You would be surprised how many inquiries we receive wanting to know what the “going rate of rent” landowners receive from farmers. A couple of years ago Joan Petzen, who was then a Farm Business Management Educator with Wyoming County, prepared an article on this topic which today is still current and not far from what is presently occurring. The article can be found on Page 3.

This season we received several calls about tomatoes not ripening, some of this has been from the fluctuation in temperatures but tomatoes grown in high tunnels can benefit from containers. Page 4 has an article written by Judson Reid of the CCE Vegetable Program. We are fortunate that Judson has agreed to come visit Cayuga County this winter and spend time with producers. Send either Keith Severson or Judy Wright topics you would like Judson to address.

Palmer Amaranth: Keep an eye out for this potentially devastating weed as you harvest corn and soybeans this fall. See Page 5 for more information.


If you are a producer of cow’s milk and are paid regularly for selling it to a commercial processor, including your marketing cooperative, you are eligible for Margin Marketing Program (MPP) now available though USDA FSA. Information on MPP and an upcoming webinar on September 23 can be found on Page 6.

Have you ever wondered whether the income of your farm business may be enhanced with more than one manager/owner? Dr. Loren Tauer, Cornell University, investigated this question and his conclusions can be found of Page 7.

Do you consider yourself or have middle management who might benefit from learning more about leadership and management principles to increase their ability to run a profitable dairy? Consider Cornell’s Dairy Executive Program—More information can be found on Page 7.

Are you thinking about building new or enlarging your dairy facility? CCE Cayuga County is pleased to introduce you to Sam Steinburg, Engineering Associate with the Pro-Dairy program at Cornell. If you are interested in meeting with him, please contact Judy or Keith as we are working to line up a day for Sam to meet with interested farmers. Learn more about Sam on Page 7.

Sincerely,

Keith Severson
Agriculture Resource Educator

Judy Wright
Agriculture Resource Educator

Household Chemical Waste
For Farms
Saturday, October 25

Cayuga County has been fortunate to be able to continue to offer household chemical waste disposal options for homeowners. Have you ever wondered, what YOU as a grower/producer should do with your excess chemicals? Well—you have options too!

Our Household Chemical Waste Event (including farms) has been set for Saturday, October 25 from 8 a.m. until 1 p.m. If you are a grower/producer who has more than 200 pounds or 25 gallons of potentially hazardous chemicals, please call Peggy Lillie at 315-255-1183 (ext. 238) to schedule an appointment for Saturday, October 25. You must register for this event before October 22 and once registered, you will be given a drop-off location with a scheduled drop-off time.

This event is coordinated by Cornell Cooperative Extension of Cayuga County, Cayuga County Department of Planning, Solid Waste Program Office and the Soil & Water Conservation District. Funding is provided by the Cayuga County Legislature, NYS DEC and NUCOR Steel Auburn.
Upcoming Events

Below is a list of upcoming events that we thought might be important to you! If you ever have further questions or need to clarify any information, you can always check out our website http://www.blogs.cornell.edu/ceccayuga, go to the Ag Calendar under the Agriculture tab on top. We try our best to keep information as up-to-date as possible so that you have a quick, easy reference available 24/7. Of course, you can always call our office with any questions or concerns you might have at 315-255-1183.

- **Small Fruit Open House**
  Friday, October 3. To be held at Cornell Orchard (709 Dryden Road) in Ithaca. Participants should plan on meeting between 12:30 p.m. to 12:45 p.m. for parking, check-in and announcements. Pre-Registration by Friday, September 26 is required. Contact Cathy Heidenreich, mcm4@cornell.edu or 315.787.2367.

- **Electronics Plus Recycling Event**
  Saturday, October 4 from 9 a.m. until 2 p.m. Held at the Cayuga Onondaga BOCES, 1879 West Genesee Street Road, Auburn, NY. This event is free and open to all Cayuga County residents. It does not require registration. Items accepted include televisions, cell phones, printers, fluorescent bulbs, small Freon appliances & propane grill tanks. We can not accept latex paint at this event. For questions, call Stefan Lutter, Resource Environmental Educator of Cornell Cooperative Extension of Cayuga County at 315.255.1183 ext. 229 or email him at sml339@cornell.edu.

