July/ Aug 2007

Farm Flashes

Baldwin Farm, Waterville NY

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Please feel free to give us a call and let us know what we can do for you. Our office hours are Monday—Friday, 8:30 am to 4:30 pm. Our phone number is (315)736-3394 or (315) 337-2531 or check us out on the web at: www.cce.cornell.edu/oneida

Cornell University
Cooperative Extension
Oneida County

Crop Shorts

By Jeff miller

Switchgrass For Energy

Dr. Donald R. Viands, Research Associate Julie L. Hansen and Extension Associate Hilary Mayton all of the Cornell University Plant Breeding and Genetics Department - are the 2007-08 grasses-for-energy project leaders. A plant pathologist, entomologist, weed scientist, crop and nutrient management specialists, and staff at the USDA Big Flats Plant Materials Center in Corning, NY, will assess the entire feedstock production system for the grasses. An economist will analyze 2008 field samples data for the grasses income potential.

Viands says, grass and legume crops potentially provide more economical and environmentally sustainable feedstocks than corn for ethanol production. Their perennial growth eliminates the costs associated with an annual crop and they are environmentally more sustainable because of their lower nutrient inputs and because their root system holds the soil against erosion and they require less land disturbance as they grow.

Cornell Cooperative Extension of Jefferson County Field Crops Educator Michael E. Hunter says the potential for switchgrass pellets to produce heat was demonstrated at the 2007 Spring Home Show at the Jefferson County Fairgrounds. Sundance Pool and Leisure of Watertown successfully burned switchgrass pellets in a biomass stove at their show display.

The agricultural industry is also taking steps to develop the infrastructure needed to support grass fuel production. For example, a Pennsylvania company is about to debut a tractor-driven hay pelletizer that could encourage additional interest in on-farm development of the grass crops. At an expected cost of up to $80,000 for the new machine, the potential may exist for a custom service that would go from farm to farm to pelletize the grasses, Hunter says.

Local Corn

Anywhere from v3 – v7 at this time. Many of the pre emergence herbicide programs struggled to control weeds this season with very little water to activate them in a timely fashion. Some local growers had to apply rescue treatments like Permit to control nutsedge, Banvel for broadleaf weed escapes or Steadfast, Accent or Beacon for annual and perennial grass control or glyphosate in RR corn for total post emergence weed control. All of these products are systemics which means they count on the weeds to be actively growing for their active ingredient to be transported to where it has its effect. With our dry conditions this season these post applied systemic herbicides also had a hard time this year.

On the whole, corn populations look pretty good this year with the exception of those dry knolls and knobs. A few growers had issues with bird damage; crows and turkeys pulling seedlings out to consume the corn kernels. Sweet corn growers have been moderately successful at managing birds with owl eyes, propane cannons and call boxes. We are still investigating the potential use of Avitrol as a control for birds.

Lightning bugs are out and corn growers know that also means that corn rootworm larva have hatched and are feeding on corn roots. If you have tried some form of corn rootworm control (Poncho or Cruiser seed treatment or CRW BT)you can dig up some plant roots and see what effect your control is having.

Many of our local corn fields will be tasseling in mid July. Take a moment and write the date on the calendar when your corn is fully tasseled. Bill Cox, Cornell University did several years of research on timing of harvest. The traditional rule of thumb is to harvest about 45 days after tasseling for corn silage. Bill found in a drought year (2005), like the season we have to date, that silage harvest moisture was achieved 31-35 days after tasseling. His research indicates that growing degree days GDD's may be a better predictor for timing of harvest versus calendar days. His work to date suggests that most 96-100 day hybrids require 750 GDDs before silage harvest and longer season hybrids require 800 GDDs. CCE of Oneida county staff will post GDDs after tasseling on our website: http://counties.cce.cornell.edu/oneida/ and we do perform whole plant moisture tests for growers to help them harvest their corn at the optimal moisture content.

Small grains

Our winter wheat crop is short and so too are spring barley and oats so straw bedding will be at a premium this year. Winter wheat looked almost disease free this season. Flowering occurred somewhere around June 4th this year a few days earlier than last year. We had some scattered thunder showers that week. One local farm reporting rain on the 3rd, 4th, and 8th.

Most growers worry about rainfall during the flowering period because that is when the disease organism for fusarium head blight can infect the head increasing mycotoxins to the point where the wheat grain may be rejected for milling. If you haven't already scouted your fields for bleached heads you may have missed the opportunity because our local wheat crop is already turning. Wheat grain can be sent to Churchville for free testing for mycotoxins.

At the small grain field days in Aurora they announced the release of a new variety -"Jensen"- that will have sprouting resistance similar to Cayuga and **will have a modest level of fusarium head blight.**

Their was a short discussion on what could be done to reduce sprouting and fusarium head blight. The two most practical suggestions were to harvest early, i.e. when grain moisture is 18-20% and air dry and when harvesting to turn the air up to blow out most of the lighter infected kernels.

As its going to be time to harvest soon growers should be emptying out and cleaning up any grain residues in their bins. Here are some suggestions:

The following sanitation practices are recommended for managing empty storage bins.

* Clean harvest and transportation machines before harvest.
* Repair all grain handling equipment before harvest and keep it in good condition.
* Seal unloading auger, auger tube opening, and side door openings before harvest
* Empty storage structures of old grain. The new crop should never be stored on top of old grain.
* Remove and destroy any grain from beneath, around or near the bin area. Sweep and vacuum the floors, false floors, and walls inside empty bins to remove old grain and debris. This debris usually contains insect eggs, larvae, pupae, and/or adults, all ready to infest the new grain. A shop vacuum, broom and scoop are very useful in a cleanup job, and all collected material should be discarded properly.
* Check fan boxes for possible grain pests.
* Remove any spilled grain outside the storage structure.
* Mow / remove weeds at least 10 feet around the bins.
* Check and clean or replace rodent traps.
* Check the integrity of screens and porcupine wires to limit bird entry and roosting.
* For additional protection against infestation, the inside and outside surfaces, foundations and floor of a storage facility can be sprayed with residual insecticide, four to six weeks prior to harvest, to kill any insects that were not removed during cleaning and those that migrate into the bin.
* Establish a written sanitation schedule, keep appropriate records

Some interesting methods of insect pest management were discussed at the small grains field day. Using infrared light source on grain stream entering the storage can kill insect pests on the grain before it enters storage. If insects are in the storage consider sealing the storage and fumigate with CO2 or raise the temperature of the grain in storage up to 140F and maintain for ½ hour.

