

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



NORTHWEST NEW YORK DAIRY, LIVESTOCK & FIELD CROPS TEAM

Winter Wheat Harvest, Protection, & Storage

By: Mike Stanyard

7 016 at a Glance

• Overall, the winter wheat across NWNY appears to be in great shape. It came through the winter beautifully and herbicide, and spring nitrogen, fungicide applications looked to be timely. Despite lower wheat prices, growers who have been following high management yield practices continued to do so this spring. Maximizing yield potential was even more important this year. Unfortunately, I still saw some fields that were brown and burned from combining nitrogen and herbicide applications.

Powdery mildew was present early but drier warmer weather kept the infections during the early growth stages from expanding to the upper leaves. Some fields were sprayed with a fungicide at tillering. Cereal leaf beetle populations were almost non-existent in the wheat. I am not sure if this was due to natural population cycles but they did not get an early start. I expected higher numbers with the milder winter. There were much higher numbers in the spring grains. Common armyworms have been a no-show in wheat as of mid -June. Yeah!!! Most of our wheat pollinated in late May and the weather was mainly dry and favorable. I saw quite a few sprayers in the field at flowering which means fungicides such as Caramba and Prosaro were being applied mainly for Fusarium Head Scab (FHS). The Fusarium Risk Assessment Tool (http://www.wheatscab.psu.edu/)



predicted a low risk of FHS infection for WNY through most of this critical flowering stage. This should result in lower levels of vomitoxin in the grain at harvest. These applications also protected the flag leaf from leaf diseases like powdery mildew, rust and fungal leaf blights. Stripe rust was found in isolated pockets around WNY.

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Ag Focus Cornell Cooperative Extension of

Genesee•Livingston•Monroe Niagara•Ontario•Orleans•Seneca Wayne•Wyoming•Yates

Ag Focus is published Monthly by the NWNY Team of CCE / PRO-DAIRY

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Layout/Design: Cathy Wallace

Postmaster Send Address Changes: NWNY Team—Cathy Wallace 420 E. Main Street, Batavia, NY 14020

Direct all inquiries & correspondence on advertising space and rates to Cathy Wallace, advertising representative at 585.343.3040 x 138 Fax: 585.343.1275

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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.

AG FOCUS JULY 2016 NWNYTEAM.CCE.CORNELL.EDU

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Straw yields will be lower on average as rainfall has been spotty and drier fields are shorter in stature. The only task left is to get the wheat harvested and in the bin!

Harvest Preparation

Know your grain moisture and have the combine prepared to go when it's time to pull the trigger.

Weather and field conditions do not always cooperate during harvest. Many producers will start harvesting at 20% and dry it down to 13%. Producers who don't have dryers and rely on field drying, run the greater risk of reduced grain quality. The first harvested wheat will have the best quality. If you had later planted wheat that flowered in the second week of June, vomitoxin from FSH could be a concern Look for pink shrunken coloration and kernels in the heads. If these conditions are present, set the combine fans to high to try and blow these light kernels back onto the field

Grain Bin Preparation

Storage facilities should be inspected thoroughly prior to grain fill. Look for openings, leaky vents, fallen supports, and signs of rodents. Bird nests are always a treat to find in the auger or vents. Stored grain insects survive in old grain so a thorough cleaning is the first line of defense. Clean up all remaining grain on the floor of the bin. Take a longhandled broom and remove any grain stuck to the walls, around the door, supports, ladder rungs and in the fan opening. If there are a lot of fines remaining on the floor, clean up with a shop vacuum. It is amazing how many insect eggs and larvae are in a small amount of material. The same is true for grain handling equipment such as augers and drying bins.

After the bin is cleaned out, an insecticide application will help keep the grain mass clean. This storage. We are very limited when it comes to empty bin insecticide treatments. TEMPO® SC ULTRA and STORCIDETM II (see label for application restrictions) are both labeled. Diatomaceous earth (Dryacide) is a non-insecticidal silica sand that can be applied as a dust in the bin and below the floor.

Spray the floor and walls inside the bin to the point of runoff. Spray some through the fan under the false floor of drying bins. Spray around the outside base of

the bin and eliminate any weeds and old grain debris within 30 feet of the bin. Insects and rodents can survive on weed seeds too!

