Cornell University
Cooperative Extension
NWNY Dairy, Livestock & Field Crops Team


Photo source: Mike Stanyard

NORTHWEST NEW YORK DAIRY, LIVESTOCK & FIELD CROPS TEAM

# Ag Focus

# Quality Harvest From Start to Finish

*By: Nancy Glazier*

As I write this (7/12) we are officially in a moderate drought in primarily all of the NWNY region. First, second and third cuttings of hayfields have been much lighter than usual, pastures have stopped growing, and cornfields are short. There isn't much in the long range forecast for relief from these conditions.


**Photo source: Libby Eiholzer**

First of all, make sure you do a great job with silage harvest. Take the time to tune up the chopper in regards to particle size and processor settings. You may need to adjust equipment from field to field! Stalk nitrate levels could potentially be high, so chop height should be raised to 8-12 inches.

This is a tough decision when yields are low, but keep quality in mind. Timely rainfall would help, but wait 5-7 days prior to chopping if we get significant rain (1"?). The nitrates in the lower stalk will translocate with stimulated new growth. You might be able to chop shorter then.

This is not the year to skimp on inoculant. Research has shown there is a payback of 10:1 with the use of inoculants. Also, make sure your dry matter is where you want it to be; start harvest at 32-35% DM with the higher end of the range for upright silos. Don't look at kernel milkline, take a sample and dry it down. Remember koster testers can give you a reading of 2% points drier than actual dry matter. If you don't have a koster tester, work with your nutritionist or call us.

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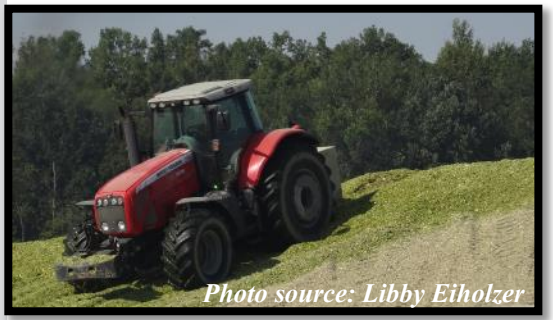
**Photo source: Libby Eiholzer**

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*Photo source: Mike Stanyard*


## Ag Focus
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### *Mission Statement*

The NWNY Dairy, Livestock & Field Crops team will provide lifelong education to the people of the agricultural community to assist them in achieving their goals. Through education programs & opportunities, the NWNY Team seeks to build producers' capacities to:

- Enhance the profitability of their business
- Practice environmental stewardship
- Enhance employee & family well-being in a safe work environment
- Provide safe, healthful agricultural products
- Provide leadership for enhancing relationships between agricultural sector, neighbors & the general public.

*Continued from page 1*

Prevent as much storage loss as possible. Double-layer plastic, white over black, is ideal as an oxygen barrier. Silo Stop™ is even better in one step. It would be beneficial to cover side walls as well.

This could be a year for high risk of silo gases since nitrates may be high. I have heard reports of gas formation with haylages in upright silos. These are primarily formed from nitrates in the plants. Gas produced is primarily nitrogen dioxide. Make sure upright silos are properly aerated for 15-30 minutes before entering. These gases can form in bunk silos too, so use care when uncovering. If there are signs of throat or lung irritation, leave the area immediately.

After harvest is in, take an inventory. Fact sheets to assist with estimating inventory and herd forage needs are listed under **Fall Feeding Decision Tools** on our website. Plan out how much you have and how much you need. Start now to find feed if you anticipate running out. Forages may be in short supply in parts of the NWNY region. Look for nearby standing corn, corn silage or hay. Work with your nutritionist to find alternative feedstuffs.

From a haycrop perspective, maybe give those poorer fields a shot of nitrogen. This will only be helpful if we get some rain! Try 50 lbs actual N. Hit the older fields harder and try to save the younger fields for next year. Make sure you have adequate potassium on your alfalfa fields to prepare them for overwintering. If you fall-kill sod, maybe keep those fields for an early harvest in the spring and hit with 100 lbs actual N at green-up. Another option for spring harvest as well as cover crop benefits is winter grains. Recent research has shown rye, triticale, and wheat can provide biomass of 2 to 4 tons DM/ac when harvested early to mid-May, even when planted after corn silage harvest. Fact sheets on this are available on our website. There is time for spring or forage oats. They should be planted in early to mid-August for 60-75 days growth. They could be stored as haylage, baleage, or possibly dry hay.

Get forage analyses on your silages. Cull least profitable cows now. Check your number of youngstock, too. Now is the time to sell so you aren't feeding them all winter.

All the factsheets and tools referenced in this article are listed under Announcements at http://nwnyteam.cce.cornell.edu/.