The last Chicago cash price I saw (June 22) was $6.09/bu. This price is great motivation to harvest and store milling quality wheat this season.

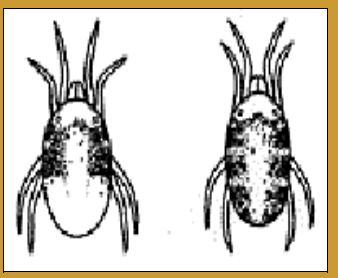
Soybeans

Recent scouting of our local crop indicates that our soybeans are mainly in v2-v4 stage at this time. Glyphosate has been applied or will be applied to many of our fields. A reminder that you can improve the activity of glyphosate by applying 8.5-17 lbs of spray grade ammonium sulfate per 100 gallons. In addition reducing your application rate from 20 gal /ac to 8-10 gals/ac will also improve weed control. Soybean aphids are being found at rates of 0-40/plant in local fields. The threshold is 250 aphids per plant. Aphid reproduction increases with temperatures from the mid 70s to low 80sF. Longevity or life span also

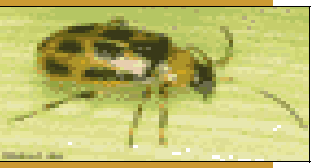
increases within that temperature range. Lack of rainfall also supports the increase in soybean aphid populations. We have experienced temperatures in that range combined with little or no rainfall which can mean a build up of aphids. The only way to know if you have a problem is to scout your fields. Signs that you might have an aphid problem include: yellowing of plant leaves, crinkling of leaves, black soot mold, the presence of lady bugs or ants. Aphids can be found on the under sides of leaves and or stems. You can count aphids on 4 plants at each of 5 locations in the field to determine the average number per plant. Three criteria should be met before you consider spraying for aphids:

- 250+ aphids per plant and population actively increasing
- lack of significant beneficial insects like lady bugs
- soybeans are in a critical stage of development (from first flower through pod fill)

Some other pests to look for in your soybean fields include:



Spider Mites



bean leaf beetles

Japanese beetles

Soybean aphid

None of these pests are as significant as the soybean aphid.

Alfalfa Timing of Second Hay Harvest

Jerry Cherney, forage specialist at Cornell, advises dairy producers to consider harvesting first cut alfalfa and alfalfa grass swards at optimal NDFs based on the percentage of grass in the sward and to take the second harvest between 30-35 days later. This aggressive management will help producers to provide a source of high quality forage for their early lactation and high milk producing cows. He would follow with the suggestion to allow 42 days before the third cut to allow plants to replace root reserves and increase the life of the stand and to segregate this hay for use in feeding animals with appropriate nutritional requirements.

A cutting height study by Ev Thomas of Miner Institute indicated that mowing higher at 4" height rather then 2" height did not increase quality significantly (only 4% difference)yet resulted in lower yield (1/2 ton/ac lower yield at 4" height). Using the milk 2000, program milk yield went from 2813 lbs milk/ac to 2615 lbs of milk /ac at the higher mowing height.

Research conducted by Jerry Cherney on **manure applications to alfalfa stands** showed that modest levels of manure-2000gal/ac or 5 ton/ac applied immediately after harvest provided essential nutrients without reducing yields. Delays in applications as little as 5 days after harvest resulted in crown injury and reduced yield. Additional work by Harold van Es showed significant long-term damage from compaction from equipment used to transport harvested forages or apply manure.

Potato Leaf Hopper (PLH)

A significant pest of alfalfa in central NY. It may not be in every field and it may not be a problem every year but when it hits a field in economic numbers it can reduce yields by ½ ton/ac, reduce protein content in the harvested hay and potentially shorten the life of the stand. PLH is even more significant in new seedings because it robs the plant of root reserves and new seedlings don't have much reserve.

Scouting alfalfa fields is the key to early detection of potato leafhopper infestations. Use a 15-inch diameter sweep net to determine the potential risk a potato leafhopper infestation may pose to your alfalfa. Scouting for potato leafhopper starts after the first cutting of alfalfa (about the first part of June) till the first fall frost. You will want to use a potato leafhopper sequential sampling plan to determine if an infestation requires management or not. The first thing to do is determine the height of your alfalfa. Smaller plants are more vulnerable to potato leafhopper; thus there are different action thresholds for different heights of alfalfa. The second thing you will need to know is how to sample for potato leafhopper. A sample consists of a set of 10 sweeps of the net. A sweep is one pass in front of you as you walk through the alfalfa. The return swing is counted as another sweep. Sequential sampling reduces the time spent in each field and tells you whether to treat (management action) or not treat (no management action). Sequential sampling is particularly helpful in minimizing time required to make a management decision in situations where PLH populations are very high or very low. Use the following chart to determine potato leafhopper infestation levels.

	3”		3”-7”		8”-10”		>10”	
Sweep Set	N	M	N	M	N	M	N	M
1	*	*	*	*	*	*	*	*
2	*	*	*	*	*	*	*	*
3	2	9	9	20	19	41	44	75
4	4	11	14	25	29	50	64	95
5	5	13	18	30	39	60	84	115
6	7	15	23	35	49	70	104	135
7	9	16	28	40	59	80	124	155
8	11	18	33	45	69	90	144	175
9	13	20	28	49	79	100	164	195
10	19	20	49	50	99	100	199	200

N= No management needed at this time
M= Management needed as soon as possible

Write down the number of potato leafhoppers for each sample taken on the card. Add each sample to the next, keeping a running total of potato leafhoppers. You will need to take at least 3 samples using the sequential sampling method. On the sequential sampling card N is defined as no treatment (no management) needed at this time and M is defined as treatment (management) needed within in a week. If the sample is smaller than the N number stop and scout 7 days later. If the number of leafhoppers is larger than the M number then management action needs to be taken within a week. If the number of potato leafhoppers fall between N and M then continue and take the next sample till a decision can be determined. A guide with a printable version of the sequential sampling chart can be found at: http://www.nysipm.cornell.edu/publications/plh.pdf

Mustang has just received a label for use in NY on grass and alfalfa stands. The lowest label rate is 2.24 fl oz/ac. Elson Shields, Cornell University entomologist, has done some research with this product finding very effective control of PLH at high densities at 1.6 fl oz/ac. Potato leaf hoppers have been sited in the Hudson Valley and western NY this season. If you think you might have a problem especially in a new seeding give us a call at 736-3394 ext 120.

