Cornell Cooperative Extension

Northwest NY Dairy, Livestock and Field Crops Program

Planning for Minimum Wage Increases

By: Libby Eiholzer

Many farms spend countless hours budgeting for production costs, but few hours planning for future changes in labor costs. According to Jason Karszes, dairy farm management specialist with Cornell's PRO-DAIRY program, hired labor is the second largest expense on many farms. With milk checks shrinking and minimum wage climbing ever higher, now is a great time to sit down and look at your overall employee compensation plan.

We know that by December 31st of 2018, all employees must be paid \$11.10/hr (Table 1). A common strategy is to wait until the deadline, and then raise everyone who is earning less than the new minimum wage up to that level.

This creates a host of problems. First, raising the newest, lowest paid employees without raising longer-term, higher-paid employees creates conflict. If there has always been a \$1.00 gap between two positions on their farm, and suddenly a veteran employee finds he is only making \$0.25 more than a recent hire, the veteran employee is bound to be irritated. We're kidding ourselves if we think that we can keep employees' wages a secret. That just doesn't work.

On a side note, I'm not convinced that it should be a secret in the first place. If you have clearly defined reasons for paying everyone their wage, it can work in your favor. If employees understand what's required of them to earn a higher wage (like staying at the job for a certain amount of time,



Feed is the largest cost on dairy farms, but hired labor is the second largest. Photo source: RJ Anderson/CCE

gaining new skills, taking on new responsibilities, or more being reliable), then it gives them something to work towards.

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Table 1: Scheduled Minimum Wage Increases

The Minimum Wage rates are scheduled to increase each year on 12/31 until they reach \$15.00 per hour. Employers must post a Minimum Wage Information poster in their establishment.

Location	12/31/16	12/31/17	12/31/18	12/31/19	12/31/20	2021*
NYC - Large Employers (of 11 or more)	\$11.00	\$13.00	\$15.00			
NYC - Small Employers (10 or less)	\$10.50	\$12.00	\$13.50	\$15.00		
Long Island & Westchester	\$10.00	\$11.00	\$12.00	\$13.00	\$14.00	\$15.00
Remainder of New York State	\$9.70	\$10.40	\$11.10	\$11.80	\$12.50	*
General Minimum Wage Rate Schedule						

* Annual increases for the rest of the state will continue until the rate reaches \$15 minimum wage (and \$10 tipped wage). Starting 2021, the annual increases will be published by the Commissioner of Labor on or before October 1. They will be based on percentage increases determined by the Director of the Division of Budget, based on economic indices, including the Consumer Price Index.

Source: https://www.labor.ny.gov/workerprotection/laborstandards/workprot/minwage.shtm

Another problem with last-minute minimum wage compliance is that it takes away the opportunity to use wage increases as an incentive or as a reward. Think about it. Is an employee more likely to feel



motivated by receiving a raise that the government required his boss to give him? Or by a raise that his boss decided to give him for doing a good job? I would argue the latter any day.

Fully utilizing raises as an incentive or reward requires managers to spend time carefully considering employee wages. Linking different levels of responsibility with different wage levels and sharing this information with employees makes it clear what they must do to get a raise.

One way to accomplish this is through creating pay bands (Table 2, page 10). Each pay band represents a different responsibility level of a job on the dairy. Within each pay band, there are five wage rates. So when employees move from one pay band to the next, they are raised to level one of that pay band. Within each pay band, there is room to give the employee raises based on their job performance, level of responsibility, work attitude, or time at the job.

I would encourage employers to reflect on how they might make their decisions about employee wages and raises more objective, rather than subjective. It can help you make more deliberate decisions about wage raises on a day-to-day basis, while also thinking ahead to upcoming minimum wage raises.