- **2014 Cornell Sheep & Goat Symposium**
  Friday, October 3 & Saturday, October 4. Hands-on Activities on Friday October 3 from 1 p.m. – 5:30 p.m. at Cornell Sheep Farm, Harford, NY (5 miles southeast of Dryden on Rt 38). Saturday sessions going from 7:45 a.m. until 6 p.m. will be in Morrison Hall on the Cornell Campus, Ithaca, NY. For more information or to register please go to: http://www.sheep.cornell.edu and click on the 2014 Cornell Sheep & Goat Symposium link.

- **Household Chemical Waste Event**
  Saturday, October 25 from 8 a.m. until 1 p.m. You must pre-register for this event. To view the list of accepted items, locations or to register, please go to our website: http://blogs.cornell.edu/ceccayuga/household-hazardous-waste or call Peggy Lillie at 315.255.1183 ext. 238 to register. After registration, location and scheduled time for drop-off will be given.

- **National American Agri-Women Fourth Annual Meeting**
  “Honoring the Past, Treasuring the Present, Shaping the Future” Held Friday November 14 and Saturday, November 15 at the Inn at the Finger Lakes. Registration deadline is Saturday, November 1. For more information go to http://www.americanagriwomen.org/.

- **Electronics Plus Recycling Event**
  Saturday, November 15 from 8 a.m. until 11 a.m. at the entrance to the City of Auburn Landfill, 311 North Division Street, Auburn, NY. No registration needed.

- **The 2014 Cornell In-Depth Tax School**
  Designed for Commercial Tax Preparers Monday, November 17 & Tuesday, November 18. Held at the Holiday Inn Syracuse/Liverpool, NY. Must Pre-Register. Discounted Registration ($375) if post marked on or before October 14 after October 14 is $405. Continuing Professional Education credits (CPE) are available to New York State Certified Public Accountants and Enrolled Agents. For more information and to register w/ credit card go to: http://agfinance.dyson.cornell.edu/two-day-school.html. For questions email: taxschools@cornell.edu.

- **100th Anniversary Celebration of Cornell Cooperative Extension of Cayuga County**
  Thursday, November 20. To be held at the Springside Inn, Auburn NY. Come join us for an evening of remembrance and optimism as we set our sights on another hundred years. Speaker for the evening is Patrick Hooker, Director of Agribusiness Development at New York State’s Empire State Development Office. Sit-down family style dinner offered. For further details call the Cooperative Extension Office 315.255.1183.

- **Annual Income Tax Update Schools**
  Wednesday, December 10 & Thursday, December 11. Held at the Sheraton Syracuse University Hotel & Conference Center, Syracuse, NY. Discounted registration (#375) if post marked before October 14, after October 14 cost is $405. CPE Credits are available. For more information contact: taxschools@cornell.edu.
Leasing land to an agricultural producer is a viable option for generating some income from land one owns. Rental income is variable across the region. It is important to have a clear understandable rental agreement, preferably in writing, between the parties involved. Both share rental and cash rent agreements can be used. Costs of ownership, the ability of the property to generate income, and market conditions all must be considered to determine a fair rental value.

Dairy farms in Western New York typically rent 30 to 40 percent of the acreage on which they grow crops.

Dairies in this region typically spend in excess of $50,000 annually for real estate rental costs. Cropland is the most frequently rented resource. Sometimes, particularly start-up operators, rent a whole farm including land, buildings and barn equipment. Some maple syrup producers rent nearby sugar bushes to increase their production capability. Vineyard owners who do not produce grapes sometimes rent established vineyards to neighbors who are currently growing grapes.

Several factors influence the rental rates paid for cropland. The productive capacity of the land is the most significant factor determining rental value. Well drained, valley floor soils command a higher rent than more poorly drained hilltop or hillside fields. The availability of land in a local area is another key factor influencing rental rate. In a neighborhood where there are several active farm operations, rental rates tend to be higher than in another area where there is less active farming. When renting pastures, a key consideration in arriving at a fair rental rate is the condition of the fences and who is responsible for their upkeep.