Wheat Yield Prediction

The June 13 NY Crop Progress and Condition Report had winter wheat as 19% excellent, 54% good, 24% fair and 3% poor. NASS USDA Northeast does not give a monthly yield harvest acres forecast or anymore for small acreage states like NY (only top 98%). They will have NY yields posted in the final small grains report in September.

Upcoming Webinars:

Feeding for Hoof Health

July 11, 1:00 - 2:00 p.m. Presented by: Mike Hutjens, University of Illinois http://www.hoards.com/webinars





Strategically Deworming the Beef Herd: Fighting Resistance

By: Nancy Glazier

T iming is everything in parasite control. Waiting for cattle to appear 'wormy' before deworming is too late, the damage has occurred. Subclinical level parasites can reduce gain and performance in cattle, oftentimes going unnoticed. Clinical signs can be dull coats, diarrhea, anemia, or edema. Heavy loads can sometimes lead to death in young animals. Recent studies have shown in particular, *Osteragia* spp. can alter the immune response from vaccines. Strategic deworming has been shown to improve milk production, reproduction performance, feed efficiency, and gain. Estimates have shown deworming at the right time and right class of animals can add returns of \$20 to \$200 per head.

Cattle are often treated when convenient, when not needed or too often since it is relatively cheap and easy to do, particularly pour-on control. This has led to overuse. It is also thought that animals may lick them off, or they could possibly get washed off by rain. Many small farms do not have scales to obtain weights so dosing is done using an average weight; this leads to incorrectly estimating the dose and potentially leading to over or undertreating. In parts of the country low doses of ivermectin have been found to control pasture flies. Improper use of anthelmintics has led to resistance.

Research was conducted with North Carolina State University herds in two locations. Weaned calves were treated and fecal egg counts were taken. The target control with deworming is over 90% reduction in eggs found in fecal samples. Less control suggests resistance. This trial demonstrated resistance with ivermectin, both generic and brand name, both pouron and injectable. Fenbendazole drench provided over 90% control. A trial on the NC State herd at another location found no resistance. So, resistance can be site specific.

How do you know if your cattle have internal parasites? One sure method is necropsy (postmortem exam). This is an unfortunate way to find out what species of parasites and how many are present. Another method is fecal exams. What is



Mature cows have developed immunity from parasite exposure. Photo source: Nancy Glazier

recommended is the Fecal Egg Count Reduction (FECR) tests where fecal samples are collected at time of treatment and then resampled 14 days later. The recommendation is to test the same cattle, at least 17, from the same class or life stage both times. Cornell Animal Health Diagnostic Center (<u>https://ahdc.vet.cornell.edu/</u>) is one lab that does the tests; commercial labs are available, too. This method has drawbacks depending on the timing. There may be immature nematodes in the intestines or abomasum that may not be egg laying. This can skew numbers.

Broad spectrum and safe anthelmintics had reduced the need to differentiate the parasites, though resistance has added some complications to that. Control does not mean elimination. This leaves some susceptible parasites to mate with resistant ones. The goals are to prevent heavy exposure to susceptible animals, reduce parasite loads on pastures, minimize effects of parasite burdens, and encourage development of immunity. Calves will develop immunity to parasites from some exposure and will not have developed full immunity until after their second grazing season. They are most susceptible and need to be properly monitored. Pasture parasite populations peak in the spring. Some eggs survive the winter on pasture and some eggs are deposited in manure. They hatch and develop into third instar larvae. These larvae crawl up pasture plants, are eaten by cattle (or other livestock), with wet conditions making it more likely for larvae to survive. Frequent (<3 days per paddock) pasture rotations with a rest for 3-4 weeks allows for the maximum destruction of infective larvae by a combination of sun, dung beetles and drying. Forage harvest will help clean up pastures, too. Winter freeze-kill cannot be taken as 100% effective.

Strategic deworming during the pasture season is critical to keep pasture loads low. Egg shed does not begin until about 40 days after normal spring turnout. This is the recommended time for treatment. This timing is designed to keep pastures from further parasite build up. Worms develop faster in youngstock since the older cows have built up immunity. Youngstock should be treated 3-4 weeks after turnout and again in another 3-4 weeks. A dry summer will reduce development and survival of parasites so treatment may not be needed again until November. That should get them through the winter. Keep in mind withdrawal times.

Some protocols recommend a treatment prior to pasture turnout. Your veterinarian can help you develop your strategic deworming plan for your farm and set it up to meet your production goals.