Continued on page 10

Robotic Milking Systems – What We've Learned So Far (Part 3)

By: Timothy X. Terry

Farm Strategic Planning Specialist, Harvest NY

- Here are the last of the tidbits including the reasons the tour farms cited in their decision to install an RMS.
- Rule of Threes
 - → 3 Days The first 72 hours of start-up and the length of time you will go with little to no sleep. It's also the period of time where you'll question whether or not you made the right decision.
 - → 3 Weeks Things are starting to fall in place, most of the bugs are worked out of the system, you've learned which alarms are important and which are urgent, but you still may not be fully convinced that you made the right decision.
 - → 3 Months You have the system pretty well dialed in. You can take a deep breath now. You can have a date night with your spouse or go to a child's ballgame/concert/play, just don't forget your smartphone!
- Cross train your staff on the various parts of the system. No one person should hold all the knowledge of how the RMS works and what to do if it doesn't. Any good coach will tell you that you need to build depth in your team, so if anyone is on injured reserve or vacation someone else can jump right in. NASA would call this "system redundancy." If at all possible avoid making spouses or close family members back-ups of one another. That way if they want to attend a family function wedding, funeral, reunion or go on vacation, you won't have both the primary and the back-up gone from the farm. Obviously, smaller farms are going to have to approach this a little more creatively.
- All of the tour farms had considered a new parlor right along with the RMS. Here are the various reasons or considerations they cited for their decision: (not all reasons on all farms)
 - → Reduced labor, especially reliance on foreignborn employees.
 - →Consistent udder prep.
 - →Reduced human error and procedural drift. (consistency)



- → More milk with less labor. In fact, this farm is at 100+ cows/man and 2.7 million lbs. / FTE. This includes the cropping and maintenance staff.
- → No human emotion. No personality clashes between cows and humans. If a cow does not want to cooperate, the robot will eventually kick her out and in an hour or two she will be more than ready to be milked.
- → Labor is a growing risk or liability
- → Parlors age RMS components or the entire system may be swapped out.
- → Maximum parlor capacity is fixed. Additional RMS can be added as the herd grows.
- → A new parlor requires a new facility. RMS can be retrofitted into existing facilities while continuing to milk in the existing parlor.
- → Prefer to manage equipment rather than people
- → Cow comfort even a robotic rotary parlor doesn't eliminate the time in a holding area. A holding area is not a cow friendly place. There is no food or water, no place to lie down (even though some do), is usually poorly ventilated, etc. If it wasn't for the fact that they are driven there they would never go to a holding area of their own accord.
- → Improved hoof health more lying time, more consistent DMI.
- → Increased eating and resting
- → Less infrastructure required ¼ of similar capacity parlor
- → Increased longevity of the cows, maybe as much as a full lactation, on average. (Semex study 1 additional lactation ≈ 4,000 lbs. RHA)

- → RMS can be dismantled and relocated or sold.
- → Used value? This exact number is unknown, but the current demand is high and the supply low – you do the math.
- → Good resale value = lower risk
- Of the more than 3,000 RMS in the US and the 30,000 worldwide 70% have more than 25,000 hours each, and 50% have more than 70,000 hours. What other piece of equipment on your farm would have this kind of longevity? To put this in perspective, if this was a vehicle travelling an average of 55 mph it would have travelled almost 4 million miles or 8½ trips to the moon and back!

There are several different RMS on the market today. Obviously, I can't endorse any particular brand. However, I would encourage you to do your homework if you're considering making such an investment. Go to farm shows, ask the dealers for a list of farms near you who are using their RMS, and talk to RMS owners and operators, especially if you can find some who are of a similar herd size. This requires a significant initial investment, so choose wisely.

Upcoming Webinars:

"The Lowdown on Reduced-Lignin Alfalfa" July 9, 1:00 p.m. - 2:00 p.m. Presented by: Ev Thomas Oak Point Agronomics Sponsored by HarvXtra

https://hoards.com/flex-309-Webinars.html

"The Effects of Dry Period Heat Stress on the Lactating Dairy Cow"

July 11, 2:00 p.m. Presented by: Geoff Dahl Sponsored by Boehringer Ingelheim http://www.dcrcouncil.org/webinars/





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Economics of Producing Industrial Hemp in NYS: Costs of Production Analysis, 2017, Initial Estimates

By: John J. Hanchar

For a detailed reporting of this work, please see the team's website <nwnyteam.cce.cornell.edu>, click on "Business", click on "Economic Analysis".

