Cornell Cooperative Extension | Northwest NY Dairy, Livestock and Field Crops Program

AG FOCUS

Wheat Assessment and Early Management

by Mike Stanyard

If you haven't already, you should be out there assessing your wheat crop. The wheat should be waking up and some of you may have already put some early nitrogen on. It is important to see how the wheat has fared over the winter to make sure there was not too much winterkill. Is the field good enough to keep? We hope so with the price of wheat right now! Once we confirm that the plant stand looks good, we need to assess tiller numbers to determine nitrogen timing.

Tiller Counts and Nitrogen. In past articles I have discussed counting the number of tillers to determine if you should put all your nitrogen up front, split it into two applications, or put it all on at Feekes Stage 6 (jointing). I'm sure many of you have already assessed how many plants and tillers you have per square yard. If you have not and need a refresher course, see my short video on how to do so, https://tinyurl.com/Tillers-Estimate, on the NWNY Team's YouTube channel. Unfortunately, late planted fields in November may just be emerging and you will have to wait a little longer to see what your final plant stand looks like. It is important to get nitrogen on these fields early for tiller development.

See chart as example of tiller number and N timing and amounts. If your plant/tiller counts are low, be prepared to get more N on early as wheat plants green up fast and need to be fed. This N is utilized to increase vegetative production and promote additional tillers. This will be crucial on the later planted fields that did not have any fall tillers. Unfortunately, spring tillers will not yield as well as fall tillers. If tiller counts are in the middle, then get some N on early and the remainder on at jointing. If tiller counts are high, hold off on applying N at green-up and apply it all at jointing. This later N application timing should coincide with stem elongation which means nitrogen is going towards increasing the number of seeds per head and seed size, not additional tillers. However, I will throw in a word of caution here. In wet years where we planned one later application of N and could not get in the field in a timely manner, the wheat turned off-color. This is not what we wanted at this crucial growth stage and yield potential was lost. I know some growers that apply 20-25 pounds of N early even if their tiller count is adequate, to protect against the potential for a delayed second application. I realize that nitrogen prices are really high this spring, so we want to make every pound count!

Tiller Number (per sq. yard)	Nitrogen Recommendation
< 300	up to 60 units of N at green up, rest applied at GS 5-6
450-600	Up to 45 units of N at green up, rest applied at GS 5-6
>700	No N at green up*, all N applied at GS 5-6 * Some growers are applying 20-25 lbs.

Counting wheat tillers per plant.
Photo: M. Stanyard / CCE NWNY Team

Spring Weed Control. The earliest planted fields can be full of winter annual weeds: purple deadnettle, chickweed, chamomile, and marestail. You never know what the weather will be like in the spring and timely weed control can be tricky. We are still encouraging that you do not mix your herbicide and nitrogen applications and spray separately. The leaf burning can cost you up to 8 bushels and could get worse as temperatures increase. For more details on herbicides, see my article in last month's Ag Focus.

Possible Early Fungicides. Powdery mildew can move in during the early vegetative stages and result in yield loss. Leaf diseases can be more prevalent with thicker wheat stands. Weather conditions also can play a role. Wet, cool conditions are more conducive to disease development. This means that early scouting of all your wheat fields is crucial to stay on top of leaf disease this spring! Look for large areas where the leaves are turning yellow. Scout for the whitish pustules of powdery mildew on the lower leaves. If you applied higher N rates (90-120 pounds), fungicides are even more important to keep the wheat healthy to prevent lodging.

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Remember To Check Out The NWNY Team Blog!

The blog will feature **Crop Alerts, Dairy Alerts, Bilingual (Spanish) Resources, Upcoming Events** and more from our team members. You can visit the blog at: https://blogs.cornell.edu/nwny-dairy-livestock-field-crops/

For more information about our program, visit us online at: https://nwnyteam.cce.cornell.edu/

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Inside This Issue

Doing the Right Thing by Joan Sinclair Petzen

As I gaze into my crystal ball, in this tumultuous time in both agriculture and the world, a quote that I heard many years ago from Peter Drucker comes to mind. "**Management is doing things right** – improving operational performance, maximizing revenues, and reducing expense while increasing the artistic production values and audience appreciation. **Leadership is doing the right things** – setting organizational priorities and allocating human and fiscal resources to fulfill the organization's vision." The time in my career has come to do the right thing and that is to retire. As I do, I hopefully have positively impacted farm families, communities, and agriculture in Western New York.

As I reflect on my nearly four decades of extension work, it seems like this quote pretty much sums up what I have been working to help with along the way. My journey started as an extension staff associate in farm business management in Cattaraugus County, working with three colleagues to meet the educational needs of the agricultural community in Cattaraugus and Chautauqua Counties. The focus was on management, understanding cost structures, management implications of income and real property tax code and strategic decision making driven by policy changes particularly for the dairy industry.

The next important chapter highlighted the functions of a farm manager: planning, organizing, staffing, directing, and controlling. We embraced the systemwide roll-out of the "Managing for Success" Program with Pro-Dairy. Along about the same time came the Farming Alternatives Program that highlighted strategic business planning for farms seeking to find their place in the industry as structural change and consolidation continued to drive commodity producers. Many were looking to find niches and new markets to continue farming and meet the changing community needs as more of our new rural neighbors worked outside of agriculture. On-farm and community farmers markets were popping up in towns and villages dotting our rural landscape.