# Transition Period Performance of Soybeans in an Organic Corn, Soybean, Wheat Cropping System: Some Early Results

By: John J. Hanchar and William J. Cox

*This article draws from William J. Cox and John J. Hanchar. 2016. "Agronomic and Economic Performance of Soybean following Three Previous Crops during the First Transition Year from Conventional to an Organic Cropping System." Selected paper. American Agricultural and Applied Economics Association Annual Meeting. Boston, MA. July 31 through August 2, 2016.*

## Summary


- Cornell researchers are working on a multi-year study to identify an optimal, transition period crop sequence given a producer's decision to switch from a conventional to an organic corn, soy, wheat rotation.
- Organic soybean production under recommended and high input management yielded similarly and had similar estimated returns; suggesting that organic soybean producers need not increase seeding rates (and use an organic seed treatment) for an entry crop.
- Based upon a variety of agronomic factors and preliminary economic analysis, researchers tentatively recommend organic soybeans under recommended management as the entry crop following conventional corn into an organic cropping system; this recommendation is subject to change based upon agronomic and economic analysis of all three crops during the 3 year transition period.


## Background

In response to changing supply and demand conditions for conventional and organic grains, field crops producers in NY practicing a corn, soybean, wheat rotation are contemplating transitioning from a conventional to an organic cropping system on at least a portion of tillable acres operated. Field crop producers must grow corn, soybeans, and wheat using organic practices subject to USDA Certified Organic requirements with no price premium during the 3-year transition period. Identification of the optimal crop sequence during the transition period to an organic cropping system can be critical to achieving financial objectives.

Field crop producers face uncertainty regarding the selection of the best entry crop, crop sequence, and optimal management practices. Led by Professor Bill Cox, Cornell University researchers are conducting a multi-year study with the following objectives: 1) to identify the best previous conventional crop (2014) for the transition to an organic cropping system; 2) to identify the best entry crop to plant during the first transition year (2015); 3) to evaluate recommended and high input management (high seeding rates and organic seed treatment, etc.; 4) to determine if high input management increases weed competitiveness and agronomic performance of the entry crop.

The remainder of this article will focus on the economic analysis component of this study, including some early results.

## Methods

At the end of the three year study, researchers will identify the optimal crop sequence under various conditions for the transition period using marginal analyses, while considering agronomic factors, for example, maintaining crop rotation recommendations and others.

In early spring of 2016, researchers estimated value of production, costs of production, and returns for combinations of previous crop and soybean treatment given available data. Researchers described the soybean treatments as follow.

- Conventional soybean production under recommended management, S1
- Conventional soybean production under high input management, S2
- Organic soybean production under recommended management, S3
- Organic soybean production under high input management, S4

Analysis focused on enterprise budget items that differed among the treatments, for example, value of production attributed to variability in soybean yield, and cost differences for inputs. Two returns to inputs were estimated. Return A is the return to variable inputs that do not differ among treatments S1, S2, S3, S4; these include: fertilizer & lime; labor and machinery operating inputs (repairs and maintenance, fuels and lubricants) for tillage, planting and harvesting tasks excluding hauling, where hauling cost is a function of yield. Return B is the return to variable and fixed inputs that do not differ among treatments. Cost of production values reported for fixed inputs exclude farm machinery ownership costs for tillage, and other tasks as above, land charges, and values of management inputs.

## Some Early Economic Results

Value of soybean production, selected costs, and returns varied among soybean treatments. Differences in value of production, seeds and plants, sprays and other crop inputs, labor, fuels and lubricants, and fixed inputs are notable with values for the latter four cost categories affected considerably by mechanical weed cultivating requirements for the organic treatments relative to spray material and application requirements for the conventional treatments.

Suppose a farmer has made the decision to transition from conventional to organic grain production. Then, the returns for the treatments begin to quantify some of the expected marginal effects associated with alternative crop sequences in the transition

period, including the effects of previous crops. For example, given the emphasis on soybeans following corn for agronomic reasons, analysis indicates the following. Return B values were $239.14 per acre and $226.58 per acre for treatments S3 and S4, respectively, statistically, no different. These results are first pieces for future marginal analyses designed to identify the optimal crop sequence for the transition period. Complete results from year 1 (2015), year 2 (2016) and year 3 (2017) will provide other important values for relevant tradeoffs. For example, what tradeoffs might be expected in terms of foregone returns for organic wheat given a scenario where organic soybeans are to follow corn in the first transition year?

Professor Cox's paper will be posted to the team's website following its presentation. Look for further reporting of this work in future issues of Ag Focus.

# Alternative Energy Systems – Part 3: Wind

*By: Timothy X. Terry*
*Dairy Strategic Planning Specialist*

A friend of mine was flying back from a conference in Kansas last month, and let me know via email that Iowa has a new crop – windmills! Seems appropriate since we used to joke that if the wind ever stopped blowing in Iowa we'd all fall down.