Research and demonstration projects being conducted in Oneida County

CCE staff are collaborating with local farmers and Cornell University staff by collecting soybean leaf samples on a weekly basis from an area soybean field in a nationwide project to track the movement of **asian soybean rust**. This program is designed to provide an early warning system to farmers to help them protect their soybeans from this disease.

A sample of alfalfa was taken from a local field in June for nutrient analysis. This sample along with many others taken all over the state will be analyzed for sulfur content. This is the first step in a research project designed to detect if there are **sulfur defficiences** in NY and to develop recommendations for fertilization where defficiences occur.

Three area farmers are hosting a research project designed to **detect northern and western corn rootworm and European corn borer populations** in areas in NY with high corn acreage versus areas within the state with low densities of corn acreage.

CCE staff of Oneida Co. Cooperative Extension collaborated with staff in Madison Co. SWCD to demonstrate the use of **strip tillage** in the production of corn and soybeans in our region.

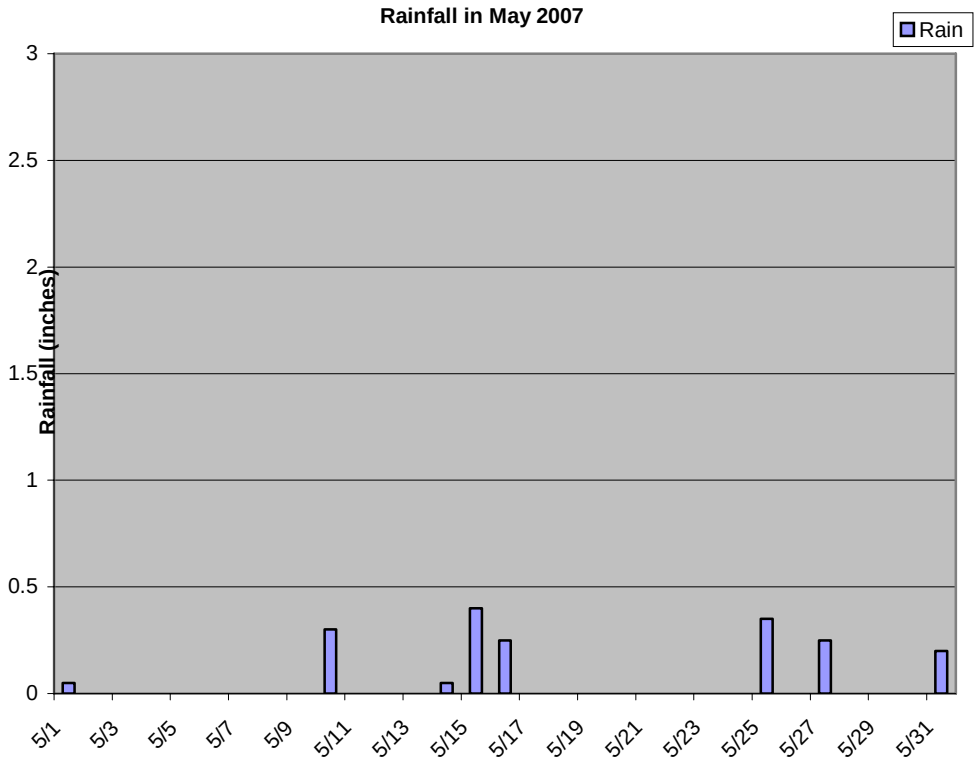
Picture of PLH nymph (upper left) and adult (lower right). Both nymphs and adults are counted when checking