Leadership became important in different aspects of my work. As some farm businesses grew, more people became part of each farm's team, changing the owner's role from laborer and manager to manager and sometimes laborer. Leading and managing people, who think for themselves, requires a whole different skill set than managing capital, land, and livestock. At the community and organizational level, more farms are marketing a diversity of products both together and individually. Organizations like community farmers markets run more smoothly with sound governance and that requires leadership, often

from within the community of vendors. Leadership is also important for efforts to engage with consumers and neighbors and help them to understand the diversity and sustainability of agriculture's many production models. Leaders plan strategically to mitigate risks and engage those around them.

Most recently, my job includes two facets, agriculture program leader for Wyoming County and farm business management specialist with the Northwest New York, Dairy, Livestock and Field Crops Team.

My sister tells me my greatest strength is my ability to network. The old saying "it's not what you know but who you know" that's important. In our ever-changing world, having a wide network of people, with whom you can collaborate and partner, helps one to resolve complex problems with innovative solutions. Part of my ability to assist farmers and help them rests with my wide network of connections both in agriculture and within the local communities where I have worked. I value these people, their knowledge, and skills. Fostering these relationships requires one to step out of their comfort zone and be willing to support the efforts of others in a selfless manner. I encourage everyone support your network every chance you get. The dividends will be exponential!

So, for now, I hope to see you all later. I would love nothing more than to continue to hear from my associates in the agricultural community. In the near term, my plans are to do some spring cleaning at home, give more attention to my garden, engage in activities to be more fit, spend more time "being Aunt Joan" to my dozen nieces, nephews and sixteen greats. I also plan on traveling to see more of our beautiful country and the world, while connecting with friends and family near and far.

All the best to the many people who have made my professional life in Extension so rich!

Boxes of Opportunity for the Future of Dairy by Margaret Quaassdorff

More and more dairy producers are looking at the opportunities offered by robotic milking systems. They are acknowledging increase in demand from consumers and society for practices that allow for enhancement in animal welfare, and recognizing the rising cost of labor. Not only is the cost of labor increasing, but the type of work that available laborers want to do is different than it has been in the past. The next generation who are attracted to agriculture tend to be more interested in technology as well, which has prompted some dairy producers to consider going robotic for this reason. This article is going to cover some things to consider if you are thinking that box-style robotic milking may be right for the future of your dairy.

Facilities:

Robotic dairies take up less square footage than those milking with a parlor. If building new, robotic dairies take 1.5 to 3 times less initial capital expenditures in building costs than parlor systems. In addition, we are now seeing that robotic dairies can have higher resale values due to advanced technology and more desirable workplace. Work with a design consultant to know your options if you are thinking about renovating an existing facility to house a robotic milking system.

Economics and Management:

In robotic systems, the management falls heavily in the category of equipment and technology, whereas in parlors, managing people is the key to success. Some of the biggest opportunities that come with box-style robotic milking systems is the type of labor it attracts, and the lifestyle choices it provides. Robots tend to attract people who have high technical skill, and they allow for better work-life balance and schedule flexibility. Training and employee development will be important in retaining this type of labor and should be viewed an investment in keeping the best people, rather than an expense.

Another benefit to robots is that they can be depended on to milk the cows consistently on a daily basis, and at a competitive fixed labor cost. Parlors require more labor, and that the labor be trained, and monitored for consistency. Robots may be an expensive investment upfront, but the farm must be in a position to adapt to inflated labor costs and number of employees needed to run a parlor happily and successfully. Robotic milking encourages data observation and interpretation for much of its animal health monitoring. It requires someone who is interested looking at that data and organizing it into relevant information for management decisions. For those people who may enjoy cow-side monitoring, it can be a challenge to step back from the cows.

Your herd genetics and cow conformation can influence the success of robots. Most cattle have udder conformation and teat placement that work fine in a robotic system. Cows with a wide teat separation, short teats, or uneven udder work better in a parlor system where humans can manually attach the milking unit. The percentage of cows that do not work well in the robot due to conformation can range depending on your genetics, but I've heard that you can expect to replace 10% or so.

Animal Welfare and Consumer Perception:

Robots provide an environment where cows can exhibit more of their natural behavior with less human influence. Once cows learn to use the robot and pen environment, they enjoy the consistency and patterns. The fact that cows in these systems are allowed more freedom to

(Continued on page 8)

There are many different designs and several brands of robotic milking systems. This setup allows a cow to move about the pen freely and enter the robot box on her own. Photo: M. Quaassdorff/ CCE NWNY Team

Boxes of Opportunity for the Future of Dairy

(Continued from page 7)

develop their own schedules and have choices, tends to be more favorable in the eye of the consumer. Robotic dairy managers tend to focus more on lameness prevention as cows are responsible for getting themselves to the robot to be milked, and will do so less efficiently when suffering from lameness. Cows in robotic systems tend to have an overall longer productive life, which can combat a higher unvoluntary culling rate associated with parlor systems. This is not only an economic benefit, but also one our consumers are on board with.

