 35% at 2.0	2% at 3.0, 40% at 2.5
Portland/ Balanced 20+20	>6% at 2.0	5% at 2.5, 35% at 2.0	1% at 3.0, 23% at 2.5
Portland/80 nodes	>12% at 2.0	8% at 2.5, 42% at 2.0	1% at 3.0, 37% at 2.5

***Phenology rating:**

2.0 = bud is pushing/swelling but shuck is still part way up on the bud; brownish wool clearly visible (doeskin stage)

2.5 = half or more of bud (doeskin) showing

3.0 = first signs of pink

**The average date for 10% pink in the Fredonia Historical Concord Vines is April 28th. The earliest 10% on record at Fredonia is April 8, 2010.

And, finally – [Bud Hardiness](#) and Bud Mortality

In case you need *still further* proof that bud break is upon us, here are the latest bud hardiness numbers from collections (see tables below). The buds are quickly deacclimating with these warm temperatures; the LTE50 for Concord has gone up to 8.8°F, an increase of almost 15 degrees in two

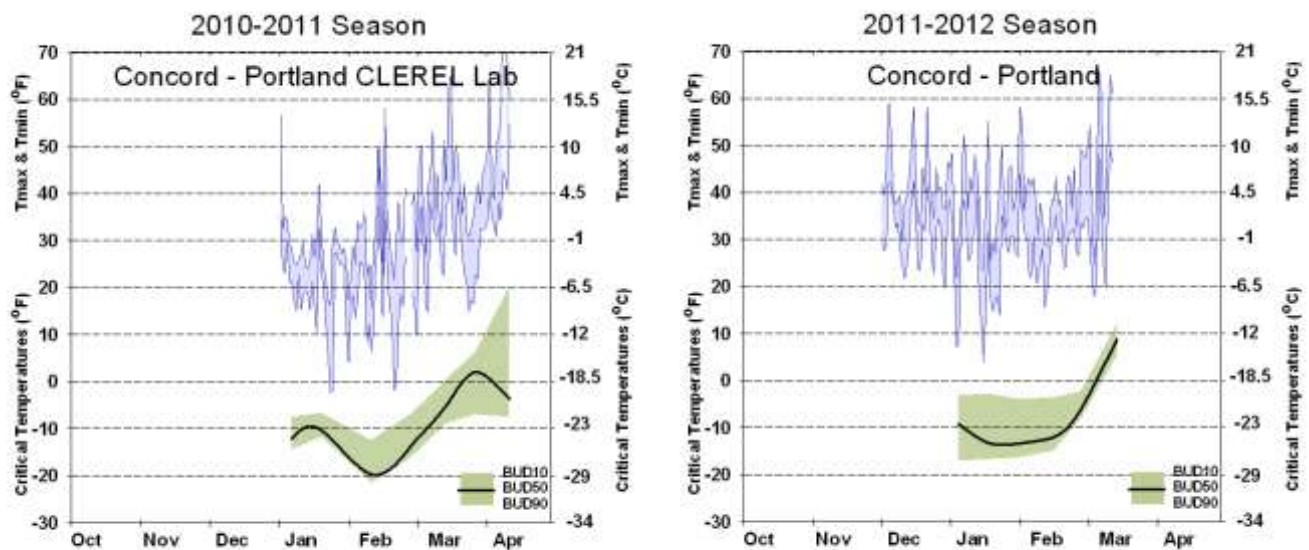
weeks. Compared to the 2010-2011 bud hardiness data (*see graphs below*), the 2011-2012 data indicates that we are a full month ahead of 2011 for now, and the forecast predicts temperatures above 40°F for the next several days. We are definitely in for an early spring, so be cautious with fertilizer plans for 2012: Remember, in situations where a majority of a crop is lost due to a spring freeze, the most important management tools become disease/insect and weed management.