Acknowledgements

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- the contributions of: Jodi Letham, Field Crops Specialist, NWNY Dairy, Livestock and Field Crops Team and others from the Cornell University Industrial Hemp Research and Extension Group; and unnamed farm business owners
- funding from NYS Department of Agriculture and Markets, NYS Empire State Development Corporation, and others

Summary

- Variable costs of production estimates for 2017 are \$282, \$268, and \$269 per acre for industrial hemp for fiber only, fiber and seed, and seed only, respectively
- Fixed costs of production estimates for 2017 are \$145, \$183, and \$160 per acre for industrial hemp for fiber only, fiber and seed, and seed only, respectively
- Total costs of production estimates for 2017 are \$427, \$451, and \$429 per acre for industrial hemp for fiber only, fiber and seed, and seed only, respectively

Results

Estimates of individual variable and fixed costs differ by system, while total costs of producing industrial hemp are \$427, \$451 and \$429 per acre for industrial hemp for fiber only, fiber and seed production, and seed production only, respectively (Table 1). Seeds & Plants costs vary due to differences in seeding rates by scenario with the fiber and seed scenario having the lowest seeding rate (30 lbs. per acre) followed by seed production only (40 lbs. per acre) followed by fiber only (80 lbs. per acre). Costs for Sprays & Other Crop Inputs are highest for the scenarios with seed production due in part to the costs associated with cleaning and drying the grain. Labor and machinery costs (variable and fixed) vary



among scenarios due to differences in harvesting tasks, including equipment required.

Initially, to date, costs of production estimates received emphasis. When analysts are comfortable with price and yield expectations based upon research in NYS, they will combine costs of production with output prices and yields for industrial hemp for fiber and seed to develop enterprise budgets under various conditions. Enterprise budgets comprise: value of production, revenue; costs of production (variable and fixed inputs); and returns, for example, return above variable costs, and return above total costs.



Table 1. Variable, fixed and total costs, dollars per acre, by industrial hemp production scenario, conventional tillage system, New York, 2017 analysis.

Cost Item	Hemp Fiber Only	Dual System Fiber Plus Seed	Hemp Seed Production Only
		\$ per Acre	
Variable Inputs			
Fertilizers & Lime	\$69.15	\$69.15	\$69.15
Seeds & Plants	\$133.33	\$50.0	\$66.67
Sprays & Other Crop Inputs	\$18.22	\$46.81	\$71.71
Labor	\$27.10	\$33.87	\$12.25
Repair & Maintenance			
Tractors	\$4.03	\$20.26	\$17.90
Equipment	\$11.54	\$21.13	\$12.51
Fuel & Lube	\$11.71	\$20.03	\$12.55
Interest on Operating Capital	\$6.88	\$6.54	\$6.57
Variable Costs Total	\$281.96	\$267.79	\$269.31
Fixed Inputs			
Tractors	\$25.89	\$54.17	\$38.81
Equipment	\$19.11	\$29.24	\$20.56
Land Charge	\$100.00	\$100.00	\$100.00
Value of Operator & Family Management			
Fixed Costs Total	\$145.00	\$183.41	\$159.37
Total Costs	\$426.96	\$451.20	\$428.68

NOTES:

- Costs reflect 2017 price levels.
- Fertilizers & lime reflect Cornell University agronomists' recommendations regarding N and Purdue University regarding phosphorus and potash.
- Seeds & Plants costs vary by scenario with respect to seeding rates, but are constant with respect to seed price per pound.
- Sprays & Other Crop Inputs include crop professional fees, machinery hire rent & lease, and others. Estimates reflect no spray inputs, since no pesticides are registered for use on industrial hemp in the United States.
- Labor costs reflect labor from hired and/or family and/or owner/operator sources.
- Machinery related variable and fixed costs per Lazarus. 2017. <.z.umn.edu/machdata>
- This analysis excludes a charge for management inputs.

Winter Wheat Harvest, Protection, & Storage

By: Mike Stanyard

2018 at a Glance

Overall, the winter wheat across NWNY looks to be in great shape. It came through the winter beautifully and spring nitrogen, herbicide, and fungicide applications looked to be timely. Despite continued lower wheat prices, growers who have been following high management yield practices continued to stay the course and push yield potential. Unfortunately, I still saw some fields that were brown and burned from combining nitrogen and herbicide applications.