For more information, read or request PRO-DAIRY's "Robotic Milking Systems" fact sheet series which covers management changes and considerations, designing and starting up a new robotic milking system facility, and the pros and cons of different flow strategies.

Robotic milking systems are becoming more plentiful and popular, and making any significant change to facilities or milking systems is a big choice and a big investment. It helps to learn the most you can from others who have gone through the process. Please seek out on your own or reach out to extension for opportunities to visit different facilities, make connections to other dairies, or talk through different ideas and scenarios you may be considering.

Upcoming Webinars

April 11, 2022 - Noon (CST)
"Focus on feed costs - the big 10"
Mike Hutjens, University of Illinois
https://hoards.com/flex-309-Webinars.html

April 12, 2022 - 10:00am (ET)
"Conversation with the Professionals: Dairy Nutrition"
Samantha Gehrett, Penn State Extension and
Dr. Joe Bender, University of Pennsylvania School of Veterinary Medicine
https://tinyurl.com/Conversation-With-Pros

May 9, 2022 - Noon (CST)
"Hypocalcemia and the transition cow"
Jeff Goff, Iowa State University
https://hoards.com/flex-309-Webinars.html

Pricing for Profit: An Introduction to the Cornell Meat Price Calculator

Monday, April 25, 2022 | 6:30pm - 8:30pm

CCE Ontario - 480 N Main Street, Canandaigua, NY

Matt LeRoux, Extension Associate at Cornell University will introduce the new Cornell Meat Price & Yield Calculator, more comprehensive than the previous one. He has 20 years' experience serving farms through Cornell Cooperative Extension, non-profits, and consulting, working with produce and livestock farmers and food businesses. He developed the Marketing Channel Assessment Tool for produce growers and the Cornell Meat Price & Yield Calculator on MeatSuite.com.

Cost: $10 per person or $15 per farm/family

Pre-Registration is required by April 22, 2022 and payment can be made online or at the door. To register online visit our website https://nwnyteam.cce.cornell.edu

Questions? Contact Nancy Glazier at 585-315-7746 or email nig3@cornell.edu

MEATSUITE.com

Performance of NYS Dairy Farm Businesses in 2021 — Preliminary Results by John Hanchar and Joan Petzen

At this point, consider these results preliminary -- the sample size will increase over the next months prior to final reporting of results.

Summary

- Milk receipts net of milk marketing expenses per hundredweight (cwt.) rose 6 percent to $18.44 per cwt. in 2021, while milk sold per cow averaged 27,164 pounds, an increase of 3 percent relative to the 2020 value.
- In 2021, the total cost of producing a cwt. of milk was $20.11, an increase of $0.24 per cwt. relative to 2020.
- As of February 7, 2022, results suggest that the same 30 New York dairy farms in Cornell University Cooperative Extension's Dairy Farm Business Summary (DFBS) Program realized lower levels of profit in 2021 compared to 2020 -- for example, for 2021, the rate of return on all assets without appreciation averaged 4 percent compared to 7.1 percent in 2020.

Introduction

On February 7, 2022, Jason Karszes and Lauren Augello, Cornell University/PRO-DAIRY, compiled and released early state level 2021 DFBS results. Results reported here represent averages for the same 30 New York dairy farms cooperating in 2020 and 2021.

Due to the pandemic and the government response, government receipts were unusually large in 2020. The magnitude of the receipts impacted accrual operating receipts, profitability and other measures. The DFBS Program uses a whole farm approach to calculate operating, purchased input, and total cost of producing milk per cwt. measures, subtracting accrual non milk operating receipts from accrual operating, purchased input, and total expenses, costs. To provide 2020 cost of producing milk per cwt. values for equivalent comparison across years, 2020 calculations exclude reported government receipts from non-milk accrual operating receipts.

Size of Business and Rates of Production

- Average number of cows per farm rose from 911 in 2020 to 932 in 2021.
- Milk sold per farm increased from 24,050,439 pounds in 2020 to 25,320,358 in 2021.
- Milk sold per cow averaged 27,164 pounds in 2021 compared to 26,397 in 2020.
- Worker equivalents per farm averaged 17.7 in 2021 compared to 17.9 in 2020.
- Hay dry matter per acre rose 30 percent to 3.5 tons, while corn silage per acre increased 4 percent to 19.0 tons per acre in 2021.

Income Generation

- Milk receipts net of milk marketing expenses per hundredweight (cwt.) increased from $17.40 to $18.44.
- Milk receipts net of milk marketing expenses per cow rose from $4,593 in 2020 to $5,009 in 2021, an increase of 9.1 percent.

Cost Control

- Dairy feed and crop expense per cwt. of milk rose from $7.65 in 2020 to $8.49 in 2021, an increase of 11 percent.
- In 2021, total cost of producing a cwt. of milk averaged $20.11, an increase of 1 percent relative to the calculated, adjusted 2020 value of $19.87.

Profitability

- Net farm income without appreciation per cwt. of milk averaged $2.16 in 2021, a decline of 38 percent compared to 2020.
- Rate of return on equity capital without appreciation fell from 8.7 percent in 2020 to 4.3 percent in 2021.
- In 2021, the rate of return on all assets without appreciation was 4.0 percent, a decrease of 43 percent relative to 2020.