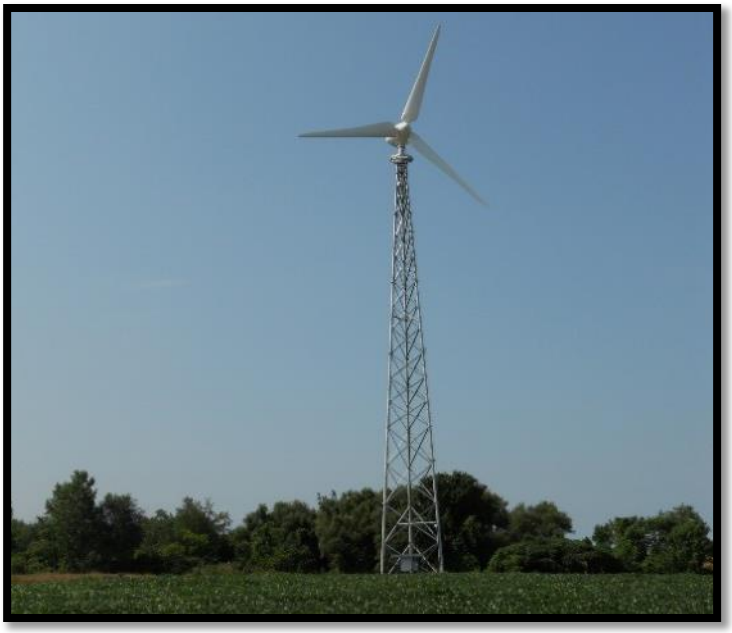

***Photo source: Ryan Cunningham, Onondaga Co. Soil & Water***

## Wind Energy – Pros

- Like solar, it is a green energy source and does not cause pollution under operation
- The potential is enormous. Experts estimate 20X more than what the entire human population needs
- It is renewable and there is no way we can run out of it since wind energy originates from the sun heating the earth
- Wind turbines are incredibly space efficient especially when compared to a solar field or anaerobic digester of similar capacity. They can be placed on top of ridges or even out on the continental shelf.
- The largest of turbines can generate enough electricity to power 600 US homes.
- Wind power only accounts for about 2½% of total world-wide energy production, but it is growing at a rate of 25% per year (since 2010).
- Prices for private units have decreased 80% since 1980 and are expected to continue to decline.
- Operational costs are low
- Therefore there is good domestic potential – yields energy savings and potentially protects owners from power outages.

## Wind Energy – Cons

- ◊ Like everything else wind driven energy production is not without its drawbacks.
- ◊ Wind fluctuates – sometimes it blows, sometimes it doesn't. As such it's not well suited to meet base energy loads unless it is coupled with storage (i.e. - batteries) or a supplemental energy source like solar or pumped hydro.
- ◊ May require some heavy upfront investments in both commercial and residential installations.
- ◊ May be a threat to wildlife (i.e. – birds, bats)
- ◊ Noise (whoosh, whoosh) has been reported as a problem by residents near large turbines
- ◊ How wind turbines look (aesthetics) may be a legitimate concern for some people.

Here are a few videos that provide some more information on windmills – their construction and use.

https://www.youtube.com/watch?v=qS3CtSX8Eck
https://www.youtube.com/watch?v=5dIL3FcoDyA
https://www.youtube.com/watch?v=BIcwd0uRn10

# Cover Crop Options in 2016

*By: Mike Stanyard*


Wheat harvest should be just about wrapped up. That leaves about 115,000 acres out there in NY to plant some cover crops. Throw in the other acres of small grains (barley, rye, and oats) and the acres continue to add up. There is also an opportunity to grow some more forage acres. So far, this extremely dry growing season has not been stellar for hay yields and if it continues corn silage production could be down. Crops like sorghum, forage oats and triticale can help fill in some of those forage losses. The past couple of years have shown us that the first half of August has been the optimal planting window for success of most cover crops.

There has been a huge emphasis on soil health and cover crops are an important piece of this puzzle. There are a lot of options when it comes to choosing a cover crop species (See table). You have to ask yourself, "What do I want to accomplish?" Is it soil conservation, increase organic content, a trap crop for nitrogen, comply with conservation payments or weed control? Another thing to consider is cost (See table). Do you want a species that winterkills or overwinters? Is compaction an issue? Do I need some extra forage? We know that there is a benefit to keeping something growing and covering our fields at all times. It looks like there is also a benefit to planting multiple species together. Mixing tap root and fibrous root species together helps create soil microorganism biodiversity.

We know radishes do a great job of loosening up the soil when there is a compaction issue. However, there is some concern that we may not get the nitrogen back that we put into them. Radishes degrade very quickly in the early spring. Is all the nitrogen gone by the time the corn is ready for it? It might be more beneficial to plant an overwintering species like a winter grain or ryegrass with the radish to pick up that N and keep it around longer so the corn can utilize it when it needs it most.

We have seen cover crops planted with many different drills, air flowed, broadcast and aerially applied. All can be successful, however proper calibration can be tedious and frustrating. Most planters do not have settings for some of these non-traditional plants. Take the time to work it out! You do not want to waste your time by putting on too little and you do not want to waste money by putting on way too much. The cover crop seed suppliers may have worked some of the settings and rates for different seeds and planters out already and have resources available.