A lease agreement transfers certain rights to the use of land, buildings, and sometimes equipment or livestock from the owner (lessor) to the renter (lessee). A well-written lease should:

1. Accurately describe the property involved in the agreement.

2. Clearly outline the responsibilities of both parties as to:
   a. Payment of taxes (usually the owner)
   b. Payment of insurance on buildings (usually the owner)
   c. Payment of insurance on crops, contents of buildings and house (may be either, usually the owner of the contents)
   d. Payment for major repairs and improvements of a permanent nature (usually the owner, as it is his or her property that is being maintained and protected. Such repairs and improvements normally include roofing, fencing, painting, water systems, reforestation, etc.).
   e. Reimbursement at lease termination for unused benefits of lime, and other semi-permanent or permanent improvements made by the tenant.
   f. Responsibility for normal upkeep or minor repairs and major repairs and improvements are carefully spelled out. (Frequently, the lease specifies that the landlord purchases the supplies and the tenant provides the labor for repairs.)
   g. Maintenance and establishment of fences. (Frequently, the owner supplies the materials and the renter the labor.) Responsibility for boundary fences is usually written into state laws.
   h. Kind, amount, place, and time of payment of rent and penalties attached for failure to pay.
   i. Length of the lease and provisions for canceling, changing, and/or renewing the lease.

3. State the specific rights of both parties to use of the land and improvements. The owner enjoys the right of entry and inspection but may seek additional rights, such as hunting, use of water from a well, timber for firewood or access to certain building for storage purposes; but the tenant has general possession, unless otherwise provided.

4. Include provisions concerning arbitration in case of disagreement, penalties for breaking the lease, the right or withholding of the right of the tenant to sublet, provisions for surrendering the property at termination of the lease, agreement by the tenant to commit or permit no waste or depletion, any privilege of the tenant to have first option to purchase the property and other provisions to which both parties agree.¹

Cash rental of farmland is common practice in the Northeast. Rent is either established as a fixed payment or tied to crop yields, like a certain amount per bale of hay or bushel of corn. Share-rental agreements involve joint contributions to production expenses and sharing of the returns according to agreed upon proportions. Generally, the returns

Continued on Page 4...
A common question in our high tunnel classes is, “What can I do to keep my soil healthy if I want to grow tomatoes every year?”

The unstated problem is that soil health in tunnels degrades over time as pH, alkalinity, salinity, nutrients and diseases enter unsustainable levels. The balancing act of adding compost, cover crops and fertilizers is like juggling chain saws while walking a tight rope. With considerable skill it can be done. In the absence of skilled management…(we’ll let the reader complete the metaphor).

An alternative to the slow motion juggling act of growing tomatoes in the same ground year-after-year is to grow in containers. This allows the use of fresh potting soil every year to preclude alkalinity, salinity and nematodes. How do yield and inputs compare to growing in the ground? To find out we are conducting a container trial (not a pot trial) to analyze the labor, water and nutrition inputs of tomatoes grown in several different sizes of containers as well as in the ground. We will schedule a meeting with Judson to learn more this winter.

Tomatoes grown in the ground using high tunnels.

Leasing Land for Agriculture (Continued from page 3…)

are shared in proportion to each party’s contributions. In cash crop operations, often the landlord receives a share of the crop produced to market as he or she chooses.

To determine the rental charge, the landlord must know their ownership costs. These costs include depreciation (for buildings or equipment), property taxes, insurance and maintenance of buildings and equipment in operating condition. The tenant needs to know their costs of production and the return they expect from rented property to be able to determine how much rent they can afford to pay. Once each party has determined their costs, the negotiation of a rental rate can begin.