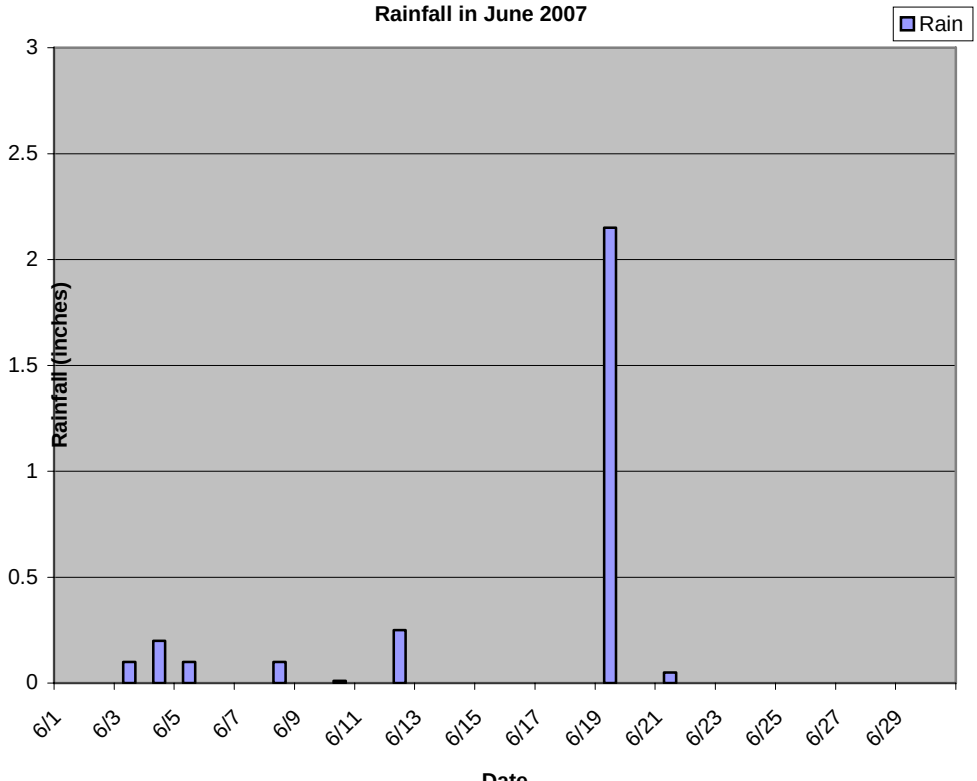
Tractor pulling strip tillage implement

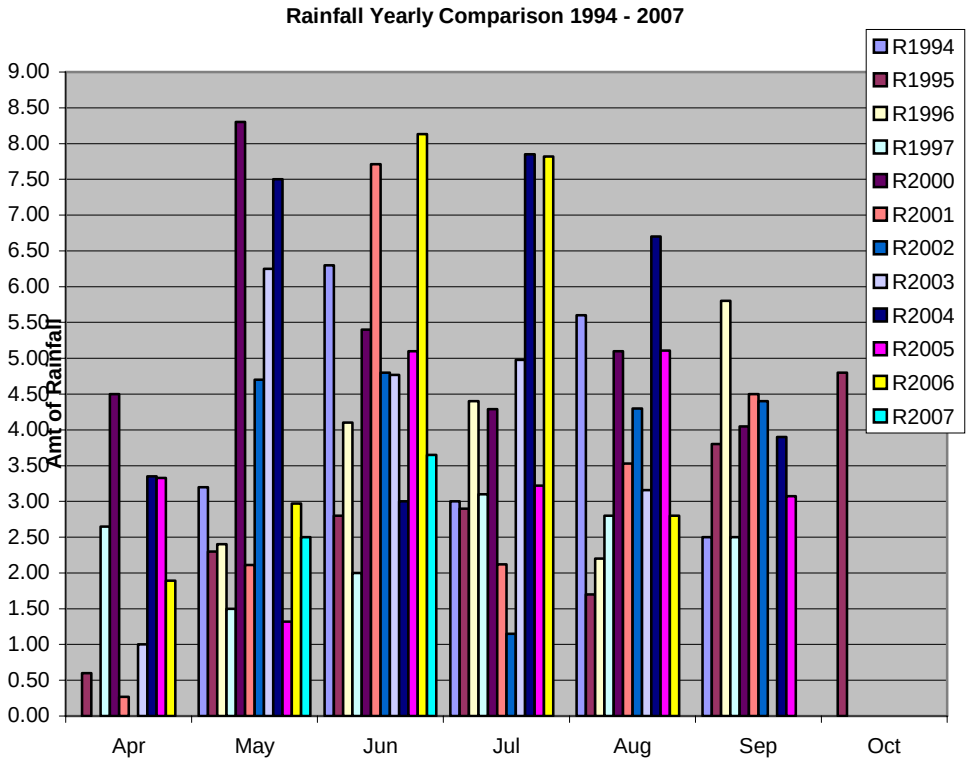
Weather 2007

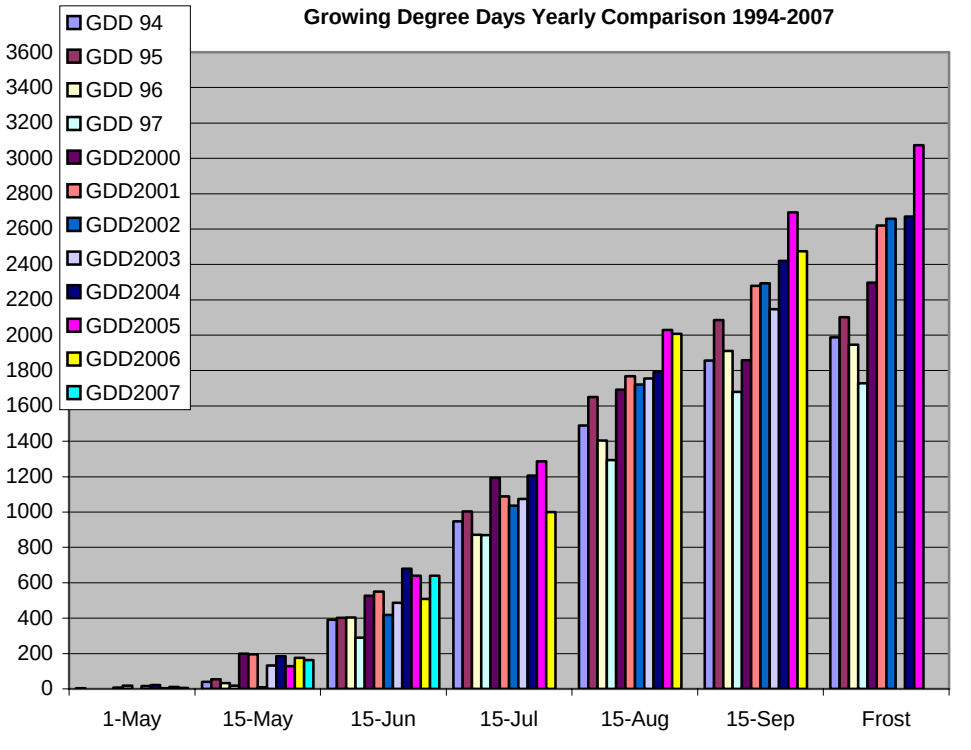
As you can see from the chart's on the next pages, showing a comparison of many years of rainfall in Oneida County, this year is drier than most. The 2 charts showing distribution of rainfall in the months of May and June show that even though there hasn't been much rain, it in fact has been distributed over a number of days making timely first hay harvest a challenge.

The growing degree day comparison shows that to date we are on track with the previous two seasons. 2005 and 2006 both had high GDDs during the growing season.