Powdery mildew was present in some fields early but the drier weather and sporadic warm spells kept 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 very low in the wheat. I expected higher numbers earlier but they seemed to build up their populations in spring barley and oats. Common armyworms have been a no-show in our pheromone traps across the region. I did receive a couple of reports in early June of armyworms moving out of grass hayfields. Hopefully, we escape with just a few isolated incidents. Remember to keep an eye out for those blackbirds diving into wheat fields. Most of our early planted wheat began to pollinate around May 28 and a bunch of fields were at full pollination the first week of June. 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 the beginning of this critical flowering stage. However, between June 4 and 7, we moved from medium risk into even high risk in many counties. 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 FHS could be a concern. Look for pink coloration and shrunken 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 can be more helpful the longer you keep the grain in 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 or harvest acres forecasts anymore for small acreage states like NY (only top 98%). They will have NY yields posted in the final small grains report in September. At this year's Cornell Small Grains Field Day in Aurora, Bill Cox went through the past 34 years of weather data as it related to wheat yield. Looking at similar years with cold Aprils and dry Mays, he is predicting 67 bushel NYS average in 2018.



Continued from page 3

Table 2: Pay Band Example						
Wages	2018	2019	2020	2021	2022	
Minimum Wage	\$10.40	\$11.10	\$11.80	\$12.50	TBD	
Lowest Responsibility (e.g. milker,	cow pusher)					
1st Level	\$10.40	\$11.10	\$11.80	\$12.50		
2nd Level	\$10.55	\$11.25	\$11.95	\$12.65		
3rd Level	\$10.70	\$11.40	\$12.10	\$12.80		
4th Level	\$10.85	\$11.55	\$12.25	\$12.95		
5th Level	\$11.00	\$11.70	\$12.40	\$13.10		
Medium Responsibility (e.g. parl	or manager)					
1st Level	\$11.15	\$11.85	\$12.55	\$13.25		
2nd Level	\$11.30	\$12.00	\$12.70	\$13.40		
3rd Level	\$11.45	\$12.15	\$12.85	\$13.55		
4th Level	\$11.60	\$12.30	\$13.00	\$13.70		
5th Level	\$11.75	\$12.45	\$13.15	\$13.85		
High Responsibility (e.g. cow/calf feeder, herds person)						
1st Level	\$11.90	\$12.60	\$13.30	\$14.00		
2nd Level	\$12.05	\$12.75	\$13.45	\$14.15		
3rd Level	\$12.20	\$12.90	\$13.60	\$14.30		
4th Level	\$12.35	\$13.05	\$13.75	\$14.45		
5h Level	\$12.50	\$13.20	\$13.90	\$14.60		

Other factors to take into account when deciding on wages are the benefits that employees receive. For



example, if you provide employee housing at no charge, sit down and figure out approximately what that costs you per employee. Sharing that information with employees will help them better understand and appreciate the benefit, and some farms pay employees not living in farm housing a set amount more per hour.

Just as important as having a plan for employee compensation is communicating that plan to your employees. Next month's article will include tips for creating guidelines for giving raises and letting employees know precisely when and how they can earn a raise.



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Ask Extension...

Why Are the Winter Grains (Wheat, Rye and Barley) Shorter this Year?

By: Mike Stanyard

have noticed this myself this year. Many think that the dry weather is the cause but it really has to do with the cold weather in the spring. Below is a good explanation from Jochum Wiersma at the University of Minnesota on why the rye was short in MN this year. This explanation would also relate to barley and wheat. We weren't the only ones with a cold spring.

Why Is My Rye Short?

Rye is generally known as being unwieldy tall and prone to lodging. Yet this spring the crop appears to be extremely short with some of the earliest crop already heading while just being knee high. What gives?

The much shorter crop is an outflow of the very cool months of March and April. The very late spring has resulted in very little (vegetative) regrowth this spring. Now that spring finally has arrived, its photoperiod response in combination with high

temperatures is forcing the rye crop to immediately transition to reproductive growth, resulting in a very short crop.

What is photoperiod sensitivity? Photoperiod sensitivity is an evolutionary adaptation to avoid conditions. adverse Flowering plants use photoreceptor proteins to sense changes in night length rather day length and use this information to transition from vegetative to reproductive growth, i.e. flower. Long-day plants flower when the night length falls below their critical photoperiod.