Local market conditions must also be taken into consideration. Talking with neighbors and learning how much they are receiving or paying for rent in your local area is probably the best method for assessing the local market. In Western New York, cropland rental rates range from keeping hay fields mowed to over $150 per acre for cropland depending upon the quality and competition for land. Sometimes owners who want some hay for their own use will rent their field for one-half of the production. In this case, the renter is responsible for mowing, raking, and baling the hay and putting the landowner’s share in a designated storage space. Sugar bush rental is usually paid on a per tap basis, ranging from trading for some syrup to $1.00 per tap for prime roadside trees. Vineyards along Lake Erie or Lake Ontario rent for between $100 and $150 per acre. Share rental agreements with 15% going to the vineyard owner and 85% to the grower are quite common in other parts of the country. In other situations cash rental is used.

Building rental is usually rented on either a per square foot or per stall (for livestock buildings) basis. Often when buildings are rented, utilities are involved. It is important to designate how the utilities will be paid for and by whom. Building rental rates, are highly variable depending upon whether the technology employed is current or obsolete, the condition or level of repair of the building, and whether it is fully equipped or not.

Renting land for agricultural production can help a rural landowner maintain their landscape in working condition while receiving some return for their investment. Using a written rental agreement assures a clearer understanding of both the landlord and the tenant’s responsibilities. When each party knows their costs associated with the agreement, it is easier to arrive at fair rental price taking local market conditions into consideration.

Palmer Amaranth (Amaranthus palmeri) is a summer annual broadleaf weed that is native to the southwestern US and Mexico. Palmer Amaranth (and it’s relative waterhemp) is a species of pigweed that is typically found in the south and is creeping further north. In 2013 it was identified on at least 7 farms in 2013 in Pennsylvania and poses unique management challenges.

Palmer Amaranth is related to other pigweeds in our region including redroot, smooth, Powell, and spiny, but unlike these other pigweeds, Palmer Amaranth grows faster and is dioecious, meaning that plants are either male or female. Pollen from male plants can travel with the wind to susceptible female plants and if the male is herbicide resistant, a portion of the offspring will also be resistant.

Containing new infestations and preventing its spread is a critical first step to managing this new threat. It is reported to grow from 1-2 inches per day during its peak growth. The risk from this new weed comes from its competitive growth habit, prolific seed production (greater than 100,000 seeds per plant) along with its potential resistance to glyphosate (e.g. Roundup) and the Group 2 herbicides (ALS-inhibitors).

Please ask all who are operating combines and floor harvesters to be alert to unusually large pigweed as it could be Palmer Amaranth. Again, it will look familiar but larger than expected and will have grown quite nicely through the herbicides used.

Why and where should we be concerned here in New York? Because the dairy industry’s use of cottonseed as a feed, there is a potential for Palmer Amaranth seed be transported here.

I have listed some references from other states and urge you to do a word based search for the youtube produced by Purdue University on Palmer Amaranth it is very descriptive and inclusive of way to distinguish this pest.

### Management of Palmer Amaranth in Illinois

**Posted on March 27, 2014 by Aaron Hager**

Palmer amaranth is a weed species that must be thoughtfully and carefully managed; simply attempting to control Palmer amaranth often leads to ineffective herbicide applications, substantial crop yield loss, and increasing weed infestations. Ignored or otherwise not effectively managed, Palmer amaranth can reduce corn and soybean yield to near zero. The threat of Palmer amaranth during the 2014 growing season is very real across a large portion of Illinois.

Before delineating the specific management recommendations, we present three general principles of Palmer amaranth management:

1. Prevention is preferable to eradication.
2. It is not uncommon for annual herbicide costs to at least double once Palmer amaranth becomes established. There are simply no soil- or foliar-applied herbicides that will provide sufficient control of Palmer amaranth throughout the entire growing season. At least three to five herbicide applications per growing season are common in areas where Palmer amaranth is well established.
3. Control of Palmer amaranth should not be less than 100 percent; in other words, the threshold for this invasive and extremely competitive species is zero.

- Prevention: clean equipment, seed, feed, manure
- Reconnaissance: learn to identify, monitor fields regularly throughout season
- Eradicate: flag suspected populations, destroy; manage to limit spread
  * harvest around patches
  * limit tillage
  * limit emergence (overlapping residuals)
Corn producers in NY only planted ~20% of the crop by May 15, ~60% by June 1 and ~80% by June 8th. Most locations in NY received ~30 to 50 growing degrees (GDD) above normal from June 1 through July 15 so fears of immature or wet corn at harvest for late-planted corn were allayed through mid-July. Since then, however, most locations in NY, especially the Finger Lakes and western NY, have received ~75-150 GDD below normal through August 18th. Consequently, fears of immature corn silage, or immature grain or wet and low-test weight grain have once again risen. What is the probability of this doom and gloom scenario?