Rainfall in May 2007
Rain
Rainfall (inches)
3
2.5
2
1.5
1
0.5
0
5/1
5/3
5/5
5/7
5/9
5/11
5/13
5/15
5/17
5/19
5/21
5/23
5/25
5/27
5/29
5/31


Rainfall in June 2007
Rain
Rainfall (inches)
3
2.5
2
1.5
1
0.5
0
6/1
6/3
6/5
6/7
6/9
6/11
6/13
6/15
6/17
6/19
6/21
6/23
6/25
6/27
6/29
Date


Rainfall Yearly Comparison 1994 - 2007
Amt of Rainfall
9.00
8.50
8.00
7.50
7.00
6.50
6.00
5.50
5.00
4.50
4.00
3.50
3.00
2.50
2.00
1.50
1.00
0.50
0.00
Apr
May
Jun
Jul
Aug
Sep
Oct
R1994
R1995
R1996
R1997
R2000
R2001
R2002
R2003
R2004
R2005
R2006
R2007


Growing Degree Days Yearly Comparison 1994-2007
3600
3400
3200
3000
2800
2600
2400
2200
2000
1800
1600
1400
1200
1000
800
600
400
200
0
1-May
15-May
15-Jun
15-Jul
15-Aug
15-Sep
Frost
GDD 94
GDD 95
GDD 96
GDD 97
GDD2000
GDD2001
GDD2002
GDD2003
GDD2004
GDD2005
GDD2006
GDD2007

Choosing a Logger

Woodland owners contract with loggers to cut and remove timber. This operation, sometimes called a "timber sale" or harvest, is complex and requires careful planning and supervision. Among other reasons, that is why the Maine Forest Service strongly recommends that landowners hire Consulting Foresters to oversee timber harvests. The decision to harvest should always be yours as the woodland owner, and is best based on the knowledge you've gained from your Woodland Management Plan.

One of the best ways to find and select a logger is through your Consulting Forester, who usually has established relationships with logging professionals they trust. Your Consulting Forester is required to work in your best interest. Your Consulting Forester typically should initiate contact with a selected logger. It is rarely wise to answer unsolicited requests from loggers to cut your woodlands. The unintended consequences of improper timber harvests sometimes results in landowners calling the MFS for help or to lodge a complaint against a logger. Once damage has occurred, though, there usually are few options for correcting the impacts beyond seeking financial remedies.

If you choose to work directly with a logger rather than through a Consulting Forester who can supervise the harvest, keep in mind that the outcomes of a harvest will determine the future of your woodland, and will affect your enjoyment of it for years to come. Just as a well-executed harvest can help you realize benefits you value most, a poorly executed harvest may cause damage that will take years and thousands of dollars to repair. Expect to make all decisions with regard to the conduct of the operation, the legal requirements of the harvest, and communicating your expectations to the logger.

Tips for Working with a Logger

Whether you hire a Consulting Forester or if you do choose to work directly with a logger, here are some helpful guidelines to follow. Even when working with a Consulting Forester, it may be helpful to learn as much as you can about the logger being recommended.

First, it may be helpful to interview several loggers. Your Consulting Forester can recommend some that work near you.

Second, always ask loggers for references of landowners and foresters with whom they have worked, and check them thoroughly. Ask if the logger fulfilled all obligations of the harvest, whether written or verbal.

Ask about the condition of trees that were not harvested, as well as the condition of the surrounding land and soil. Ask if the logger conducted the harvest on a reasonable timetable. Finally, ask for an overall evaluation. Talking to other knowledgeable woodland owners and hearing about their experiences with a particular logger will help direct your choice.

Third, ask about the logger's certifications and any specialized training they or their employees have. Make sure they have or can obtain necessary workers' compensation and liability insurance.

Finally, and most important, have your Consulting Forester draw up a detailed *Timber Sale Agreement* or Contract with the logger you choose to work with. Remember, a logger is under no obligation to meet your objectives unless they are clearly defined in a written contract.

This is only a *suggested* contract. Again, a Consulting Forester can help you write the best possible contract for the harvest you want to undertake. Some of the items you will want to address in your Contract include:

- **The Contract Period** - State clearly when the contract begins and when it ends, and whether there are periods during which operations may be suspended at the discretion of your Consulting Forester (such as during spring thaw).

- **Access** - Define where and how the logger will get to the stands to be cut, and in what condition any access roads and log landings will be left.

- **Trees to be harvested** - Clearly define in the contract what trees will be cut and what trees will be left uncut, and how they are marked in the forest. Often your Consulting Forester will walk through the stands with the logger to be sure that the marking is clear.

- **Harvest boundaries** - Indicate in the Contract and in the field where the harvest should take place. If the harvest is near your land's boundaries, marking the boundaries is a legal requirement and prevents expensive mistakes.

- **Handling residual "slash"** - Slash treatment (tree tops and branches left on a site after a timber harvest) should be defined in the Contract.

- **Insurance** - The Contract should clearly state what insurances are required before the contract is valid; do not sign the contract until you have insurance certificates in hand that are valid through the contract period..

- **Payment** - Spell out the basis for payment by type of timber (sawlogs, veneer, pulpwood, boltwood and other types), and include remedies for late payment, default or failure to satisfy other obligations under the Contract.

In order to protect yourself from the start, consider requiring a deposit or bond before harvesting begins. If for any reason a landowner has a dispute with the logger, a copy of the Timber Harvest Contract signed by all parties will help clarify expectations, and becomes critical in any legal action.

What To Charge For Field Operations

The following rates should be used only as a guide in establishing custom rates.
Source: "2006 Custom Rates & Fees", CCE of Franklin County

Hay Harvesting

Mow Hay	$17/acre
Rake Hay	$14/acre
Pick-up Baling	$0.75/bale
Mow, Bale, Store	$1.50/bale
Large Bales:	
Round or Square Bales	
< 800# bales	$6.50/bale
> 800# bales	$8.50/bale
Wrapping Large Bales	
<800# bales	$6.50/bale
>800# bales	$8.50/bale

Custom Labor

Machinery Operator	$12-$16/hour
Chain Saw Work	$20/hour
Post Hole Digging	$5/hole
Building Fence	$14-$18/hour
Milking (only)	$8-$12/hour
Skid Steer	$40/hour
Power Wash	$28/hour

Tillage & Planting

Moldboard Plow (sod)	$25/acre
stubble)	$20/acre
Chisel Plow	$22/acre
Heavy Disking	$18/acre
Springtooth Harrow	$15/acre/pass
Corn Planting	$25/acre
No Till Corn	$30/acre
Seeding (drill or cultipacker)	$15/acre
Broadcast Seeding	$12/acre
Spraying Crops	$9/acre
Spreading Fertilizer	$9/acre
Liquid Manure (pumping & spreading)	$0.07/gallon
Solid Manure (loading or spreading)	$60-$80/hour

Miscellaneous

Bulldozing	$70-$90/hour
Bush Hogging	$30-$50/acre
Back Hoe	$40-$60/hour
Grinding & Mixing	$15-$20/ton
Mixing (only)	$8/ton
Liquid (pump & spread)	$90/hour
Silage Wagon	$10/hour
Hauling Livestock	$1.50-$2.00/ mile