**Preventative Planting Acres**

For the first time, I actually have requests for preventative planting letters because the fields were too dry to plant! If a cover crop is being planted following a planned corn or soybean crop, check herbicide labels if a pre-emerge product was applied. Some of the small seeded cover species may not be able to be planted due to plant back restrictions. Penn State has a great herbicide reference table for cover crops, http://extension.psu.edu/plants/crops/soil-management/cover-crops/herbicide-persistence/herbicide-carryover-table. The folks at Purdue University have also put out a good reference, "Cover Crops for Prevented Planting Acres", https://ag.purdue.edu/agry/extension/Documents/PreventedPlantingCovers2015.pdf.

**Extra Forage**

There are a couple of options for the early August planting date. A common choice is spring/forage oats. They are usually in the boot stage by mid-October. I have seen from 1.5 to 2 tons dry matter per acre. You can add annual ryegrass to the mix and field peas or clover if higher protein is desired. Planting winter triticale has become popular after corn silage harvest. It is harvested in May just after flag stage emergence (GS 9). We have seen 2-4 tons of dry matter per acre in NY. See the Winter Triticale Forage factsheet at http://nmsp.cals.cornell.edu/publications/factsheets/factsheet56.pdf for specifics.

| | Drilled | Broadcast | Price/lb. | Winterkill? |
|---|---|---|---|---|
| Annual Rye Grass | 10-20 lbs. | 20-30 lbs. | $.86/lb. | N |
| Sorghum-Sudangrass | 30-40 lbs. | 30-40 lbs. | $.50/lb. | Y |
| Crimson Clover | 12 lbs. | 20 lbs. | $1.24/lb. | N |
| White Clover | 5-9 lbs. | 7-12 lbs. | $4.80/lb. | N |
| Red Clover | 7 lbs. | 10 lbs. | $3.50/lb. | N |
| Field Peas / Austrian Winter Peas | 120/50 lbs. | 140/60 lbs. | $.60/.92/lb. | Y/N |
| Hairy Vetch | 15-20 lbs. | 25-30 lbs. | $2.68/lb. | N |
| Forage Radishes | 8-10 lbs. | 12 lbs. | $2.10/lb. | Y |
| Forage Turnips. Purple Top | 4-7 lbs. | 10-12 lbs. | $1.00/lb. | N |
| Oats (Spring or Forage) | 80-110 lbs. | 110-140 lbs. | $.41/lb. | Y |
| Triticale | 80 lbs. | 110 lbs. | $.40/lb. | N |
| Wheat | 70 lbs. | 100 lbs. | $.36/lb. | N |
| Winter Cereal Rye | 60 lbs. | 85 lbs. | $.33/lb. | N |

# Farm Worker Housing Quiz

*By: Libby Eiholzer*

The quiz below was developed by members of the Agricultural Workforce Development Council (AWDC) to help farm managers assess the current status of their worker housing. It may also be used as a starting point to create a farmworker housing "responsibilities" document, so that all involved parties understand their roles in ensuring a safe, comfortable living environment. The statements used in the quiz reflect a combination of good housing management as well as compliance with current regulations.

The AWDC is a group of agricultural organizations dedicated to the proactive promotion of positive on-farm employment practices and resources, in an effort to ensure access to productive, well-trained and competitively compensated employees as a critical component to the future of New York State agriculture.

| | | Yes | No |
|---|---|---|---|
| 1. | We have an assigned person who inspects housing periodically & when an employee vacates the premises. | | |
| 2. | We have a written housing agreement signed by occupants that outlines employer & employee responsibilities. | | |
| 3. | Heating equipment is in working order & will maintain a mean temperature of 70° F during occupancy | | |
| 4. | We provide employee training & instructions for maintaining critical aspects of the housing including hot water, wells, septic drains, heating system, lights, and fire alarms. | | |
| 5. | Interior walls, floors, and ceilings are in good condition. There are no holes in walls, cracked floors, broken or missing electrical outlet covers. | | |
| 6. | The kitchen floors, walls, ceilings, tables, shelves, and counter tops are made of cleanable materials and are maintained in a clean and sanitary condition. | | |
| 7. | A rated fire extinguisher is provided within 30 feet of all rooms containing cooking facilities. | | |
| 8. | The dwelling has smoke detection devices that are in operating order and each sleeping room has a smoke detector. | | |
| 9. | Garbage containers are provided and arrangements have been made for regular garbage removal at least once every two weeks. | | |
| 10. | Hot and cold running water is provided for hand washing, bathing and laundry. Hand washing basins are provided at a ratio of one basin to every six occupants. | | |
| 11. | At least one bathing facility is provided for every 10 occupants. | | |
| 12. | Clothes washing machines are provided and maintained with proper vents and drains. Facilities for drying clothes are provided. | | |
| 13. | We have a written set of rules for living in group housing and showing respect for each resident. | | |
| 14. | Cooking equipment is in good working order, clean and free of grease, vented and a shut-off valve is provided for gas heating appliances. | | |