Where is your next opportunity?



Training Resource Corner

By: Libby Eiholzer

C ontinuing your education has value whether you've graduated from high school, college, or have been doing the same job for 40 years. Consider the value of providing continuing education for your employees. Not only does it help ensure that you are all on the same page, it also shows them that you care about helping them to learn, grow and become even better employees. I'm sure that some of you feel overwhelmed with the thought of *more* training. But don't dismay: training doesn't have to be a lot of extra work. Even with a 10 to 15 minute session once a month or so, you can connect with your employees and help them to improve their performance.

Over the next couple of months, you'll see a "Training Resource Corner" article with resources for different training topics. These may be websites, videos, written materials and even professionals that you can call on to help you encourage continued growth among your employees.

For July, our featured training topic is Milk Quality.

Why it's Important: Milk is always a dairy farmer's bottom line, but when milk prices are low, achieving quality premiums can go a long ways towards boosting your milk check.

Key Resources:

• University of Wisconsin Madison:

http://milkquality.wisc.edu/

This website has a plethora of information to help you train your parlor team about mastitis prevention and treatment. From posters explaining the basics of milking procedure, somatic cell count and mastitis to factsheets about the various mastitis organisms, you'll find all kinds of training materials. Under the "media" tab, you'll also find a link to all of their video series. These include topics such as managing different mastitis pathogens, the habits of highly effective milking routines, and how to evaluate milking performance. The latest video series includes 11 short videos (about 5 minutes each) that walk you through all the steps of using on-



Ongoing training about milk quality can help improve your farm's bottom line.

Photo source: Libby Eiholzer

farm culturing. Not all but most of these resources are available in Spanish as well.

• National Mastitis Council:

http://www.nmconline.org/documents.html

NMC is "a professional organization devoted to reducing mastitis and enhancing milk quality." They have developed factsheets on topics such as the different mastitis organisms, dry cow therapy, and somatic cell count. They offer protocols, guidelines and procedures for all aspects of milking management. There are many resource articles as well as a series of articles addressing basic questions about milk quality. (Look for "translated materials" under the "resources" tab. You may recognize some of these that were originally published in the *El Lechero* magazine). The website includes both English and Spanish resources.





NYSERDA OFFERS NO-COST ENERGY AUDITS

YSERDA launched the Agriculture Energy Audit Program in March 2016. The Program offers farms and on-farm producers no-cost energy audits that provide recommendations for energy efficiency measures. The Program also offers assistance identifying and accessing funding to implement the measures identified in the audits. Three levels of audits are offered:

Level 1: This walk-through energy audit provides a summary letter with limited evaluation of feasible energy efficiency measures. This level is ideal for smaller operations with minimal energy use or for quick assessments.

Level 2: This detailed energy audit analyzes the farm's previous year's utility bills along with equipment specifications and run-time information for that equipment. This information will then be used to help calculate estimated energy savings for energy efficiency upgrades on the farm. The comprehensive report will provide a list of recommended measures with associated energy and cost savings and measure payback. This audit meets

ANSI/ASABE 612 standards. This level is the most common and the best option for most farms.

Level 3: This energy audit is focused on a specific system, energy efficiency measure, or renewable energy. This report is ideal for operations with a complex system to be analyzed beyond standard energy efficiency upgrades, or if the farm is interested in renewable energy.

Once the audit report has been completed, NYSERDA's program implementer, EnSave, will assist each farm in identifying the most appropriate measures to implement and programs to pursue for implementation funding. There are several options available, including programs through utilities and the federal government.

Funding for audits is available on a first-come, firstserved basis. Call 800-732-1399 or email aeep@nyserda.ny.gov to discuss program options and obtain an application.



AGRICULTURE ENERGY AUDIT PROGRAM







REDUCE operating costs

IMPROVE energy efficiency

REDUCE carbon emissions

call: 1-800-732-1399

email: aeep@nyserda.ny.gov

visit: nyserda.ny.gov/agriculture

NYSERDA, a public benefit corporation, offers objective information and analysis, innovative programs, technical expertise, and support to help New Yorkers increase energy efficiency, save money, use renewable energy, and reduce reliance on fossil fuels. NYSERDA offers energy audits to help eligible farms and on-farm producers identify ways to save energy and money on utility bills. Reports include recommendations for energy efficiency measures.