02/27/2012 Bud Low Temperature Exotherms

Variety	LT10 °F	LT50 °F	LT90 °F
Cab Franc	-4.2	-7.8	-10.2
Noiret	0.5	-4.6	-8.8
Concord	-3.4	-6.1	-9.0
Riesling	-6.5	-10.0	-12.2
Niagara	-2.5	-8.4	-11.1
Traminette	-6.0	-8.6	-13.4

03/12/2012 Bud Low Temperature Exotherms

Variety	LT10 °F	LT50 °F	LT90 °F
Cab Franc	9.4	2.6	-3.6
Noiret	16.6	10.3	4.3
Concord	11.1	8.8	4.6
Riesling	4.4	-0.9	-3.9
Niagara	12.8	6.9	2.0
Traminette	4.0	-0.1	-2.3



With the mild winter temperatures this year, bud mortality is very low (*see table below*), which means that if we survive the spring without any frosts or freezes, the region should be in good shape for a decent-sized crop that could potentially ripen earlier than average. I collected at least 100 buds (from positions 2-10 in the canes) of each variety and sectioned through the buds to assess whether they

were alive. Concord and Niagara buds were already swelling and were sectioned on the day of collection. For the remainder of the varieties, canes were brought in and placed in water for 24 hours prior to sectioning.

Bud Survival for 2011-2012 Winter		
Variety	Primary Bud (% Alive)	Secondary Bud (% Alive)
Concord	94%	97%
Niagara	97%	97%
Traminette*	93%	88%
Cabernet Franc	100%	99%
Riesling	98%	93%
Noiret	92%	94%
<i>*Poor bud survival is more than likely due to wet field than to freezing winter temperatures.</i>		

BUSINESS MANAGEMENT: Kevin Martin

Yearly Bud-break, Expected Value and Crop Load Management

We know that the average year is just as rare of an occurrence as a very good or a very bad year. Yet again we are shaping up for a year very different from average. With 2% pink in Portland and the 10-day forecast, bud break should be right around the corner. The earliest last frost date on record for the region that I can find is April 2nd. The earliest we've reached 10% pink up until now is April 8th. While we are breaking records, we might as well break the earliest last frost date.

The reality is, an early growing season highlights the importance of risk management. Last week we discussed crop insurance, one of the biggest risk management tools available. The other large risk management tool is selecting a crop size. Crop size selection needs to be finalized before veraison, ideally 30-60 days post bloom to ensure vine size for the following year. Due to the high risk of frost, the expected production of grams per bud is significantly lower than average. Having more buds makes a lot of economic sense at the moment (120 – 150). Once vineyards reach bud break, each day that passes without a frost, expected production per bud increases as the probability of frost decreases.

Given the potential for an extremely early start, even if a frost does not happen, the extended growing season should either reduce the need for later crop adjustment. If adjustment is needed it should at least be a practical undertaking. In other words, even with a combination of shoot thinning, shoot positioning, and fruit thinning removing more than 6 ton per acre might be cost prohibitive.

If your crop load is already finalized, pruning to <100 is complete, in economic terms, at this moment in time, the expected value of your crop is rather low. With a normal crop load of six ton, given the probability of frost, the expected value should be around \$750 per acre, plus any insurance guarantee. There won't be a lot of sustainable savings you can realize by having this type of disaster. At this point, it is really about adjusting your expectations and really controlling those expenses that can sustainably be controlled. Of course, a month from now we'll know so much more. With that knowledge thirty days from now you might well be able to make a capital investment, plan an August vacation or upgrade the

cost of your vineyard floor management plan.

With 120 buds on the right site, you may have also already finalized your crop load decision. A 7 ton average is likely sustainable, depending on your market. This year could possibly be a tough one to swallow but overall your long-term production is only slightly lower than adopting a comprehensive crop load plan because your disasters are so few and far between. Normally I would not touch climate change with a ten-foot pole. I would just mention that Dr. Bates has seen long-term trends toward earlier bud break and a longer period of time between bud-break and bloom. This has the potential to be the earliest bud break in recorded history. With that in mind, your crop and site history averages may evolve as your sample size increases. As your averages evolve, your management strategies to increase your margins may need to as well. In general, the greater the probability of a disaster, the greater the expected value of postponing crop size despite the potential increased cost of fruit thinning.

U p c o m i n g E v e n t s

PESTICIDE TRAINING AND EXAM

DATE: Thursday, May 3, 2012

TIME: 8:30 AM – 4:00 PM

LOCATION: Chautauqua County, Frank Bratt Agricultural Center, 3542 Turner Rd., Jamestown, NY 14701

COST: The cost of the morning training is \$15.00 and must be received by Monday, April 23, 2012. This fee **does not** cover the cost of exams or manuals.

SPACE IS LIMITED: PRE-REGISTRATION IS REQUIRED BY MONDAY, APRIL 23, 2012

*****More information and Registration form are at the end of this Update! Please read all documents carefully.**

Next Electronic Crop Update will be: Thursday, March 29, 2012

Lake Erie Regional Grape Program Crop Update is an e-mail newsletter produced by the Lake Erie Regional Grape Program and sent out by subscription only. For subscription information, please call us at 716.792.2800 ext 201, or look for subscription forms at http://lergp.cce.cornell.edu/Join_Lergp.htm.