| | | Yes | No |
|---|---|---|---|
| 15. | Sleeping rooms are separated from other living space with at least 50 square feet of floor space for each occupant. Sleeping rooms have windows that provide egress and ventilation. | | |
| 16. | A suitable, separate bed, constructed of sturdy and comfortable material is provided to each occupant. The sleeping quarters contain adequate space for the storage of clothes and personal possessions of each occupant. | | |
| 17. | Mattresses are covered with a bedbug resistant cover. | | |
| 18. | The house is free of rodents. | | |
| 19. | All electrical wires and outlets are safe and in working order. | | |
| 20. | Windows that open to the outside in rooms used for living, dining, cooking, sleeping, bathing and toilet facilities are maintained with insect screening. Exterior door openings have insect-proof screen doors or solid doors. | | |
| 21. | Adequate food refrigeration space is provided for all residents of the housing unit. | | |
| 22. | A minimum of one toilet is provided for each 10 occupants. | | |
| 23. | Locks are provided on each window & exterior door. | | |
| 24. | The housing is free of bedbug & cockroach infestations. | | |
| 25. | Employees have free access to visitors. | | |
| | **Bonus Question:** | | |
| | All household mechanical systems are in working order including furnace, toilets, hot water heater, etc., & are tested at least once every six months. | | |

**How to Score the Worker Housing Management Quiz**

This quiz is scored on a total of 100 points. The correct answer to each statement is "yes".

Total "yes" answers _____ x 4 points each _____ Total points _____

**SCORE**

| | |
|---|---|
| 80 – 100 | Congratulations! You put major emphasis on ensuring that employee housing is safe and comfortable. Continue to look for ways to do even better. |
| 60 – 79 | Identify several areas where changes are needed and make a plan for improvement. |
| Below 60 | Take a hard look at your entire housing situation and create a prioritized long range plan for improvement. |

**Resources:**

NYDOH- https://www.health.ny.gov/regulations/nycrr/title_10/part_15/index.htm

OSHA- https://www.osha.gov/pls/oshaweb/owadisp.show_document?p_table=STANDARDS&p_id=9791

H-2A- http://www.ecfr.gov/cgi-bin/retrieveECFR?gp=&SID=e49246f7d4b425e 90b916ea9d4b8f3e4&mc=true&r=PART&n=pt20.3.654#sp20.3.654.e

**Prepared by:**

*Thomas R. Maloney, Senior Ext. Associate, Cornell University & Lisa M. Ford, Special Projects Manager, Cayuga Marketing, LLC*

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**2003 OSHKOSH F2346**; 330 HP Cummins ISM Diesel; 10-Spd.; 22.5 Tires; Alum. Steel Wheels; 212" WB; Tandem Axle; 20,000# F/A; 46,000# R/A; Clean, Low Mile 6x6 Mixer Truck; 10.5 Cu. Yd. McNeilus Mixer; Full Locking Rears; Will Separate Mixer From Chassis; 17' Frame Behind Cab; 128" CT; 167,717 Miles; Stk. #5014 - **$44,900**


**1997 PETERBILT 378**; 350 HP Cummins L-10 Diesel; Allison Auto. Trans.; 22.5 Tires; All Steel Wheels; 308" WB; Tandem Axle; 16,000# F/A; 40,000# R/A; Double Frame; 27½' Frame Behind Cab; 230" CT; 531,144 Miles; Stk. #3986 - **$27,500**


**1999 VOLVO ACL64**; 330 HP Cummins M11 Diesel; 5.29 Ratio; 22.5 Tires; All Steel Wheels; 242" WB; Tandem Axle; 18,000# F/A; 42,000# R/A; Good Running Arizona Truck w/Double Frame; 21'6" Frame Behind Cab; Stk. #4551 - **$24,900**


**2001 INTERNATIONAL 2674**; 435 HP Cummins N14 Diesel; 8LL Trans.; Air Ride Susp.; 24.5 Tires; All Steel Wheels; 242" WB; Tandem Axle; 20,000# F/A; 46,000# R/A; 152,515 Miles; Stk. #5042cc - **$35,500**


**2010 PETERBILT 367**; 485 HP Cummins ISX Diesel; 10-Spd. Engine Brake; Air Trac Susp.; 24.5 Tires; All Steel Wheels; 202" WB; Tandem Axle; 13,200# F/A; 46,000# R/A; Very Clean Daycab Tractor w/Air Slide 5th Wheel; Steer Tires 99%, Drives 90%; 369,622 Miles; Stk. #4990/4991 - **$43,900**


**1996 PETERBILT 357**; 300 HP CAT 3306 Diesel; 8LL Trans.; 12.00 x 22.5 Tires; All Steel Wheels; 216" WB; Tandem Axle; 22,000# F/A; 46,000# R/A; Very Clean 6x6 Cab & Chassis w/17' Frame Behind Cab; 132" CT; 3/4 Locking Rears; Stk. #5091 - **$36,000**