Eligibility

Eligible farms include but are not limited to dairies, orchards, greenhouses, vegetables, vineyards, grain dryers, and poultry/egg. The farms must also be customers of New York State Investor-owned utilities and contribute to the System Benefits Charge (SBC). Please check your farm's current utility bills to see if your farm pays the SBC.

Energy Audit Options

You can request the level of energy audit that best fits your farm's needs. NYSERDA will assign a Flexible Technical Assistance Program Consultant to visit your farm and perform an energy audit at no cost to you.

Level	Audit Activities	Type of Report that the Farm Receives
Level 1	Walk-through energy audit	Summary letter with limited evaluation of feasible energy efficiency measures
Level 2	Detailed energy audit	Energy audit report with calculated evaluations of appropriate energy efficiency measures Including simple payback; meets ANSI/ASABE S612 standards
Level 3	Energy audit focused on specific systems, energy efficiency measures, or renewable energy	System-specific energy analysis report

Get Started

Visit nyserda.ny.gov/agriculture to download an application or apply online. Call **1-800-732-1399** to learn more, request an application, or for assistance with determining the audit level.





Alternative Energy Systems—Part IIB: Solar

By: Timothy X. Terry Dairy Strategic Planning Specialist

S olar hot water is really just a capture and conversion of solar radiation. Flat plate collectors and evacuated tube collectors are the two most common methods for capture and conversion.

In a flat plate collector a network of copper pipes (headers and risers) are nestled in a dark absorber plate. As sunlight hits the absorber plate it heats up. The heat is transferred to the copper pipes and the



Figure 3 - Solar Water Heat - Flat Plate Collector Photo source: www.synergysolar.com

fluid flowing in them. (See Figure 3) The fluid is circulated back to a heat exchanger where it preheats water for domestic use – much like the pre-cooler on your milkline.

The tube in an evacuated tube collector is just like the glass thermos you use to keep your coffee hot. Like the flat plate collector there is a copper pipe nestled in a dark absorber plate, however, the pipe is sealed and only partially filled with a water-alcohol mix. (See Figure 4) As the pipe heats up, the mixture boils, the steam rises, condenses, and flows back down into the pipe. As it condenses it releases heat into a heat exchanger in the header of the unit. The fluid in the header is circulated back to a heat exchanger where it preheats water for domestic use,



Figure 4 - Solar Water Heat - Evacuated Tube Collector

Photo source: www.viessmann.us

just like the flat plate collector. Check out this video for a more detailed description: <u>https://</u> www.youtube.com/watch?v=XAVaOQ1o67w

And here is an on-farm example of solar hot water: <u>https://www.youtube.com/watch?v=rHNO5rikn1E</u>

Is one of the two types better than another? Not necessarily, each has its strengths and weaknesses. For example, the evacuated tubes tend to work better in northern climates or where sunlight may be subdued, but flat plate collectors are usually less expensive. Furthermore, it depends on the particular installation.

If you asked Joel Salatin to define the term "Solar Fuels" he'd probably say, "Firewood", and he'd be correct. Biomass is definitely a form of captured solar energy, but it is not the only form. By taking PV energy one step further, and using it to power a process called electrolysis, acidified water is split into its components of hydrogen and oxygen. The hydrogen can then be used to power fuel cells and the oxygen saved for other industrial uses. Unfortunately, even though the concept is old the current technology is energy inefficient, but research continues – just don't look for an off-the-shelf hydrogen generator anytime soon.

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FREE SAFETY TRAINING OPPORTUNITY for FARMERS

Grain Bin Safety Training Instructed by National Education Center for Agricultural Safety (NECAS)

> August 12, 2016 7:00 to 9:00 AM and 10:00 to 12:00 PM At Sunnyside Farms, Inc. 2231 Indian Farm Rd. Scipio Center, NY



Learn about the hazards of grain bins and how to work safely around them Learn the 4 most common ways people become entrapped and how to avoid them

Registration **required** for training Contact NYCAMH Agricultural Safety Specialist Jim Carrabba, 800-343-7527 x2216, jcarrabba@nycamh.com Sponsored by New York Center for Agricultural Medicine and Health (NYCAMH), National Education Center for Agricultural Safety, and Sunnyside Farms, Inc.