Final Thoughts

Sound farm financial management practices are key to achieving farm business objectives and goals. Financial summary & analysis help answer:

- Where is the business now financially?
- Where do you want it to be?
- How will you get the business to where you want it be financially?

For example, owners of dairy farm businesses cooperate in Cornell University Cooperative Extension's DFBS Program for purposes of identifying strengths and weaknesses by comparing their results to results of other cooperators, and evaluating progress towards goals.

If you are interested in improving your farm business' ability to practice sound financial management, then please call or message us – for contact information, please see information at the front of this newsletter. Owners of all types of farm businesses are encouraged to contact us. The NWNY team has the capacity and desire to work with a variety of farm businesses -- dairy (small, medium, and large; conventional; organic; grazing; and others), field crops, livestock, and others.

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April 15, 2022

Highly Pathogenic Avian Influenza Reminders by Nancy Glazier

By now you should be aware of the outbreak of Highly Pathogenic Avian Influenza (HPAI). The H5 subtype found in New York and elsewhere is both highly contagious and virulent. As of today (3/9), there are confirmed cases in three counties in NY: Suffolk, Ulster, and Dutchess. The number of states with confirmed cases continues to increase, currently at 12. Over 3 million birds have been affected, either infected or euthanized. With wild bird migration well underway cases can rise at any time. Below are a few reminders with a disease such as this.

HPAI is a reportable disease, which means if domestic birds of any species or flock type (commercial or backyard) are found dead or with symptoms, it needs to be reported to NY Ag & Markets or USDA Animal Plant and Health Inspection Service (APHIS). Though wild birds, especially waterfowl, can be carriers of the disease, any wild bird mortalities need to be reported to DEC. Proper and timely reporting helps the US maintain our international trade status. The World Organization for Animal Health (OIE) is the international organization that oversees animal disease risks; they provide guidance to countries concerning outbreaks which may impact trade. Species of confirmed cases are identified by their international designation to standardize reporting.

HPAI is an epizootic disease; it is temporarily prevalent and widespread in one year, then may disappear for many years. Small birds and rodents are considered a low risk for disease spread, but this research is difficult. For research to occur, researchers must act quickly during outbreaks, as well as practice enhanced biosecurity.

According to the U.S. Centers for Disease Control and Prevention, the recent HPAI detections in birds do not present an immediate public health concern. No human cases of these avian influenza viruses have been detected in the United States. As a reminder, the proper handling and cooking of poultry and eggs to an internal temperature of 165 F kills bacteria and viruses.

A concern I have is for the upcoming field season. Canada and snow geese are all over the region and state right now, headed to their summer grounds. It is unknown how long the potential for soil contamination stays active. If you have any poultry, be aware of walking or driving through fields then contaminating the home farm or someone else's farm with feces. If you have poultry, precautions include:

- Keep flocks indoors until the threat has passed
- Close bird areas to nonessential personnel or vehicles
- Provide employees with clean clothing and disinfection facilities and directions for their use
- Thoroughly clean and disinfect equipment and vehicles (including tires and undercarriage) when entering or leaving the farm
- Ban the borrowing or lending of equipment or vehicles
- Ban visits to other poultry farms, exhibitions, fairs, and sales or swap meets (if visits must occur, direct workers to change footwear and clothing on their return)
- Ban bringing birds in slaughter channels back to the farm

Indemnity payments may be available if flock owners can document their due diligence with biosecurity measures.

For regular updates, visit this site: https://www.aphis.usda.gov/aphis/ourfocus/animalhealth/animal-disease-information/avian/avian-influenza/hpai-2022

If you would like more information, let me know. My contact information is on page 2.

Calving Article Update:

I received feedback from last month's article. Due to my brevity and space limitations, I omitted some important points:

Calves should stand and nurse within 2 hours of birth if everything is normal and weather is not severe. For maximum antibody exposure from the colostrum, calves need to nurse within four hours of birth. By 12 hours, the ability of a calf to absorb antibodies from colostrum is reduced by 50%. By 24 hours they are not able absorb antibodies. From the dairy side, research has shown the importance of subsequent milkings/nursings of transition milk.

Cornell Cooperative Extension

Northwest NY Dairy, Livestock and Field Crops Program

Calving Workshops

April 2022

1:00pm - 3:30pm ET

In-Person

Offered in English and Spanish

To pull or not to pull? That is (one of) the questions dairy farm personnel have while working in the maternity area on a farm.

This workshop will teach best calving management practices to minimize stillbirth rates and improve calf and cow health during and directly after the calving process.

This in-person workshop includes an oral presentation followed by hands-on demonstration and practice intended to train farm personnel in the learning objectives below. Under the guidance of experienced educators, participants will apply the concepts from the oral presentation using sedated calves and a bovine pelvis.