The progenitors of modern wheat, barley, oats, and rye were all long-day plants. This ensured that the crops would flower, set seed, and mature before (extreme) the summer heat and drought of the desert or frost in the mountain plateaus in the centers of origin could threaten the viability of the next generation. Amongst the cereals, rye has probably the strongest photoperiod response, as it is most adapted to northern latitudes, where a strong photoperiod response is most advantageous.

This article can be found at: http://blog-cropnews.extension.umn.edu/2018/05/why-is-my-ryeshort.html



Ask Extension...

How Should I Store My Hay?

By: Nancy Glazier

I was recently asked this question by a small scale beef producer. He explained he was looking for an alternative to stacking round bales and covering with a tarp. He fell off the pile uncovering the next row; he didn't get hurt, but needs to look at alternatives. He asked the question, is it worth building a barn?

Large round bales that are densely baled and net wrapped tend to store better than twined-tied bales. Grass hay makes a tighter bale than coarse-stemmed alfalfa. Whether they are small or large bales, storage impacts loss. A small amount of loss can occur when baling, moving, feeding, and feed rejection. The biggest loss – both dry matter and digestibility – occurs with outdoor storage. Dry matter loss can exceed 60% depending on the type of hay, storage conditions and length of storage.

Storage Method	Range of DM Loss (%)
Under roof	2-10
Plastic wrap, on ground	4-7
Bale sleeve	4-8
Covered, rock pad or elevated	2-17
Uncovered, rock pad or elevated	3-17
Uncovered, on ground, net wrap	6-25
Covered, on ground	4-46
Uncovered, on ground	5-61

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The above options have their advantages and disadvantages. It is not always realistic or practical to build a barn to store hay, though worth considering if you plan on storing hay for more than 20 years, the life expectancy of a barn. There is little loss, but the longer hay is stored, the more loss that may occur. Initial cost is high, but may be depreciated over its life expectancy.

Plastics are one option. One is wrapping bales in a similar way to baleage. There is some trial and error involved to determine the number of wraps needed. On the down side condensation can occur, which may lead to mold and spoilage. Also, the plastic will need to be disposed of. Bale tubes and bags are available. Though these options require special



balers or added equipment, individual bale sleeves work well as they reduce wicking and precipitation losses and leave the ends open for air flow. If handled carefully they may be reused a couple years or more.

A newer alternative similar to the above options is a breathable film wrap. One type I ran across was developed jointly with John Deere and Tama. An add -on part is available for some balers. In a study this wrap did a good job of shedding water, with no condensation and less hay rejection when fed than wrapped hay.

To reduce losses from outdoor storage, line bales tightly together end to end. Pick a site that has good drainage and ventilation with sun exposure. Areas should be away from hedgerows and wooded areas as this gives bales a better chance to dry out with air movement. Row spacing of at least 3 feet or more allows for good air flow and sunlight penetration. It's also a good idea to keep vegetation mowed between rows.

Ideally, bales should be stored off the ground. Unwrapped hay stored directly on the ground may lose up to 12 inches on the bottom of the bales due to wicking action. Find some waste material such as old fence posts, pallets, or tires and place the bales on top. Gravel or stone would work, too.

There are many options for storage and I still haven't answered the question about the barn. To help make a decision on hay storage, Brian Holmes, Professor and Extension Specialist (emeritus) at the University of Wisconsin developed an Excel spreadsheet that can be downloaded at <u>https://fyi.uwex.edu/forage/files/2014/01/BaleStorage5-7-04.xls</u>.

Milk Components – Reaching for the Brass Ring

By: Jerry Bertoldo

B ack in the day one of the enticing features of carousels or merry-go-rounds was the presence of a wooden arm that dispensed rings. These arms were located so that riders on the outside horses could reach them and pluck one off. Most rings were made of iron, but a small percentage were made of shiny brass. These special brass ones were redeemable for an extra ride on the carousel. Reaching for the brass ring is a phrase still with us today, one that implies striving for the highest prize - the loftiest goal.