**2002 INTERNATIONAL 2674**; 420 HP CAT C12 Diesel; 10-Spd.; Engine Brake; 22.5 Tires; All Steel Wheels; 283" WB; Tri-Axle; 20,000# F/A; 46,000# R/A; Very Clean, Low Mile, Double Frame Drywall/Block Delivery Truck; 264,693 Miles; Stk. #5110 - **$32,900**


**2006 KENWORTH T800**; 430 H CAT C13 Diesel; Engine Brake; 22.5 Tires; Alum. Wheels; 238" WB; Tandem Axle; Pneumatic Tank Type; 3,100 Gal Capacity; Steel Complosition; 4.30 Ratio; 20,000# F/A; 46,000# Full Locking R/A; Water Tank Truck w/Gardner Denver 3x5 Triplex Pump; Dual Air Cleaners & Exhaust; Good Rubber; 236,724 Miles; Stk. #4943 - **$44,900**


**2005 MACK GRANITE CV713**; 460 HP Mack AC460 Diesel; 18-Spd.; Engine Brake; 24.5 Tires; Alum. Wheels; 237" WB; Tandem Axle; 4,200 Capacity Steel Body; 18,000# F/A; 46,000# R/A; Clean, Low Mile Vac Truck; 93,746 Miles; Stk. #5047 - **$53,900**


**2004 KENWORTH T800**; 335 HP CAT C10 Diesel; 10-Spd.; Engine Brake; Hendrickson Susp.; 22' Length X 102" Width; 5.29 Ratio; 22.5 Tires; All Steel Wheels; 240" WB; Tandem Axle; 20,000# F/A; 44,000# Full Locking Rears; Low Mile, Double Frame Flatbed Truck w/PTO; Will Separate Flatbed From Chassis; 20' Frame Behind Cab; 160" CT; 75% Rubber; 110,826 Miles; Stk. #4952 - **$44,500**


**2005 PETERBILT 357**; 370 HP CAT C11; Allison HD4560P Auto. O/D; 5.38 Ratio; 22.5 Tires; Alum./Steel Wheels; 216" WB; Tandem Axle; 20,000# F/A; 46,000# R/A Lockers; Hendrickson Susp.; 144" CT; 17' Useable Frame Behind Cab; Front Alum. Floats; 85,200 Miles; **Brand New Virgin Rubber All Around!**; Stk. #5075 - **$55,000**


**1999 VOLVO WG64**; 350 HP Cummins M11 Diesel; 8LL Trans.; 4.33 Ratio; 22.5 Tires; Alum./Steel Wheels; 254" WB; Tri-Axle; 18,740# F/A; 46,000# R/A; 35' Length; Double Frame; Hiab 235K Crane; Full Locking Rears; 24'6" Deck; 18,000# Lift Axle Behind Drives; Will Separate Crane From Chassis; 29' Frame Behind Cab; 180" CT; 357,502 Miles; Stk. #5055 - **$24,900**


**2006 WESTERN STAR 4900FA**; 515 HP Detroit 14L Diesel; 8LL Trans.; Engine Brake; 12.00 x 24 Tires; Alum./Steel Wheels; 404" WB; Tandem Axle; 20,000# F/A; 46,000# Full Locking Rears; Very Heavy, Double Frame Truck; Winch & Flatbed Can Be Removed; 30+ ft. Frame Behind Cab; 315" CT; Good Rubber; Low 143,295 Miles; Stk. #5097 - **$37,900**


**2001 INTERNATIONAL 2674**; 435 HP Cummins N14 Celect Diesel; 10-Spd.; Engine Brake; 25' Length x 96" Width; 22.5 Tires; Alum./Steel Wheels; 278" WB; Tandem Axle; 20,000# F/A; 46,000# Full Locking R/A; Double Frame Flatbed Truck; Will Separate Flatbed From Chassis; 25' Frame Behind Cab; 206" CT; 199,970 Miles; Stk. #5094 - **$29,500**


**QTY. (3) 2005 PETERBILT 357**; 305 HP CAT C11 Diesel; Automatic; Haulmaax Susp.; 216" WB; 22.5 Tires; Alum. Wheels; Tandem Axle; 22,000# F/A; 46,000# R/A; 133,852 Miles; Good Running, Low Mile Truck w/McNeilus 10.5 Cu. Yd. Mixer; We Will Separate Mixer From Chassis; 17' Frame Behind Cab; 140" CT; Stk. #4893-4894 - **$56,500**


**1999 MACK RB688S**; 400 HP Mack E7 Diesel; 8LL Trans.; Engine Brake; Rubber Block Susp.; 19' Length; 22.5 Tires; Spoke Wheels; 248" WB; Tri-Axle; 20,000# F/A; 46,000# R/A; 501,176 Miles; Stk. #4760 - **$24,900**


**2003 PETERBILT 379**; 525 HP CAT C15 Diesel; 8LL Trans.; Engine Brake; 4.11 Ratio; 24.5 Tires; Alum./Steel Wheels; 302" WB; Tandem Axle; 18,740# F/A; 46,000# R/A; Double Frame; 294,095 Miles; Stk. #4947 - **$47,900**