Harvesting

Silage Chopping/Hour	
Chopping Only	$160/hour
Chopping & Hauling	$225/hour
Silage Chopping/Acre	
Chopping Corn	$30/acre
W/Processor	$35/acre
Bagging: (Rule of Thumb = $5/ft)	
8' (150' L)	$750
9' (200' L)	$1000
Combining Corn	$40/acre
Combining Small Grains	$30/acre
Combining Soybeans	$40/acre

Tractor Rates (tractor only/fuel not included)

< 60 HP Tractor	$20/hour
60-100 HP Tractor	$25/hour
100-140 HP Tractor	$30/hour
140 (+) HP Tractor	$40+/hour

Approximately .30/hp/hr
Calculate daily rates by multiplying values above by 10

Rental Rates & Fees for Land and Buildings

Good Pasture	$10-$15/cow/month
Water & Fence	$7.50-$10/heifer/month
	$30-$40/animal/season
Tillable Cropland	$20-$60/acre
Based on fertility & demand	
Standing Hayland	*$0.20-$1.50/"kicker" bale
*Price determined by forage quality	
Dairy Facilities	$8-$12 average barn
Stall/month	$12-$16 modern facility
Utilities & Land not included	
Custom Heifer Raising	$1.75-$2.25/Hd/day
Housing (building only)	
Yearlings	$4-$5.50/month
Calves	$2-$3.50/month
Silos	$1.25-$1.50/wet ton
Hay Storage	$3-$5/ton/season

This custom rate guide can be found on our website at:
http://counties.cce.cornell.edu/oneida/Custom%20Rates%202006.pdf

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Farm Wanted:
Family looking for Tie Stall Dairy Farm for 80-120 Cows. Would be interested in rent to own option. Contact: (410) 692-6305 or angilen@aol.com

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Gehl 940 and 970 chopper wagons. 315-826-3812

Farm Wanted:
Looking for a tie stall dairy farm to milk 40-60 cows and house 40-50 heifers. Prefer 100-300 acres. Our number one goal is to graze as many months as possible. Contact: (207) 938-3836

FAMILY FARM CRITICAL DECISIONS

by Mary Wrege

Installment #2

This is continued from our last Farm Flashes issue where we will offer ten critical decisions about family farms that are viewed as challenges and opportunities. These are not ranked, but presented so that they may provide a starting point of discussion among you and your family members, other farm decision makers and farm advisors with the outcome of helping to improve the overall management and direction of your farm/family future.

As I noted in the last issue, Steven Covey advises: "Start with the end in mind." Our previous focus for question #1 was: *"What is your vision of the future in terms of continuing as a family farm business?"*

Here is critical decision #2:

2. ***What actions are important to minimize risk?***

It is important to stop here and be honest about risks. Consider some of the situations that could create "worst-case" scenarios and, unlike the weather, can somewhat be managed.

Prior planning and discussion is a key to help in minimizing risk.

One effective discussion-tool/exercise that we participated in was to come up with worst-case scenarios that started with the letter "D" as a way to set the stage for discussion with the family and farm decision makers.

-**Divorce.** "Do you really want to be at meetings with your ex-daughter/son-in-law? You must make decisions about involvement of in-laws, preferably before anyone falls in love. Otherwise, if any spouse is excluded, it *WILL* be taken personally."

- **Disability.** What if someone is taken ill or is seriously hurt? Sometimes disability can be more difficult to manage than death. Disability can often create a period of "not knowing" what will be the outcome and/or how long the disability would last. What if the situation involved a stroke, a serious accident, coma, or a long-term condition and there was no access to disability insurance. Would you be in a position to be able to hire help during this period. Would more responsibility be piled on family members or the help of neighbors and friends?

-**Death.** Often hard to discuss. This is the D word that's the certainty. We are just not sure when. Plan a complete transition plan that plans for the death of every key player, not just for the senior person on the farm. What if you've got a young son who is your key herdsman and he is only 22. You need to know what happens if he dies. What if mom dies before dad? Actuarial

tables, generally will predict that dad will die before mom, if he is same age or older than mom. What if one of four sons is on the farm and considering starting his family; if dad died, would the daughter-in-law be able to plan to be a stay-at-home mom if suddenly her husband wasn't the primary owner of the farm because the three other brothers decided to "come back to the farm".

-**Disagreements.** All families have conflict; the most important thing is to deal with it and not sweep it under the rug. If someone asked what's your priority and you said "family", would your daily planner be consistent with your answer? Many are not consistent. Effective families make time for each other and for regular communications. YOU HAVE TO MAKE TIME. Take time out from the routine day-to-day crisis of the moment and make time where you sit down and talk about the issues and concerns, as well as taking note of the positive things you have noticed. It is a time of the family intentionally sitting down to told about where's the farm headed in the future. Invite all the people whose lives really matter and are in the family. They may or may not be on the farm.

The above are just a few examples. But the main objective is to list at least one action for each response that is most important in order for you to protect the farm and your family. This will help you minimize possible risk. The next installments will discuss ***Grooming: How will you groom young family members as part of your farm family*** and ***Talents and Experiences: What talents and experiences does the farm need for future success?***

Below is a site for the Austin Family Business Program through Oregon State University. It offers some free succession and risk assessments. Check it out. http://www.familybusinessonline.org/resources/action_checklists.htm

New/Beginning Farmer Programming

Oneida County Cooperative Extension is working with 6 North Country counties to develop fall and winter programming for new/beginning farmers. This program will build on a previous well-received CCE curriculum organized under the banner "Building Your Small Farm Dream".

If you are a new or aspiring farmer, or if you just need help thinking about a potential farming venture from the ground up, this programming is designed for you. The curriculum will cover establishing goals; inventorying your resources; identifying an appropriate farming enterprise; marketing what you produce; evaluating land, equipment and facilities; what it will take to be profitable; and regulations, tax and legal issues.

If you'd like to be notified as the new/beginning farmer program is developed for Oneida County, contact Jim Manning at (315) 736-3394 ext. 129, or by e-mail at jpm277@cornell.edu.