Today the brass ring to dairy producers is achieving over 6 pounds of components per cow shipped per day. It reflects the value that fat and protein have in the processing and sale of milk based products. Simple math tells you that the more milk you make the more pounds of components you will sell at any given component combination. Our colored breeds that crank out fat and protein at much higher percentages than the average Holstein have a distinct advantage. They may not match up on pounds of milk or components per cow per day produced, but on a paid per hundred weight basis their milk value is the brass ring!

Historically, milk protein has commanded a higher premium than fat. Since September 2015 however, the pay price for butterfat has exceeded that of protein except for five months. The production of butterfat and protein are always seasonal with the most pounds and percentages in the cool/cold weather and the lowest during the warmest months. The price for butterfat is generally highest in August when fat test and milk production are down coincidental with summer heat stress. Milk protein pay price has often trended with butterfat, however the correlation is poor compared with that of production. In 2017 summer pay prices went in opposite directions. Last August milkfat peaked at \$3.01/lb. and protein bottomed at \$1.22/lb. for the year.

The Cornell Dairy Profit Monitor network profiled 76 herds in 2016 to get an idea of where milk component numbers ranged. Pounds shipped per cow averaged around 5.7 for the year for the group with the range between 4.7 and 7.1. Two-thirds of the



Photo source: greatamericanthrills.net

herds fell between 5.25 and 6.25. A common finding in high component herds is attention to detail in all aspects of managing the dairy cow. You cannot "buy" 6 to 7 pounds of components through ration magic while ignoring all of those broad cow comfort factors - lameness, heat stress, overcrowding, acidosis and bad water!

Bad water? Water is one of those last frontiers akin to cooling dry cows and breeding age heifers. If it's clean, available and they drink it what's the beef? Hard water can be a drag on growth, health, reproduction as well as milk production. As an example, a large dairy in our region had marginal water quality due to sulfates, a situation known for years. After improving every area of cow comfort and nutrition over time, they were faced with a glass ceiling of production stuck in the mid-80's. A decision was made to spend the money to hook up to the recently available county water supply. Within a week milk jumped several pounds. Eventually they hit over 100 lbs. and 7 lbs. of components per cow per day! Not a bad payback.

On the straight nutrition end, high components cannot be achieved without basic, good rumen health. There are feed components whose fat content and fatty acid profiles can significantly reduce butterfat production. The protein content of milk is more elevated than fat although the two trend in the same direction depending on rumen function and digestive efficiencies. In Holsteins butterfat of less than 3.4% and milk protein under 3.0% is an easier fix than raising taking average numbers to 4.0 and 3.3.

A new butterfat analysis test that is presently used on bulk tank milk only can be helpful in determining where the precursors of butterfat come from. De novo fatty acids (short-chain) are made within the mammary cells. The "fuel" for these comes from the digestion of forages in the rumen. Preformed fatty acids (long-chain) are already made and come from feeds in the diet. Mixed fatty acids (medium-chain)

can be either de novo or preformed. The fact that these fatty acid profiles vary by parity and days in milk and that more work needs to be done in this area, butterfat analysis on individual cows is complicated and not recommended at this time.

Top end levels of de novo fatty acids are associated with increased milkfat and protein production as

well as higher levels of effective rumen fiber. Interestingly, by-pass fats in the diet appear to have no impact on milkfat in either direction. It is the unsaturated fats in grains and grain by-products that can contain the most milkfat depressing fatty acids. As little as 2 to 4 grams of certain trans-fats can hamper the cow's ability to make de novo fatty acids in the udder with the result of up to a 0.5% drop in butterfat!

Beyond the cow environment issues that must be up



to snuff, it becomes obvious that to grab onto that brass ring of higher components and dollars that come with it producers must work closely with a competent nutritionist. Feed analysis to determine the various types of fats going into the diet from concentrates and forages is a must. Checking the cheapest and most basic NIR test on the Dairy One form is not going to get you the detail necessary to figure out

the fatty acid profiles let alone the true digestibility of forages. Chasing the top component prize money is not like playing horseshoes – close doesn't count.



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Find the Winning Combination for Increased Profits

By: Joan Sinclair Petzen

This past winter Dana Chamberlain told the Wyoming County Agriculture Program Committee, "when prices are low and times are tough is when farms make changes that really improve their businesses." One of the challenges for farm businesses is overcoming the rut of the various routines and protocols. We have all heard the old saying "it is hard to see the forest for the trees." In farming, a fresh perspective or looking at the situation through a new lens can help uncover opportunities for improved profits.