**2003 OSHKOSH F2346**; 330 HP Cummins ISM Diesel; 10-Spd.; Alum./Steel Wheels; 212" WB; 20,000# F/A; 46,000# Full Locking Rears; Good Running 6x6; 212" WB; Haumaax Susp.; 162,140 Miles; Stk. #5073 - **$39,900**


**1994 MACK CL713**; 400 HP Mack E7 Diesel; 18-Spd.; Engine Brake; 24.5 Tires; All Steel Wheels; 205" WB; Tandem Axle; 20,000# F/A; 46,000# Full Locking Rears; **Export Pricing Shown!**; Heavy Spec Daycab Tractor w/Mechanical Engine; Spring Susp.; Wetline System; 519,795 Miles; Stk. #4812 - **$15,900**


**2005 INTERNATIONAL 5900i**; 475 HP Cummins ISX Diesel; 18-Spd.; Engine Brake; 24.5 Tires; Alum./Steel Wheels; 366" WB; Tandem Axle; 40,000# F/A; 46,000# R/A; Double Frame; Twin Steer Cab & Chassis (Deck To Be Removed); 317,179 Miles; Stk. #5109c - **$52,500**


**2001 KENWORTH T800**; 430 HP CAT C12 Diesel; Auto. Trans.; Engine Brake; 4.11 Ratio; 22.5 Tires; All Steel Wheels; 246" WB; Tandem Axle; 12,000# F/A; 44,000# Full Locking Rears; Very Clean, Low Mile Southern Truck w/21'6" Frame Behind Cab; 170" CT; 160,558 Miles; Stk. #4918 - **$36,500**


**2007 MACK VISION CX613**; 66" Mid Roof Sleeper; 350 HP Mack Diesel; 13-Spd.; 22.5 Tires; Alum. Wheels; 222" WB; Tandem Axle; 12,000# F/A; 40,000# R/A; **EXPORT PRICING SHOWN!!!** Very Good Running Sleeper Truck w/Air Slide 5th Wheel; Stk. #5031 - **$16,900**


**2000 VOLVO WX64**; 275 HP Volvo VE Diesel; Allison Auto. Trans.; 5.86 Ratio; 22.5 Tires; All Steel Wheels; Tandem Axle; 18,000# F/A; 40,000# R/A; Low Mile Garbage Truck w/Pak-Mor 24 Cu. Yd. Front Load Packer; 33,513 Miles; Stk. #5041 - **$15,900**

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# On a Farm Near You...

## *Top of the Hill Jerseys – Family, friends and making opportunities*

*By: Jerry Bertoldo*

Up on a hill with a great view just south of Attica, NY, there is a Jersey herd with an inspiring story about passion, resourcefulness and young people with a stake in the dairy industry. Lyman and Chelsey Rudgers, Josh and Katie Carpenter have teamed up using a cattle leasing agreement in a 110 cow operation that began in December, 2013. Chelsey's parents, Jim and Eileen Downs, are the landlords and forage providers.

The Rudgers and Carpenters are young, their combined ages not much over the century mark. Their life stories are filled with an impressive amount of farm experience backed by practical agricultural college educations. Their individual histories read like other young people who have a love for working with dairy cattle with the benefit of good experience and management skills as well – farm chores growing up, ownership of cattle while in school, purchasing and placing livestock with farms that they worked for, and acquiring additional animals as part of employee compensation.

Lyman and Chelsey graduated from Attica Central Schools, a couple years apart in age. Both of their families were out of the milking business by the time they graduated high school. Lyman worked for three area dairies up through his college days. Chelsey helped her parents with their calf and heifer raising operation. Lyman graduated from Morrisville in 2013. Chelsey will be receiving her degree from there this year. The couple married on July 15, 2016.

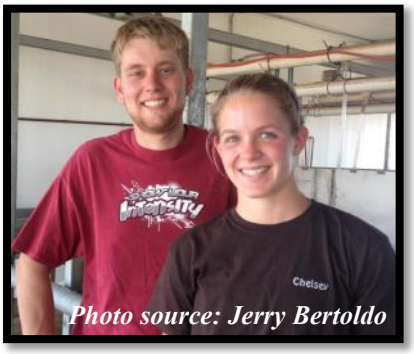
*Photo source: Jerry Bertoldo*

Josh grew up in Dryden, New York on his family dairy. He met Katie while she was doing a 4-H internship with Tompkins County Extension where Josh's Mom worked. Katie grew up in Wyoming County and is another Attica Central alum. She graduated from Cornell, Josh from Cobleskill.

After college graduation, Lyman worked with the Downs to renovate their old stanchion barn. The results were 23 new tie stalls with a pipeline and a relocated milk house. Lyman's 20 Jerseys moved in during December 2013. In August 2014, John and Mariann Fessenden of Cayuga County needed a place to house their show string of 12 milking and 12 young Jerseys. Through the "network" they made arrangements to join Lyman's small herd. The number of milking cows rose requiring the use of the new tie stall area as a flat milking barn. Additional housing was provided in the section of the stanchion barn not renovated.