I think that fears are overblown at the moment because of three important factors. First, the National Weather Service (NWS) has predicted above normal temperatures in NY for the final 2 weeks of August (don’t ask me why I still believe them!). If this holds true, August will come in only ~40-80 GDD below normal for the month and the crop in eastern and northern NY will be close to normal development, whereas the crop in central and western NY will be about 5 days behind. Second, many growers dialed back their maturity (as recommended in the May 16th posting) by 5-10 days once planting was delayed until early June, which greatly enhances the probability of maturation before a killing frost. Finally, corn hybrids (90-100 day relative maturity) that are planted in early June require about 75-100 less GDD to mature than when planted in early May. In other words, if a grower planted a 100 day hybrid in early May, that hybrid would require about 1200 GDD to silk, another 850 GDD to attain 66-68% moisture for silage harvest (2050 GDD total), and about another 150 GDD to attain black layer (2200 GDD total). The same hybrid, however planted during the first week of June would require about 1150 GDD to silk, and 800 GDD to 66-68% moisture for silage harvest (1950 GDD total), and another ~150 GDD to black layer (~2100 GDD total).

Will this scenario of less GDD to maturation with delayed planting hold true again for this year? As some of you know, we planted a 96 and a 103-day hybrid at Aurora at five planting dates ranging from early April to very late May (May 30th) in 2013 and 2014. The 96-day hybrid required ~1140 GDD to silk when planted on May 7th in 2014 but only ~1100 GDD to silk when planted on May 30th (Table 1). Likewise, the 103-day hybrid required ~1230 GDD to silk when planted on May 7th in 2014 but only ~1180 GDD to silk when planted on May 30th (Table 1). If planting were pushed back another week, the difference in GDD would probably be greater. I believe that the shortening of the silking to ½ milk line or black layer stage will also be occur in 2014. Of course, the shortening of the GDD requirement does come at a small expense to yield. On the other hand, an extended grain-filling period, even with the shortened number of GDD to maturation, should contribute to high overall yields, even at a late planting date.

New Margin Protection Program for Dairy

The announcement and implementation of the new Margin Protection Program (MPP) was made on September 2 with the enrollment period ending November 28, 2014.

To help dairy farmers make an informed decision about MPP three webinars will be offered at CCE Cayuga County Education Center on Tuesday, September 23 from 10 a.m. – 12 noon; 1 p.m.- 3 p.m. and again from 7 p.m.- 9 p.m. More information will be sent directly to dairy farmers to insure you receive further information, please email Judy Wright at jlw24@cornell.edu or call and leave a voicemail for her at (315) 255-1183 ext. 234.

Since the 1930’s the Federal Government has had a commitment to dairy farms and over the years various programs have been used. MPP will be administered through FSA and is viewed as a framework to support dairy farms well into the future. MPP is being described as a hybrid of the insurance model (LGM-D) and countercyclical (MILC). The major understanding is that MPP will on a national level (not regional or county). This is a significant paradigm shift that all dairy producers will need to make.

WHAT TO DO NOW?! The decision to participate should be made after careful thought is given along with consideration of the market components as they can change between now and the end of November. Be sure to examine educational materials available to you (join the September 23 webinar) and stop by your local FSA office to receive the information they are providing about their program.
September is National Preparedness Month
“Be Disaster Aware, Take Action to Prepare”

During National Preparedness Month we ask you, your family, community school and workplace to take action by planning a National PrepareAthon! Day on or around September 30. For more information you can go to http://www.ready.gov/september.