Each farm works with a number of advisors, employees, and family members. Each one perceives the farm operation in their own way. Effectively evaluating the status of a farm business, requires bringing individuals with different points of view together to share information and discuss the farming operation as a whole. Organizing an advisory or profit team of a farm's key advisors to meet with the farm's managers on a regular basis provides an opportunity for everyone to share their insights. Frequently, during these meetings new ideas emerge that can bolster productivity or reduce costs. Sharing performance data is key to how a team interacts and identifies opportunities for change.

Advisory or Profit Teams can be organized to provide ongoing support or to address a specific issue, like resolving a production problem, evaluating the possibility for expansion, or developing a management succession plan.

The New York Farm Viability Institute (NYFVI) believes that bringing the right people together as a team to discuss a farm's operations and propose solutions can help a farm operate more profitably. The Dairy Profit Team program is designed to help farm owners and leaders bring their advisors together and establish a routine of regular team meetings.

Under the leadership of the farm, the team evaluates the farm operation, identifies priority areas, and

"Farms with Dairy Profit Teams have achieved significant gains in productivity, profitability, efficiency and quality of life." – NY Farm Viability Institute



makes recommendations for improvement. Brian Youngers at Sregnuoy Farm values an advisory team, "Because it brings everyone together and results in unified decisions to address important production issues." Typical areas of focus include milk production, input costs, cow comfort, and mortality rates. Regular meetings keep everyone on track and provide an opportunity for practical solutions to be developed.

NYFVI accepts Dairy Profit Team applications on a rolling basis. The program requires farmer participants to hold a minimum of six team meetings over a maximum 15 month period and covers 100 percent of the fees charged by the team up to \$3,000. Information and application for Dairy Profit Team funding can be accessed at: <u>http://www.nyfvi.org/default.aspx?PageID=2380</u>. NWNY Team members are experienced Dairy Profit Team facilitators. Reach out to a team member to learn how they can help.

Farms with the strongest financial performance are businesses that closely monitor and control the practices employed in their farming operation. They also hold managers accountable through monitoring key performance indicators. Regular monitoring is critical to early detection of protocol slip or emergence of a new disease, or other production or financial challenges. Using a profit team provides an opportunity for key advisors, farm owners, and managers to brainstorm and select the best alternatives to enhance farm profitability.

Resource: NY Farm Viability Institute: Using A Dairy Profit Team: It's as Easy as 1, 2, 3

Progressive Ag Safety Day coming to Ontario County August 18, 2018

There are many challenges in farming today: increasing government regulations, falling milk and commodity prices, labor supply uncertainties, just to mention a few. But the most daunting daily challenge may be **keeping everyone on the farm safe!** In 2010 in New York State alone there were 27 farm fatalities and an estimated 2417 ambulance calls related to farm injuries and accidents.

In an effort to address farm family safety, Cornell Cooperative Extension of Ontario County is partnering with Jim Carrabba of the New York Center for Agriculture Health and Medicine and others to put together an **Ag Safety Day** for the whole family. Progressive Publication has been sponsoring Ag Safety Days for over 20 years nationally and it is time to bring the event to Ontario County.

The date is 8-18-18 at the New York Steam Engine Pageant Ground, 3349 Gehan Road, Canandaigua, NY 14424 from 9:00 am-3:00 pm. There will be a variety of demonstrations on family and farm safety including: PTO entanglement demonstration by NYCAMH; Grain Bin Rescue Tube demonstration by Benton Fire Department; Bicycle Safety, Bicycle Rodeo, and **Kids Safe ID** and finger printing by Ontario County Sheriff's office personnel; a Fire Extinguisher demonstration by our Emergency Management office; ATV and UTV Safety Instructor presentation; First Aid and CPR Demonstrations by the Ontario Public Health Office; and others. The day will include lots of "give away" items in a Progressive Day gift bag, a **free lunch**, and **free t-shirt** to all who pre-register by **July 16**. Come join your friends and neighbors for a few hours of sharing and caring, it could **save your life**!!