Performance Objectives:

- Understand Anatomy and Physiology of Calving
- Monitor Close-Up Cow for Signs of Labor
- Assess Normal and Abnormal Calf Position
- Properly Assist the Calving Process
- Properly Use Chains, Calf Puller/Calf Jack
- Assemble a Calving Toolkit
- Properly Care for the Newborn Calf

Cost: $50 per person

Register*: https://nwnyteam.cce.cornell.edu/events.php

***Limited to 15 per location**

Questions?
Contact Margaret Quaassdorff
maq27@cornell.edu
585-405-2567

Locations:

Wednesday April 6, 2022

CCE Orleans
12690 NY-31 Albion, NY 14411

Thursday April 7, 2022

Mulligan Farm
5403 Barber Rd. Avon, NY 14414

Friday April 8, 2022

Keystone Mills
1975 NY-336 Romulus, NY 14541

Monday April 11, 2022

Spring Hope Dairy
2941 County Road 4
Clifton Springs, NY 14432

Presented by CCE NWNY Dairy Management Specialists:

Margaret Quaassdorff, MS
Dr. Kaitlyn Lutz

Strategies for Managing Your Crops in a Year of Fertilizer Shortages and High Prices by Jodi Letham

For months now, there have been speculations and realizations around the potential for fertilizer shortages across the United States. Possible fertilizer shortages are set to take place due to the war between Russia and Ukraine as sanctions are being placed and imports and exports are currently blocked. What could this mean for farmers? High fertilizer prices could hurt the business. However, if sanctions are removed there could be a surplus of fertilizer. As you search for alternative programs or debate other management strategies, it is important to keep in mind the valuable resources available such as: consulting your local Extension Specialist or Agronomist, agricultural consulting companies, and agronomy guides from Cornell and surrounding state universities. In this article we aim to discuss various management concepts to help you get around the potential shortages for the 2022 growing season.

To begin, prioritize your fields. It is still important to consider the cost per acre. Each farm has low-yielding fields (below farm average) as well as high-yielding fields. Some fields yield consistently throughout time, while others fluctuate greatly. Those of you with yield monitoring capability can improve efficiency by measuring and monitoring production over time. When you measure yield, you have a clearer idea of the crop needs and limitations. Yield ranges can then be identified per field and ranked from low to high. Yield map evaluations can help you decide whether or not the limitation can be managed and if not, you can reduce your inputs to reflect the lower yield potential. For example, don't apply fertilizer for a 300-bushel crop if the reality is 150-bushels.

If you don't have a yield monitor then you'll want to start with up-to-date soil tests (< 3 years old). Based on the results you can select the cultural practice and cultivar that best fits the field condition. Consider the crop to be grown in each field and what the optimum nutrient range needs to be. Soils that fall within the optimum range typically have enough nutrient supplying capacity to grow a crop without a deficiency for one year. If your budget is limited, first address any soil pH concerns. When soil pH is optimal, nutrient availability will be better. Remember to consider your crop rotation and nutrient credits. First year corn after alfalfa/hay is typically the cheapest to grow as it does not need additional N beyond a starter. Corn after sod, soybean, and cover crops need less fertilizer N, approximately 30 lbs. N/acre less according to past research done by the Cornell University Nutrient Management Spear Program.

Dr. Quirine Ketterings gave an excellent presentation titled "Getting the Best Bang for Your Nitrogen Buck" during Corn Congress this year and discussed several management strategies summarized below:

- If you want to harvest winter cereals for forage, choose well-drained fields with a history of manure and plant before October first; there is a high chance of good yield without the extra N.
- There is value in manure. It is a great source of all nutrients including N. If manure is not mixed with soil and applied close to planting, inorganic N can be lost. Directly incorporate/inject manure at planting or apply during the growing season to provide the most N from manure. How aggressive does the incorporation need to be? Shallow mixing is sufficient to obtain nitrogen credits.
- Split applications of N (V4-V6) at the right time can help you save money on fertilizer. If application is delayed, adjust your rates because your yield has already been compromised.
- When N is needed and N losses are expected, consider using enhanced efficiency nitrogen sources.
- Make use of the available tools to determine where application savings could be made.
- Consider end-of-season and learn by evaluating e.g. Corn Stalk Nitrogen Tests (CSNT).

To learn more about the different strategies discussed in this article please visit the Cornell University Nutrient Management Spear Program (nmsp.cals.cornell.edu) Agronomy Factsheets where you can sort by the factsheet number or category.

Comparison of manure incorporation methods.
Image source: https://nrcca.cals.cornell.edu/nutrient/CA4/CA0433.php

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2013 KENWORTH T800; Cummins ISX 600 HP; 18-Spd. Manual; Double Frame; 244" WB; 20K Front Axle; 46K Full Locking Rears on Hendrickson Air Ride Suspension; 3.73 Ratio; 2-Spd. Auxiliary Transmission; 164" CT; 176" Frame Behind Cab; 545,546 Miles; Stk. # 6321 - **$54,900**

2011 PETERBILT 37 TANK TRUCK; CAT 475 HP; 18-Spd. Manual; 20K F/A; 46K R/A; 19K Steerable Tag; 265" WB; 175" CT; 4,200 Gal. Tank w/Fruitland Pump; WILL SELL JUST CHASSIS; 326K Miles; Stk. #5963 - **$61,900**

2007 PETERBILT 357 CRANE TRUCK; 430 HP CAT C13; 8LL Manual Trans.; Double Frame; Terex BT4792 23.5 Ton/ 92' Reach Crane w/4-Outriggers; 36" Bunk; 18' Steel Deck; 20K Front; 40K R/A; Steerable Lift Axle; 216" WB; 105,127 Miles; Stk. #5798 - **$71,900**