The Cornell Dairy Executive Program is a unique educational opportunity organized by the PRO-DAIRY Program at Cornell University. As a professional educational program focused on leadership and management principles for progressive dairy executives and agriservice personnel, who want to increase their ability to run a successful dairy business and to enhance their understanding of the fast-changing dairy industry. Target audiences for this program are progressive managers in dairy production who have 5 or more years of dairy experience in a decision making position, as well as business owners and managers affiliated with dairy production that are committed to working with their customers and improving the industry.

After attending this class you will have developed:
- A comprehensive self-evaluation of your business
- 1- and 5-year strategic business plans
- Leadership and management skills
- A network of dairy executives
- A plan for building business relationships

The next PRO-DAIRY Executive Program is forming and will be starting in December. For more information on the program, please go to www.anisci.cornell.edu/prodairy/dairyexec.

Dr. Loren Tauer, Cornell University, is often asked the question whether income of a business is enhanced with more than one owner/manager. Using NY Dairy Farm Business Summary data from 1998 through 20011 he found that the returns to management to sole operated and multiple operated farms were statistically equivalent, concluding that there are neither increasing returns to multiple managers, nor a detriment. The management income each manager earned was the same whether they operated by themselves or in a partnership. However, when partnerships were separated into parent-child partnerships from non-parent-child partnerships, it was found that the none-parent-child partnerships did make more money per manager than the sole proprietorships. It appears that more than one head managing the business does enhance management returns except in parent-child partnerships. The parent-child business may be lower possibly because of the learning curve for management for the child. Unfortunately, the data available does not allow more extensive investigation of how tasks are managed on these farms to determine conclusively the reason for the difference. The following link will provide the published research http://ageconsearch.umn.edu/handle/165739

Are Two Heads Really Better than One?

Sam Steinburg is a Dairy Facilities and Environmental Systems Engineering Associate with Cornell's PRO-DAIRY Program. His responsibilities within PRO-DAIRY include advising dairy farms on various aspects of project development and management, assisting in the preparation of design drawings for dairy housing and manure handling and processing systems, and participating in the conduct of educational programs related to facilities and manure systems engineering. He has an undergraduate engineering degree from the University of Michigan. His previous experiences include working for a barn equipment company and at Cornell's research dairy farm.

Thinking About Building New or Enlarging your Dairy Facility?
Meet Sam Steinburg

Sam Steinburg Engineering Associate
Pro-Dairy Program
Below is a summary of data research collected by Jason Karszes, Farm Management Specialist with the PRO-DAIRY Program at Cornell University, regarding the cost of dairy replacement programs on 17 individual farms. These farms participated in the 2012 Pro-Dairy data collection with the compiled data and research being released this spring. For the full report go to: http://hdl.handle.net/1813/36889

Dairy Replacement Costs

Dairy replacement programs within dairy farms are one of the largest expenses within the dairy. For these 17 above average herd size farms with high levels of management, their dairy replacements entered the herd with a total investment of $2,232 per animal, including the value of the animal when it was born. These animals are calving at 23.0 months of age and weighing 1,302 pounds. The animals averaged 1.75 pounds of gain per day at a total raising cost of $2.995 per day per heifer, or $1.72 per pound of gain.

Feed costs were the most significant cost, followed by labor. These two costs comprised 65.4% of the total cost to raise a dairy replacement. Significant changes in cost per day per heifer and per pound of gain occurred when the animal was weaned and when the animal went through puberty. There was also a large range in total costs to raise heifers, with the inter-quartile range from $2,010 to $2,413.

Labor efficiency on these farms is considered to be above average and equaled 39.4 heifers per labor hour. Housing systems used, design and location, played a significant role in determining the labor efficiency for the replacement enterprise. The results reported from this study are considered to reflect above average heifer management systems, and only represent the results achieved by the seventeen participating farms. Size of operation, housing system, rate of gain, calving age, and level of management all impact the total cost to raise a dairy replacement. Depending upon these factors, individual farms may or may not achieve the performance levels achieved by these seventeen farms.

The information given herein is supplied with the understanding that no discrimination is intended and no endorsement is implied by Cornell Cooperative Extension. Where trade names are used, no discrimination is intended and no endorsement is implied. 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 possible. Any recommendations herein are not a substitute for pesticide labeling. Please read the label before applying.