New Opportunities for Dried Distillers Grains

One hundred percent of distiller's dried grains with solubles (DDGS), a byproduct of ethanol production, can be palletized without adding a binding agent or anything else, according to Agricultural Research Service (ARS) scientists and cooperators.

ARS agricultural engineer Kurt Rosentrater has turned DDGS from corn-based ethanol production into high-quality pellets using processing equipment at a commercial feed mill. And the heating used in palletizing did not harm the high-protein, low-starch nutrient content.

Cattle feed is currently the primary outlet for distiller's grain. But other livestock such as swine and poultry can also eat it. To date, there are no commercial DDGS pellets available for livestock, which limits the byproduct's use. DDGS is the protein, fat, fiber, unconverted starch and ash left over after ethanol production.

This palletizing work also promises to solve a growing problem of product deterioration – as well as hardening and caking problems during shipping and storage, which can clog the various chutes and bins that DDGS flows through. With an increasing supply of the byproduct, ethanol plants have to ship it greater distances to reach markets.

Today, nationwide ethanol production is more than five billion gallons a year, and that amount will increase as new plants come online. Ethanol plants are spreading outside the Corn Belt, with plants now in New York and California, for example.

Programs for organic dairies at CCE-Oneida

Extension staff is working to develop upcoming programming for certified or transitioning organic dairies as well as dairies that are considering the organic option. If you are interested in being kept informed of organic dairy programming in Oneida County, please contact Jim Manning at 736-3394 ext. 129 or e-mail jpm277@cornell.edu.

LIVESTOCK NICHE MARKETING OPPORTUNITY

Dramatic opportunities are emerging for livestock producers and others interested in producing "All-Natural" meats for upscale markets. Meet with a well-connected marketing expert to find out how you can tap into this trend toward local and regionally produced meats. Meeting time and place to be determined depending on interest from our region. For more information contact Remi Link at CCE 736-3394 Ext. 111 or Marty at Ext. 121.

Agriculture staff strengthened at your CCE office

As of July 1, Bonnie Collins will be joining Jim Manning in the Farm Business Management Educator role at CCE – Oneida County. Bonnie brings a strong financial background to the position, operating an accounting business for 23 years. She has most recently worked in Financial Literacy and the Touring Teacher program at Extension. The addition of Bonnie to the Ag team will strengthen our ability to help farmers make critical financial decisions, improve record-keeping systems and plan for the future.

Meanwhile, Mary Wrege, who joined us in March in Farm Business Management will be taking on the newly created function of Alternative Energy Community Educator. In this position, Mary will help the community at large identify, understand and meet the challenges and opportunities posed by the emergence of a whole host of new energy alternatives. These changes have major local implications, in particular for agricultural production and economics, and Mary is especially well-qualified to keep Oneida County stakeholders informed and prepared to meet the challenges.

Visit www.cce.cornell.edu/oneida for more information or call 736-3394 or 337-2531

New Farm Business Manager

Bonnie Collins joined Oneida County Cooperative Extension, on August 15, 2004 as the Family Financial Management Educator and as of July 1st will be sharing the Farm Business Manager role with Jim Manning. Bonnie has a Bachelors of Science degree in Accounting from SUNY Institute of Technology and has operated her own accounting business since 1984.

Bonnies professional career has included starting and assisting management in several local businesses. Some of the management skills Bonnie will bring to this position include financial and tax issues as well as helping with human resource issues.

"I'm excited and looking forward to working with the Ag Community and using my professional skills to improve the development of their operations."

Any questions that you have for Bonnie, she can be reached at 736-3394 ext. 104 or e-mail at bsc33@cornell.edu..

New Report from Michigan State on the Economics of Grazing Dairies

Michigan State University's C.S. Mott Group for Sustainable Food Systems has just released a report entitled "Opportunities in Grazing Dairy Farms: Assessing Future Options". Although the report focuses on the implications for Michigan agriculture, many of its observations and conclusions are relevant for New York and Oneida County.

The authors conducted an extensive review of recent research from throughout the country, with particular emphasis on the Midwest and Northeast, and concluded that "low-capital managed grazing dairy production offers a viable management option for small- and medium-sized farms".

The article documents a continuing decline in small- and mid-sized dairies in Michigan. In 1997 94% of Michigan dairies had fewer than 200 cows; by 2002 the number of these small to mid-sized dairies had declined by 34%, while the number of larger dairies had increased by 19%. The authors emphasize the dangers of the loss of "diversity of scale" in farming communities, citing a number of studies that conclude that "rural communities with greater numbers of small- to medium-sized operator-owned farms score better on a number of measures of community well-being". These measures include: more even income distribution; better housing conditions; more civic engagement; lower rates of poverty, unemployment and violent crime; lower incidence of low birth-weight babies; fewer numbers of food stamp recipients; and higher qualities of housing, social services and public education. Also, small- to mid-size farms are more likely to purchase inputs locally.

Despite the trend, small- to medium-sized dairies remain the dominant form in Michigan, as in New York. And the data on mid-sized dairies shows that managed rotational grazing can help reverse the pattern of decline by providing a lower-cost and higher net-income model for these smaller farms. In addition, the lower capital investment requirement of the grazing-based model represents a more accessible point of entry for young and beginning farmers.

The authors of this report collected and analyzed the results of numerous studies of capital investment per cow; debt per cow; ownership costs per cow; and return to equity and assets. They also studied reports on net income per cow and per hundred-weight of milk. While the studies cited vary in their approaches, their definitions, and their conclusions, a wide range of results suggest that "grazing dairies require less capital investment per cow", and that "with good management practices, grazing dairies appear to provide a livable family income at a farm scale manageable with primarily family labor".

The authors also review studies of the market opportunities for "differentiated" or value-added dairy products, and conclude that "pasture-based farms are well positioned to offer differentiated products" and that, "while not necessary for grazing dairy profitability, such differentiated product opportunities can add to farm profit and make significant contributions to economic development in the state".

Finally, this report reviews the literature on the "environmental performance" of grazing-based dairies with regard to soil conservation, nutrient

management, surface and subsurface water quality, and soil carbon storage. While the conclusions are mixed with regard to nutrient management, pasture-based livestock farms can perform significantly better with regard to soil erosion, water quality, and carbon sequestration than confinement systems. The authors note that this better performance "will prove to be increasingly important as national agricultural policy is forced to conform to global trade agreements".