2012 MACK GU813; Mack MP7 395 HP; 13-Spd.; Double Frame Flatbed w/Hab 2868P Hi Pro Knuckleboom Crane w/Remote; 24' Steel Deck; 20K Front Axle; 44K Rears on Camelback Susp.; 20K Rear Mounted Lift Axle; 246" WB; Crane Can Be Removed; 28' Frame Behind Cab; 200" CT; 387,637 Miles; Stk. # 6388 - **CALL**

2011 KENWORTH T800 WATER TANKER TRUCK; Cummins 425 HP; w/9,226 Gallon Advance Steel Tank and Pump; 250" WB; 16K Front Axle; 46K Full Locking Rears on Hendrickson Air Ride; 4.30 Ratio; We Will Separate the Tank from the Chassis; 21' Frame Behind Cab; 172" CT; 48,978 Miles; Stk. # 6354 - **$58,000**

2007 PETERBILT 357; 475 HP CAT C15; 18-Spd Manual; Clean Daycab w/Tulsa Winch; 20K F/A; 46K Full Locking Rears; Chalmers Susp.; 224" WB; 496,503 Miles; Stk. #6241 - **$39,900**

2003 KENWORTH T800; 475 HP CAT C15 6NZ Turbo; 8LL Manual Trans.; Clean Daycab w/12,800# Front AXle; 46K Rears On KW 8-Bag Air Ride; 4.11 Ratio; 186" WB; Wetline; 447,898 Miles; Stk. #5925 - **$49,900**

2004 & 2003 PETERBILT 378 TRI-AXLE DUMP TRUCKS; 475 HP CAT C15 Single Turbo; 18-Spd. Manual; 20K F/A; 44K R/A; Air Trac Susp.; Double Frame; 21' Aluminum Box; Airlift Tag; 540,000 Miles; Stk. #6345/6346 - **CALL FOR PRICE**

1999 MACK RD688S DUMP TRUCK; 400 HP Mack E7; Engine Brake; 8LL Trans.; Rubber Block Susp.; Tri-Axle; 19' Steel Body; 20,000# F/A; 46,000# R/A; 22.5 Tires; 248" WB; Spoke Wheels; EXPORT PRICED!!!!; 777,148 Miles; Stk. #5902 - **$19,500**

2009 KENWORTH T800 FLATBED; CAT 335 HP; 10-Spd. Manual; Clean Double Frame Flatbed Truck w/Palfinger PK11001 Rear Mounted Knuckleboom; 42" Forks; 20K Front Axle; 44K Full Locking Rears on Neway Air Ride; 23' x 96" Aluminum Deck; 4.63 Ratio; 270" WB; 192" CT and 28' Frame Behind Cab; Flatbed & Knuckleboom Can Be Removed; 278,458 Miles; Stk. # 6308 - **$48,900**

2005 PETERBILT 357 6x6; Clean Double Frame 316" Flatbed Truck; CAT 350 HP; 8LL Trans.; 23K F/A; 46K Full Locking Rears; 425/65R22.5 Tires; Hendrickson Haulmaax Susp.; 5.65 Ratio; 288" WB; 216" CT; 30" Frame Behind Cab; Will Separate Bed from Chassis; 174,181 Miles; Stk. #5701 - **$49,900**

2005 KENWORTH T800 FLATBED; CAT 335 HP; Double Frame Flatbed Truck; 20K F/A; 44K Full Locking Rears; 21'6" x 96" Steel Deck; 5.29 ratio; 244" WB; Hendrickson Susp.; Flatbed Can Be Removed; 19' Frame Behind Cab; 162" CT; 12,584 Hours; 137,760 Miles; Stk. # 6323 - **$49,500**

2005 PETERBILT 357 CAB & CHASSIS; Cummins 370 HP; Engine Brakes; 8LL Manual Trans.; Quad-Axle w/Double Frame; 18K F/A; 44K Full Locking Rears; (2) 11K Steerable Lift Axles; Air Trac Susp.; 22' Frame Behind Cab; 212" CT; 302,500 Miles; Stk. #5831 - **$43,500**

2008 PETERBILT 367; Cummins ISX 485HP; Allison Auto. Trans.; Clean Single Frame Dump Truck w/15' Steel Body w/3' Sides and 1' Sideboards; Tarp; 14,300# F/A; 46K Locking Rears on Air Trac Susp.; 204" WB; Plumbed for Pup Trailer; Engine Had Complete Rebuild (Paperwork Included); 383,992 Miles; Stk. #6264 - **$62,900**

2008 PETERBILT 340 DUMP TRUCK; Paccar PX8 330 HP; 13-Spd. Manual; Double Frame; 19' Heated Steel Body; 20K Front Axle; 20K Lift; 46K Full Locking Rears; 246" WB; Tarp; 5.25 Ratio; Air-Trac Suspension; Hitch and Plumbed for Pup Trailer; 214,987 Miles; Stk. # 6342 - **$49,900**