Bassett Healthcare Network New York Center for Agricultural Medicine and Health



Women Landowner and Farmer Business Relationships Being Studied

In Western New York, one third of the land in the region used for farming is leased and roughly a third of those landowners are women. There are many ways landowners and tenants can work together to improve the productivity and beauty of rented lands. Many women are surprised to learn how much flexibility there can be in designing a lease to suit both the landowner's and tenant's goals and risk tolerance.

Cornell Cooperative Extension is working with American Farmland Trust to identify and develop resources that are needed to assist women farmland owners with reaching their goals for their land. A focus group of women landowners was held in April to learn more about questions that are perplexing women landowners. Researchers will conduct a similar focus group meeting with farm operators who rent land from women to learn about the issues that come up when renting from women landowners.

WFAN is a community of women in sustainable agriculture. Their mission is to engage women in building an ecological and just food and agricultural system through individual and community power. WFAN works with many constituents, including farmers, consumers, students, researchers, advocates, and policy-makers. Through outreach, they're working with women landowners to provide education and resources about conservation methods they can implement on their land.

American Farmland Trust's mission is to protect farmland, promote sound farming practices, and keep farmers on the land. They focus on long-term solutions, rather than short-term gain. AFT is involved in advocating for protection of farmland through a number of avenues including supporting state and Federal purchase of development rights publishing guides to programs, farmland conservation practices at the community level, studying the impact of legislative solutions and training landowners, municipal officials and agency personnel in farmland protection options.



For this project, Cornell Cooperative Extension was invited by American Farmland Trust to:

- host and help facilitate focus groups of women landowners and farm operators who rent land from women to identify issues challenging women landowners,
- host a *Women Caring for the LandSM* discussion
- become involved in developing resources for women farmland owners in the Northeast to strengthen their relationships with their tenants to implement conservations practices, when funding is identified.



Keep Stored Grain Cool, Dry During Summer

By: Kenneth Hellevang, PhD, PE, Ext. Engineer North Dakota State University

Warm grain could lead to insect infestations and mold growth.

Stored grain needs to be cool and dry during the summer, a North Dakota State University Extension Service grain-drying expert says.

"Cold or cool grain has been safely stored through the summer for many years," notes Ken Hellevang, an Extension agricultural engineer. "Keeping the grain as cool as possible should be the goal of spring and summer grain storage."

Allowing grain to warm to average outdoor air temperatures during the summer can lead to insect infestations and mold growth. The optimum grain temperature for insect activity is approximately 70 to 90 degrees. Reducing grain temperatures below 70 degrees will lessen insect reproduction and activity, and lowering grain temperatures below 60 degrees will greatly reduce insect activity.

Hellevang warns that using aeration could warm the grain, which may increase the moisture content of the grain slightly. Aeration fans should be covered to prevent wind and a natural chimney effect from warming the grain. Wind blowing into uncovered fans or ducts will move air through the grain in a way that is similar to operating an aeration fan.

One challenge to keeping the grain cool during the summer is that solar energy on the bin roof heats the air above the grain. Convection currents in the grain flow up along the bin wall and down into the grain near the top middle of the bin, drawing this heated air into the grain. Ventilating the space between the grain and the bin roof can reduce the amount that the grain near the top of the bin is warmed.

Natural ventilation to cool this space can occur if the bin has openings near the eave and peak; these openings work like the vents in an attic of a building. The heated air rises and exits near the peak, drawing in cooler air near the eave. This natural ventilation will not occur unless the bin has adequate openings



Photo source: Nancy Glazier

at the eave and peak. Roof exhaust fans controlled by a thermostat also can be used to draw the heated air out of the bin if openings are available to allow air into the area above the grain.

Cool grain in the upper portion of the bin by operating the aeration fan about every three weeks during a cool early morning. Using positive-pressure aeration to push air up through the grain enables the cool grain in the bottom of the bin to cool the air, which then cools the grain near the top of the bin.

Run the fan only long enough to cool the grain near the top surface. That may require running the fan for a few hours during a cool, dry morning for a couple of days. Running the fan more than necessary will warm more grain at the bottom of the bin, increasing the potential for storage problems.