Lake Erie Regional Grape Program Team Members:

[Andy Muza](#), Extension Educator, Erie County, PA Cooperative Extension, 814.825.0900

[Tim Weigle](#), Grape IPM Extension Associate, NYSIPM, 716.792.2800 ext. 203

[Jodi Creasap Gee](#), Viticulture Extension Associate, CCE, 716. 792.2800 ext. 204

[Kevin Martin](#), Business Management Educator, 716. 792.2800 ext. 205

For any questions or comments on the format of this update please contact Tim Weigle at:

thw4@cornell.edu.

Subscribe to [Appellation Cornell newsletter](#):

<http://grapesandwine.cals.cornell.edu/cals/grapesandwine/appellation-cornell/index.cfm>

[2010 Appellation Cornell Newsletter Index](#):

<http://grapesandwine.cals.cornell.edu/cals/grapesandwine/appellation-cornell/2010-index.cfm>

[Veraison to Harvest newsletters](#):

<http://grapesandwine.cals.cornell.edu/cals/grapesandwine/veraison-to-harvest/index.cfm>

[NY Grape & Wine Classifieds](#) – New Address! - <http://flgclassifieds.cce.cornell.edu/>

This publication may contain pesticide recommendations.

Changes in pesticide regulations occur constantly, and human errors are still possible. Some materials mentioned may not be registered in all states, may no longer be available, and some uses may no longer be legal. Questions concerning the legality and/or registration status for pesticide use should be directed to the appropriate extension agent or state regulatory agency.

Read the label before applying any pesticide.

Cornell and Penn State Cooperative Extensions, and their employees, assume no liability for the effectiveness or results of any chemicals for pesticide usage.

No endorsements of products are made or implied.

Cornell University Cooperative Extension provides equal program and employment opportunities.

Contact the Lake Erie Regional Grape Program if you have any special needs such as visual, hearing or mobility impairments.

CCE does not endorse or recommend any specific product or service.

**The Lake Erie Regional Grape Program at CLEREL
6592 West Main Road, Portland, NY 14769**



Cornell University
New York State
Integrated Pest Management Program

“CORE” Pesticide Training and Exam

***** Space is limited --- pre-registration is required *****

*****by Monday, April 23, 2012 *****

Core level pesticide training will be offered by NYS IPM Program, Cornell Cooperative Extension on May 3, 2012 at the location listed below. **3.0 Credits for NYS Pesticide Applicator Re-certification** (these are core credits that do not cover category specific requirements) are available. PA core credits have been applied for. The NYS-DEC is offering pesticide applicator exams following the training.

Thursday, May 3, 2012

Chautauqua County
Frank Bratt Agricultural Center
3542 Turner Road
Jamestown, NY 14701

The above program will all follow this schedule: 9:00 AM to 12:15 PM Core Training Session, 12:15 PM to 1:00 PM lunch on your own, 1:00 PM - DEC Pesticide Exam Session. You must pre-register for the exam with NYS-DEC by calling the Buffalo office at (716) 851-7220. The cost of the morning training is \$15.00 and must be received by Monday, April 23, 2012. This fee **does not** cover the cost of exams or manuals.

Any questions about your eligibility to take an exam or the status of your current certification should be directed to the Buffalo DEC office at (716) 851-7220. A pesticide manual order form and course registration form are enclosed. These need to be returned to the Jamestown office (pre-registration is required for the training). **You must also register with the Buffalo DEC office if you are planning on taking any exam.** Also, remember lunch is not provided at the day session so bring a lunch or plan to get something quick in town. **Training begins promptly at 9:00 AM and exams at 1:00 PM sharp.**

**DEC PROCEDURES REQUIRE YOU TO REGISTER FOR ENTRANCE TO THE EXAM SESSION
WITH THE BUFFALO DEC OFFICE AT (716) 851-7220.**

If you have any questions, call me at 716-792-2800 x 203.

Tim Weigle
Senior Extension Associate,
Statewide Grape IPM, NYS IPM Program
Cornell Cooperative Extension

Accommodations for persons with disabilities may be requested by contacting Tim Weigle at 716-792-2800, ext 203 or thw4@cornell.edu by April 23, 2012.