Josh and Katie married and moved back to Wyoming County in 2004. They were first employed in agribusiness before being hired in management positions on a large local dairy. In 2011 they took their "accumulated equity" Jersey herd to a rented barn in Fillmore, NY. In early 2015, facing a labor shortage, they got in contact with Lyman and the Downs about teaming up. With the retrofit of the Downs' free stall heifer barn to sand stalls, the combined herd moved up to over 90 milking Jerseys in May 2015. The newer tie stall area continued to be used as a flat barn parlor. The heifer raising operation was ended with this transition.

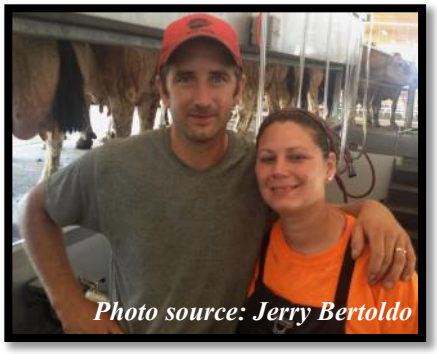
*Photo source: Jerry Bertoldo*

With the addition of the Carpenter herd, the limited bulk tank capacity meant daily pick up. The confined location of the milk house prevented a larger replacement tank or adding a second one. The decision was made to construct a new double-10,

parallel parlor and holding area. Jim and Eileen Downs funded the structure, the young partners paid for the contents, the parlor itself, plumbing and electrical work. The new parlor went on line in early March.

With excellent milk quality, high components, strong mailbox prices through 2014 and some do-it-themselves design and construction, much of the "partner" work was paid for out of cash flow. Those efficient, solid champion Jerseys have kept the farm in the black even at current milk prices. The 2X herd has consistently hit 75 lb., 4.8 BF, 3.6 MP and 100,000 SCC of late.

The players at Top of the Hill Jerseys have broad skills and resources in hand. Today they handle artificial insemination, machinery maintenance, bookkeeping and all their labor needs. Their barns are cow friendly and in good shape. They have sufficient land base and equipment for all cropping needs and manure handling. There is the possibility of using close-by vacant barns and pasture for youngstock and dry cows. Their parlor has excellent expansion capacity. But, most of all there is a positive attitude and a strong sense of family.

The partners at this dairy reflect the drive and talents that have pushed the dairy industry to the high standards expected today. They have pooled their talents and resources to advance their mutual goals of establishing dairies. Capitalizing on their drive and strong business skills, these millennials are making their mark in the dairy business.

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**NWNY Dairy, Livestock & Field Crops Team**
**3 Murray Hill Drive**
**Mount Morris, NY 14510**

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## *AUGUST 2016*

## Save the Date...

3-7 ***Niagara County Fair,*** 4487 Lake Avenue, Lockport. For more information: www.cceniagaracounty.org

4 ***NY Corn & Soybean Crop Tour,*** Sunnyside Farms, 2231 Indian Field Road, Scipio Center

4-6 ***2016 Grasstravaganza,*** Alfred State College, 10 Upper College Drive, Alfred. For more information: www.alfredstate.edu/grasstravaganza

4-7 ***Monroe County Fair,*** Northampton Park, Ogden. For more information: www.mcfair.com

8 ***Webinar: An Update on Raising Better Calves,*** 1:00-2:00 p.m., Presented by: Bob James, Virginia Tech. Website: http://www.hoards.com/webinars

9-11 ***Empire Farm Days,*** Rodman Lott & Son Farms, 2973 State Route 414, Seneca Falls. Free admission, Parking $10/car

12 ***Grain Bin Safety Training,*** 7:00 a.m.—9:00 a.m. & 10:00 a.m.—Noon, Sunnyside Farms, Inc., 2231 Indian Farm Road, Scipio Center. Registration ***REQUIRED*** for training. Contact: Jim Carrabba at: 800-343-7527 x2216 or jcarrabba@nycamh.com

13-20 ***Wyoming County Fair,*** 70 Main Street, Pike. For more information: www.wyomingcountyfair.org

15 ***Webinar: Current Research in Genomic Selection,*** Presented by: Dr. Joe Dalton, University of Idaho & Dr. Jose Santos, University of Florida. Website: http://articles.extension.org/pages/29156/upcoming-dairy-cattle-webinars.

15-20 ***Wayne County Fair,*** 300 W. Jackson Street, Palmyra. For more information: www.waynecountyfair.org

16 ***Grain Bin Rescue Training,*** 7:00 p.m., Benton Fire Station, 932 Route 14A, Penn Yan. For registration/questions, contact: Henry Martin at 315-536-4736

20 ***Yates Farm Safety Day,*** 8:30 a.m.—2:30 p.m., Benton Fire Station, 932 Route 14A, Penn Yan. **Please RSVP by: August 13.** For registration/questions, contact: Henry or Ada Martin at: 315-536-4736