If the air dew point is warmer than the grain temperature or if the air relative humidity is high, some moisture will condense onto the grain during fan operation. Condensing moisture will release heat that will warm the air slightly, reducing the effectiveness of the aeration and increasing the amount of warming occurring in the grain at the bottom of the bin. Therefore, selecting mornings when the air is cool and dry is important. Verify that the grain moisture content is dry enough for storage at summer temperatures. The recommended long-term grain storage moisture contents are about 13.5 percent for wheat, 12 percent for barley, 13.5 percent for corn, 11 percent for soybeans, 13 percent for grain sorghum, 8 percent for oil sunflowers and 10 percent for confectionary sunflowers. The market moisture content may be higher, but storing warm grain at higher moisture contents may lead to mold growth on the grain.

Measure and record the stored grain temperature at several locations near the top surface, along the walls and within the stored grain. Temperature sensors are an excellent tool when monitoring stored grain, but remember that they only measure the temperature of the grain next to the sensor. Because grain is a good insulator, the grain temperature may be much different just a few feet from the sensor. Increasing grain temperature may be an indicator of an insect infestation or mold growth.

Mold growth and insect infestations occur rapidly at summer temperatures, so stored grain should be

checked every two weeks. A situation with only a few insects can turn into a major infestation in less than a month. Using insect traps or placing grain samples on white material helps you look for insects.

Resources:

NDSU Agriculture Commuication - June 3, 2016 Ken Hellevang, 701-231-7243, kenneth.hellevang@ndsu.edu

Editor: Ellen Crawford, 701-231-5391, ellen.crawford@ndsu.edu https://www.ag.ndsu.edu/news/newsreleases/2016/may-30-2016/keep-stored-grain-cool-dry-during-summer





Five Summer Interns Bring New Energy to the NWNY Team

My name is Lindsay Chamberlain, and I am interning for Quirine Ketterings and Mike Stanyard in the Nutrient Management Spear Program at Cornell University this summer. This fall I will be a senior at Cornell, majoring in Plant Sciences with a concentration in Plant Physiology and Molecular Biology. My passion for agriculture stems from growing up on a Jersey dairy farm in Wyoming County. I spent summers showing cows and weekends feeding calves, and still enjoy helping out on the farm when I go home. I am very excited to be working with the NMSP, as the program is the collision of my two passions; research on plants that are grown to feed dairy cows.

My project this summer focuses on precision agriculture for nitrogen management in corn. Crop sensing technologies, such as the Green Seeker, can quantify the "greenness" or health of the crop with NDVI. These sensors may be attached to a sprayer boom to determine the crop's nitrogen needs, and adjust nitrogen fertilizer rates on the go. This precision technology increases efficiency by limiting excess nitrogen application while still maximizing yields. I use a handheld Green Seeker sensor to regularly assess corn plots that have been treated with variable N rates. A goal of the experiment is to determine the plant growth stage with the most reliable Green Seeker yield predictions. We will also be utilizing UAS (Unmanned Aerial System) images to determine NDVI. In other words, we are using pictures from a quadcopter drone to determine the differences between variable N rate plots.

I look forward to seeing results develop as the growing season progresses, as well as working with a friendly and collaborative group of researchers.

Hello everyone, my name is **Brooke Ryan** and I am working this summer as an intern for Libby Eiholzer. I just finished up my junior year at Cornell University as an Animal Science major with a minor in Spanish. I am originally from Cortland, NY and, although I did not grow up on a farm, my mom and I own about 30 Holsteins that reside on a farm in Perry, NY. Growing up, I liked to show my cows at junior and state shows, and I also participated in



L to R: Dennis Atiyeh, Brooke Ryan, Lindsay Chamberlain, Chelsey Downs & Peter Bertoldo Photo source: Libby Eiholzer

Junior Holstein Club and 4-H, so hopefully I will feel right at home working with CCE this summer!

My main objective in working with extension over these next few months is to help Libby and our faculty advisor at Cornell, Tom Maloney, conduct two surveys of Hispanic employees and their employers. We wish to compare the results of these surveys to results of similar surveys conducted in 2009 and 2005. One survey is of farm owners that will be about the jobs, performance, pay, etc. provided to Hispanic employees. The second survey is of Hispanic employees looking into demographic information, job satisfaction, and incentives to stay at their jobs. Both surveys will be completely anonymous. If you are interested in your farm participating in the survey, you can contact Libby by phone at 607-793-4847, or email her at geg24@cornell.edu. I truly look forward to getting to know more of Western New York and its hardworking dairy farmers this summer!