2007 MACK CTP713; 370 HP Mack MP7; Clean, Low Hour Double Framed Feed Mixer Truck w/Supreme Int'l, Inc. 1400T Feed Mixer; Digi-Star EZ3400 Scale System; Allison Auto. Trans.; 20K F/A; 46,400# R/A; Camelback Susp.; 264" WB; 198" CT; 24'6" frame; 79,280 Miles; Stk. #6363 - **$104,900**

2010 WESTERN STAR 4900FA; Detroit Diesel Series 60 14.0L 495 HP; 18-Spd. Manual; Clean Fuel Tanker Truck w/3,550 Gal. Hannay Steel Tank & Pump; 245" WB; 14,700# Front Axle; 44K Full Locking Rears on AirLiner Susp.; 3.90 Ratio; We Will Separate Tank from the Chassis; 20' Frame Behind Muffler; 158" CT; 223,505 Miles; Stk. # 6384 - **$53,900**

2007 MACK CTP713; Mack MP7 370 HP; 10-Spd.; Clean Cab & Chassis; 18K Front Axle; 46K Locking Rears; Air Ride Susp.; 270" WB; 172" CT; 21' Frame Behind Cab; 118,186 Miles; Stk. # 6369 - **$47,250**

2012 KENWORTH T400 FEED MIXER; 330 HP Paccar PX-8; Allison Auto. Trans.; Clean Double Frame Feed Mixer Truck w/Kuhn Knight Profeed 7011D Feed Mixer; Digi-Star EZ3600 Scale System; 18K F/A; 46K Locking Rears; Hendrickson HN Susp.; 244" WB; 176" CT; 23'3" Frame; 7.17 Ratio; 59,926 Miles; Stk. # 6364 - **$79,900**

2006 WESTERN STAR 4900 TANDEM TRI-DRIVE CRANE; 550 HP CAT C15; Double Frame; Tri-Drive, Twin Steer Truck w/Terex Stinger TM7571 Crane w/House; 37.5 Ton Capacity; 71' Reach; 36" Bunk; (4) Stabilizers; 36K F/A; 57K Triple Locking Rears; Fifth Wheel; 408" Bridge Measurement; 456 Ratio; 32.5 Ton Lift Block; 221,496 Miles; Stk. #6361 - **$72,900**

2004 KENWORTH W900; 335 HP CAT C10 Engine; 8LL Trans.; Cab & Chassis; 20K F/A; 46K Full Locking Rears; 252" WB; 21' Frame Behind Cab; 150" CT; 4.89 Ratio; Haulmaax Susp.; 118,703 Miles; Stk. #6075 - **$29,900**

2001 INTERNATIONAL 5600i 6x6 CRANE; 435 HP Cummins N14; 10-Spd. Manual; Double Frame; Pitman Hydra-Lift HL1580 7-Ton/ 65' Crane; 4-Outriggers; 20'x8'6" Flatbed; 20K F/A; 46K R/A; Hendrickson HN Susp.; 244" WB; 184" CT; 25'3" Frame Behind Cab; 158,174 Miles; Stk. #6299 - **$49,900**

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Think Horses *not* Zebras. An Interesting Herd Issue by Kaitlyn Lutz

One of the phrases that sticks with me from vet school is "when you hear hoofbeats, think horses not zebras". The point being, start with the common diagnoses because they're, well, more common! This is the reason why we can use Standard Operating Procedures for diagnosing and treating sick cows on farms, and most of the time get a good result.

I was reminded of this phrase recently when working up a herd issue. See what you think. Was this a zebra or a horse?

History:

60-head tie-stall barn. Over the past 6 weeks they had 8 fresh cows or heifers. Two of the fresh animals developed the signs described below, and subsequently died. The rest of the herd was doing great- milking better than ever! The affected cows were both 3rd lactation and 10-14 DIM at the onset of signs.

Physical exam:

The affected cows had dropped off in production and feed intake around 10 DIM, developed dark red urine and pale mucous membranes, a high heart rate and subsequently died. They had not developed fevers, ketosis, or any other signs of typical postpartum diseases such as metritis, mastitis, pneumonia or DA and had normal manure.

Necropsy:

The farmer called for a necropsy after the second cow died as he was starting to get worried. On necropsy she had yellow-tinged fat, an enlarged and pale liver, and dark red urine. No bleeding was seen elsewhere, and all other organs looked pristine. This points to red blood cells rupturing within the vessels.

Diagnosis:

Postpartum hemoglobinuria (PPH) – hemoglobin in the urine found in cattle < 30 DIM

The cause of PPH is not fully understood, but it has been consistently linked to low serum phosphorus (P) and low dietary P. In some countries (i.e., New Zealand) PPH has also been associated with low copper levels due to deficient soils. It effects high-producing dairy cattle, < 30 DIM and > 2nd lactation. The deficiency is most likely chronic and exacerbated at the time of calving when 20-55 g/day of P are shunted towards milk production. This increased draw on P is greater in older, higher producing cows, explaining why we see PPH in this population.

Why the hemoglobin in the urine? Many of you likely link phosphorus to reproductive performance, but it is important in many bodily functions. Red blood cells rely on phosphorus to maintain their normal structure and function. In phosphorus deficiency, red blood cells become more rigid and fragile, eventually causing them to rupture. This causes the hemoglobin from within the cell to be released and filtered out by the kidney. Bilirubin, a chemical within hemoglobin, is released in high quantities and causes the yellow coloring of the fat seen in this picture.