NOTES FOR PEOPLE TAKING EXAMS

NYS-DEC has raised exam fees to \$100.00 for all exams. This fee must be paid prior to the exam date. If you are planning on taking any exam, contact the Buffalo DEC office at 716-851-7220 at least two weeks prior to the exam session. You will then be sent an exam application form and test instructions by the DEC.

Cornell Cooperative Extension can provide you with the books for the exams (see attached order form). However, questions about eligibility to take the exams or current certification status must be handled by the DEC office in Buffalo.

Notes for Buying Manuals for the Exam

Commercial Applicators: You will need the “Core Manual” and the category manual for the area in which you will be certifying.

Private Applicators: You will need to get the “Core Manual” plus the private category manual for the area in which you will be certifying.

DEC PROCEDURES REQUIRE YOU TO REGISTER FOR ENTRANCE TO THE EXAM SESSION WITH THE BUFFALO DEC OFFICE AT (716) 851-7220.

REGISTER FOR ANY TRAINING WITH THE APPROPRIATE CORNELL COOPERATIVE EXTENSION OFFICE.

**You can also order manuals directly from
PEMP at Cornell University by calling:
(607) 255-7282**

ORDERS MUST BE RECEIVED BY Monday, April 16, 2012

**PESTICIDE TRAINING MANUALS
ORDER FORM**

Qty	Title	Price each	Total
_____	"CORE" Manual (Needed by both commercial and private applicators (2003)	\$35.00	_____
_____	Federal Farm Worker Protection "How to Comply" manual	No Charge	
	Commercial Category Manuals		
_____	1.a. AGRICULTURE- PLANT (2006)	\$35.00	_____
_____	1.b. AGRICULTURE-ANIMAL (1999)	20.00	_____
_____	2. FOREST (2006)	35.00	_____
_____	3. ORNAMENTAL & TURF (2004)	35.00	_____
_____	4. SEED TREATMENT (1977)	14.00	_____
_____	5. AQUATIC (2004)	30.00	_____
_____	5.e. SEWER LINE ROOT CONTROL (1996)	30.00	_____
_____	6. RIGHT-OF-WAY (2005)	35.00	_____
_____	6b. GROUND LINE INSPECTION & PRESERVATIVE RETREATMENT OF STANDING WOOD UTILITY POLES (2002)	15.00	_____
_____	7.a. STRUCTURAL AND RODENT (2006)	35.00	_____
_____	7.b. FUMIGATION (1993)	24.00	_____
_____	7.c. TERMITE APPLICATOR'S CERTIFICATION PACKET (2000)	34.00	_____
_____	7.d. LUMBER AND WOOD PRODUCTS (1987)	15.00	_____
_____	7.f. FOOD PROCESSING (2005)	35.00	_____
_____	7.g. COOLING TOWERS (1998)	24.00	_____
_____	8. PUBLIC HEALTH (2002)	30.00	_____
_____	10. DEMONSTRATION AND RESEARCH (1978)	19.00	_____
_____	11. AERIAL APPLICATION (2001)	30.00	_____
_____	12. SALES (2004)	30.00	_____
	Private Applicator Training Manuals		
_____	21 Private Field and Forage (2003)	\$30.00	_____
_____	22 Private Fruit (2003)	30.00	_____
_____	23 Private Vegetable (2004)	30.00	_____
_____	24 Private Greenhouse & Florist (2002)	30.00	_____
_____	25 Private Nursery, Ornamentals & Turf (2004)	30.00	_____
_____	I will pick up my manuals at my local Cornell University Cooperative Extension office	No Charge for Postage & Handling	
_____	Please mail my manuals to me.		
	I have added \$6.50 for Postage & Handling		_____
	Total		_____

“CORE” Pesticide Training Registration Form

Space is limited - pre-registration is required.

Manual orders must be received by Monday, April 16, 2012.

To register for the training, fill out the following and send to the address below:

Agricultural Program
Chautauqua County CCE
Frank Bratt Agricultural Center
3542 Turner Road
Jamestown, NY 14701

Name(s) _____

Address _____

Phone _____ Number Attending _____

Registration and **payment** by Monday, April 23 (\$15 per person) \$ _____

Cost of manuals (from enclosed order form) \$ _____

(Manual orders must be received by Monday, April 16, 2012)

Total enclosed \$ _____

Make Checks Payable To: **Cornell University Cooperative Extension**

Do **not** include payment for your exam. This payment must be sent to DEC prior to the exam.