You can download a copy of the full report on CCE-Oneida County's website (www.cce.cornell.edu/oneida) or request a copy by contacting Jim Manning at 736-3394 or jpm277@cornell.edu.

Visit www.cce.cornell.edu/oneida for more information or call 736-3394 or 337-2531

Calf & Heifer Corner

Don't Forget to Keep Calves Cool this Summer

Cows aren't the only ones affected by hot summer temperatures. Calves can also suffer from heat stress. This reduces daily gain, lowers immune function, and causes dehydration. In order to keep calves growing and healthy, consider these suggestions for dealing with summer heat stress:

- Place calf hutches under a shade cloth or in a shady area.
- Space calf hutches far enough apart for good airflow and open all vents. Also allow calves an area outside the hutch.
- Consider using sand to bed hutches. This will keep calves cooler than straw or other insulative bedding. Also, if kept clean and dry, sand can help reduce flies.
- Provide clean water at all times, starting with the day the calf is born.

Physical Form of Starter Affects Intake

A new study shows calves prefer texturized starter, but their feed efficiency may be better on a pelleted diet. The study, published in the June Journal of Dairy Science, found that overall starter intake was greater for calves fed a texturized starter than calves fed a pelleted form. From 12 to 64 days of age, the texturized treatment group ate about 13.5 pounds more starter per calf than the pelleted group. Both starters had the same ingredients and nutrient composition. However, because final bodyweight was similar between both treatment groups, the feed efficiency of the pellet-fed calves was actually better than the texturized starter group. **In other words, they achieved the same amount of growth using less starter.**

Small Wind Turbines And Net Metering

The following information was taken from material that was copyrighted in 2006 by the American Wind Energy Association and found on this website:

http://www.awea.org/smallwind/newyork.html

Wind power has been in the news and in New York State for good reason. New York State ranks #15 for windiness!

When New York enacted its net metering law, Public Service Law Section 66-j, in 1997, it included only facilities powered by solar energy. On September 17, 2002, the net metering law was expanded to include qualified farms that generate electricity from biogas produced by the anaerobic digestion of agricultural waste, such as livestock manure, farming waste, and food processing wastes. Eligible systems must have a rated capacity of not more than 400 kW. The legislation was designed to make the installation and operation of anaerobic digesters more economic for New York farmers, while providing them with a tool to address environmental concerns and to reduce their energy costs.

On September 14, 2004, the Governor signed a bill which expanded New York's net metering law to include residential wind turbines of 25 kW or smaller and farm-based wind turbines of 125 kW or smaller. At the end of each month, net excess generation for wind turbines of 10 kW or less is credited to the next month's bill at the retail rate. Net excess generation for systems larger than 10 kW is credited to the next month's bill at the avoided cost rate. Excess generation at the end of the year is paid for at the avoided cost rate. As a result of this law, the utilities will prepare tariffs that will be submitted to the New York State Department of Public Service (DPS) for approval.

What are "Net Billing" & "Net Metering?"

What is net metering?

"Net-metering" is a simplified method of metering the energy consumed and produced at a home or business that has its own renewable energy generator, such as a wind turbine. Under net metering, excess electricity produced by the wind turbine will spin the existing home or business electricity meter backwards, effectively banking the electricity until it is needed by the customer. This provides the customer with full retail value for all the electricity produced.

Under existing federal law (PURPA, Section 210) utility customers can use the electricity they generate with a wind turbine to supply their own lights and appliances, offsetting electricity they would otherwise have to purchase from the utility at the retail price. But if the customer produces any excess electricity (beyond what is needed to meet the customer's own needs) and net metering is not allowed, the utility purchases that excess electricity at the wholesale or 'avoided cost' price, which is much lower than the retail price. The excess energy is metered using an additional meter that must be installed at the customer's expense. Net metering simplifies this arrangement by allowing the customer to use any excess electricity to offset electricity used at other times during the billing period. In other words, the customer is billed only for the net energy consumed during the billing period.

Why is net metering important?

There are three reasons net metering is important. First, because wind energy is an intermittent resource, customers may not be using power as it is being generated, and net metering allows them to receive full value for the electricity they produce without installing expensive battery storage systems. This is important because it directly affects the economics and pay-back period for the investment. Second, net-metering reduces the installation costs for the customer by eliminating the need for a second energy meter. Third, net metering provides a simple, inexpensive, and easily-administered mechanism for encouraging the use of small-scale wind energy systems, which provide important local, national, and global benefits to the environment and the economy.

What are the benefits and costs of net metering?

Net metering provides a variety of benefits for both utilities and consumers. Utilities benefit by avoiding the administrative and accounting costs of metering and purchasing the small amounts of excess electricity produced by small-scale wind energy facilities. Consumers benefit by getting greater value for some of the electricity they generate and by being able to interconnect with the utility using their existing meter.

The only cost associated with net metering is indirect: the customer is buying less electricity from the utility, which means the utility is collecting less revenue from the customer. That's because any excess electricity that would have been sold to the utility at the wholesale or 'avoided cost' price is instead being used to offset electricity the customer would have purchased at the retail price. In most cases, the revenue loss is comparable to having the customer reducing electricity use by investing in energy efficiency measures, such as compact fluorescent lighting, efficient heating and cooling equipment, or other highly-efficient appliances.

The bill savings for the customer (and corresponding revenue loss to the utility) will depend on a variety of factors, particularly the amount of excess electricity produced. In most circumstances, however, the difference will be between $10-40 a month for a 10 kilowatt residential wind energy system. Moreover, any utility revenue losses associated with net metering are at least partially offset by administrative and accounting savings, which are not included in the above figures. These savings can exceed $25 a month because, absent net metering, utilities have to separately process the accounts of customers with wind turbines and issue the monthly checks. In practice, these checks can be for as little as 5 cents.

Can I really use my existing meter to take advantage of net metering?

The standard kilowatt-hour meter used for most residential and small commercial customers accurately registers the flow of electricity in either direction. This means the 'netting' process associated with net metering happens automatically — the meter spins forward (in the normal direction) when the customer needs more electricity than is being produced, and spins backward when the customer is producing more electricity than is needed in the home or building. The meter registers the net amount of energy produced or consumed during the billing period.

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