Treatment:

The fresh cows in the herd were also screened for low P to confirm the herd problem and 3 of 4 were found to have low serum P levels and treated with oral supplementation.

At the time that I'm writing this article, the nutritionist is in the process of analyzing the dry and lactating rations and a liver sample has been submitted to the diagnostic lab for copper analysis. The hope is to identify and implement ration changes prior to the next round of fresh cows.

So, was this a horse or a zebra?

PPH is the classic disease that causes dark red urine in postpartum cattle. This makes it a horse.

It is no longer commonly seen in the USA, likely due to good nutritional management. This makes it a zebra.

Trick question ☺

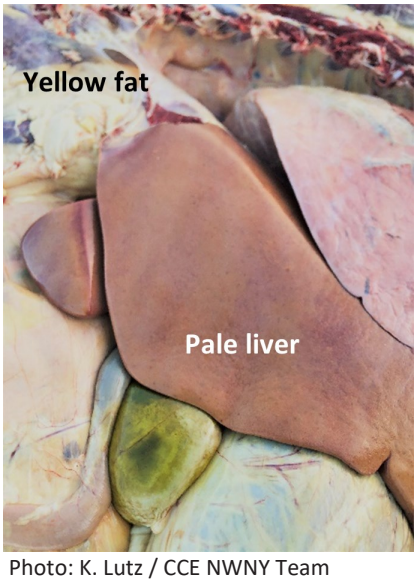

Photo: K. Lutz / CCE NWNY Team

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>> **UPCOMING EVENTS** <<

April 2022

Herd Health and Nutrition Conference - April 4-5, 2022 at the Doubletree by Hilton, East Syracuse, NY. Presented by PRO-DAIRY and Northeast Agribusiness and Feed Alliance, the Herd Health and Nutrition Conference is a two-day event for agriservice personnel, feed industry representatives, veterinarians, and dairy producers, featuring educational topics related to current herd health and nutrition management techniques. To learn more or to register visit: https://tinyurl.com/2022-Herd-Health

Calving Workshop: Orleans County - April 6, 2022 from 1:00pm - 3:30pm at CCE Orleans, 12690 NY-31, Albion, NY. Cost: $50 per person, Limited to 15 participants. See page 12 for details.

Calving Workshop: Livingston County - April 7, 2022 from 1:00pm - 3:30pm at Mulligan Farm, Avon, NY. Cost: $50 per person, Limited to 15 participants. See page 12 for details.

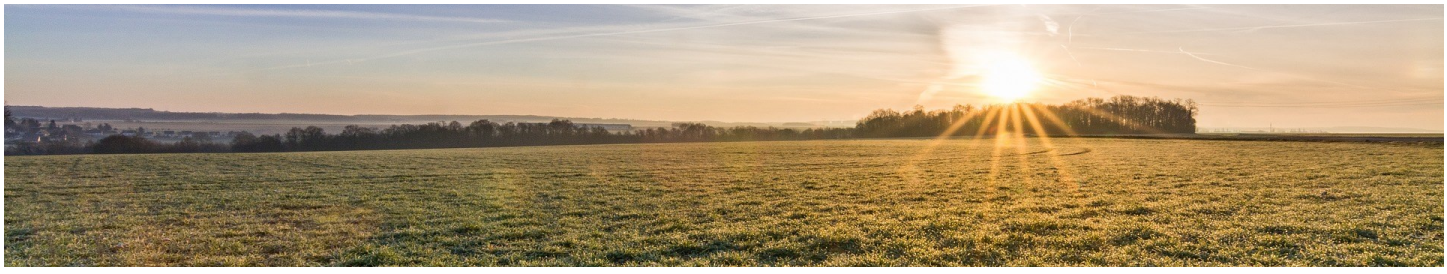
Calving Workshop: Seneca County - April 8, 2022 from 1:00pm - 3:30pm at Keystone Mills, Romulus, NY. Cost: $50 per person, Limited to 15 participants. See page 12 for details.

Calving Workshop: Ontario County - April 11, 2022 from 1:00pm - 3:30pm at Spring Hope Dairy, Clifton Springs, NY. Cost: $50 per person, Limited to 15 participants. See page 12 for details.

Introduction to Pasture Management - April 13, 2022 from 6:30pm - 8:00pm at CCE Niagara Training Center, 4487 Lake Ave, Lockport, NY. Cost: $10 per person. For details contact Nancy Glazier at 585-315-7746 or nig3@cornell.edu

Forage and Pasture Management Workshop for Livestock Farmers- April 23, 2022 from 10:00am - 3:30pm at Pioneer Central School, County Line Rd, Yorkshire, NY. Cost: $40 per person. For details and to register visit our website: https://nwnyteam.cce.cornell.edu/events.php

Pricing for Profit: An Intro to the Cornell Meat Price Calculator- April 25, 2022 from 6:30pm - 8:30pm at CCE Ontario, 480 N. Main Street, Canandaigua, NY. Cost: $10 per person, $15 per farm/family. See page 8 for details.



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