Hey everybody! My name is **Dennis Atiyeh**, and I am an intern working for Dr. Mike Baker and Nancy Glazier! I am senior double majoring in Agricultural and Animal Science and a member of the Men's wrestling team here at Cornell University. My family and I live on a farm in Schnecksville, Pennsylvania where we raise some livestock and vegetables. I come from a family of eight (two brothers and five sisters). There is never a dull moment at home, from sibling rivalries to chasing some cows down the road. It is always a good time at the farm.

This summer, I will be working alongside retired veterinarian Dr. Dave Wilson in preparing virgin heifers for estrous synchronization and artificial insemination. I will also be assisting him with day-to -day activities on the farm. We will be measuring response to synchronization, rates of estrous observed, pregnancy rate, hours of labor required and other associated costs. I will be creating a display for Empire Farm Days, and blog to help producers understand the value of synchronization and artificial insemination in the reproductive management of their herd. By the end of summer, I hope to show these reproductive strategies are a viable option to increase profitability for producers.

My name is **Peter Bertoldo** and I am working as an intern this summer for Mike Stanyard. This spring I finished my junior year at Saint Bonaventure University where I study Modern Languages and International Business. I grew up on a horse farm in Bennington, New York, so I feel pretty comfortable in an agricultural environment. Although this internship does not relate directly to my studies, I am excited to branch out with field crop research and data collection this summer.

This summer, my main focus is on the malting barley crop in the northern region of Western NY. Recent state legislation has been passed regarding the craft beer industry in NY. With this legislation, NY craft brewers will be required to use 60% NY grown materials, effective in 2018. While trying to attain this goal, malting barley growers must strive to grow a crop that passes a threefold test of quality. My job is to travel to the barley growers across the region to collect data and speak to growers, gathering information about barley planting and care. We want to know the details relating to each barley plot's planting date, breed variety, soil type, fertility, insect activity, and chemical use to help us determine which practices are most successful. Our goal is to create a system of best practices that leads to the highest quality malting barley that can be used in the ever-growing NY craft beer industry. I look forward to working with both growers and researchers in order to facilitate this exciting new effort!

Chelsey Downs was featured in an article about the Beef Summary project in the June 2016 issue of Ag Focus.



four wheeling, summer nights, cooking farm fresh meals, and

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For more information, please contact: Dr. Melanie Hemenway at 585-313-7541 or melanie.hemenway@agriculture.ny.gov.



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Save the Date...

- 7 *Seed Growers Conference*, 9:00 a.m. 12:00 p.m., NYSIP Foundation Seed Barn, For more information contact: Margaret Smith at 607-255-1654 or mes25@cornell.edu
- 12-16 Genesee County Fair, 5056 East Main Street Road, Batavia. For more information: www.gcfair.com
- 12-16 Yates County Fair, 2370 Old 14A, Penn Yan. For more information: http://www.yatescountyfair.org/
- 14 *Aurora Farm Field Day*, 9:00 a.m. 3:00 p.m., 1256 Poplar Ridge Road, Aurora. DEC & CCA credits will be available. For more information contact: Jenn Thomas-Murphy: 607-255-2177 or jnt3@cornell.edu
- 16 *Management of Internal Parasites in Sheep & Goats*, 9:00 a.m. 3:30 p.m., CCE-Ontario County, 480 North Main St., Canandaigua. To register contact: Nancy Anderson, 585-394-3977 x427 or nea8@cornell.edu, see page 17 for more details.
- 19-23 Livingston Co. Hemlock Fair, 7370 Fair St., Hemlock. For more information: http://www.hemlockfair.org/
- 20-23 Seneca County Fair, 100 Swift Street, Waterloo. For more information: http://www.senecacountyfairny.com/
- 25-30 Orleans County 4-H Fair, 12690 State Route 31, Albion. For more information: http://www.orleans4-hfair.com/
- 26-30 Ontario County Fair, 2820 County Road 10, Canandaigua. For more information: http://ontariocountyfair.org/

AUGUST 2016

- 3-7 Niagara County Fair, 4487 Lake Avenue, Lockport. For more information: www.cceniagaracounty.org
- 4-7 Monroe County Fair, Northampton Park, Ogden. For more information: www.mcfair.com
- 13-20 Wyoming County Fair, 70 Main Street, Pike. For more information: www.wyomingcountyfair.org
- 15-20 Wayne County Fair, 300 W. Jackson Street, Palmyra. For more information: www.waynecountyfair.org