Registration/release forms are available at the Farm implement dealers, the 4-H Office, Tractor Supply Company, and Country Max. Form needs to be mailed to Cornell Cooperative Extension, Attn: Farm Safety, 480 N. Main Street, Canandaigua, N.Y. 14424 by **July 16, 2018!** All youth must have a registration/release form signed by a parent. Space is limited sign up the family today! Forms also on the website: www.cceontario.org

A confirmation will be sent by email when we receive your registration. Questions? Call 585-394-3977 x429 or Email <u>alm72@cornell.edu</u>

The Progressive Ag Day site: https://www.progressiveag.org/WhatWeDo.cgi



Early and Late Season Nitrogen Applications

By: Jodi Letham

Total precipitation during the month of May was low which has slowed the growth of many crops. However, early planted corn in Western New York is at or quickly approaching V5 growth stage. At that time, growers will begin to apply early-season sidedress nitrogen. In 2016, the hot, dry, windy conditions may have attributed to a decrease in uptake of soil N. Corn canopy was also delayed and may have led to an increase in nitrogen volatilization via sunlight. In 2017, wet weather patterns and significant flooding caused nitrogen loss due to leaching in the soil. Nitrogen requirements by a corn plant after V5 increases significantly and because of this, research has shown that applying nitrogen at V5 can increase yields. There are several methods of applying nitrogen after corn emergence, but technologies such as the YIELD 360 YDROP System allows growers to place the nitrogen at the base of the corn plant. Proper nitrogen placement is a key component to the 4R Stewardship program; Right Source, Right Rate, Right Time and Right Place. Late-season nitrogen applications may also be considered especially if the soil conditions are sandy or continuously water-logged which may increase the likelihood for leaching. Here, it may be a good idea

Dairy Crossbreeding Update

By: Nancy Glazier

As part of the USDA Market News report, when there are at least 5 cross bred calves prices will be included. Watching these calves over the last year, they have generally received a \$50-\$100/hd premium. Now we have some data. To view additional reports, visit <u>https://www.ams.usda.gov/</u> market-news/livestock-poultry-and-grain-list-reports.

To sign up to receive these reports and other beef news, enter your email on the right side of the page at <u>http://blogs.cornell.edu/beefcattle/</u>.

Funded by the New York State Department of Agriculture and Markets project "Stocker cattle: Using underutilized grasslands to improve economic viability of the Southern Tier while providing viable careers for beginning farmers."



YIELD 360 YDROP nitrogen placement at base of corn plant. Photo source Josh Putman

to do a split N application where a majority of the N required is applied at V5 and the remainder at V10. One thing to keep in mind is that high clearance machines are needed for these later applications. It is also important to note that nitrogen stabilizers are vital especially in really wet and dry years. Nitrogen stabilizers prevent leaching, volatility and denitrification and ultimately give growers the confidence that their applied product will be there at the time the plant needs it.

June 11th Maplehurst Auction, Hinsdale, NY: Dairy/Beef Crossbred Calves, prices per cwt Bulls, 84-96 lbs. 235.00-300.00; Heifers few, 82-84 lbs. 240.00-285.00.



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Save the Date...

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July 2018

- 4 Independence Day, Office closed
- 10-14 Yates County Fair, 2370 Old 14A, Penn Yan. For more information: www.yatescountyfair.org
- 12 *Aurora Farm Field Day*, 9:30 a.m. 3:30 p.m., Musgrave Research Farm, 1256 Poplar Ridge Road, Aurora. For more information contact: Jenn Thomas-Murphy at 607-255-2177 or jnt3@cornell.edu
- 16-21 Genesee County Fair, 5056 East Main Street Road, Batavia. For more information: www.gcfair.com
- 17-21 Livingston County Hemlock Fair, 7370 Fair Street, Hemlock. For more information: www.hemlockfair.org
- 18-21 Seneca County Fair, 100 Swift Street, Waterloo. For more information: www.senecacountyfairny.com
- 23-28 Orleans County Fair, 12690 State Route 31, Albion. For more information: www.orleans4-hfair.com
- 24-28 Ontario County Fair, 2820 County Road #10, Canandaigua. For more information: www.ontariocountyfair.com

August 2018

- 1-5 *Niagara County Fair*, 4487 Lake Avenue, Lockport. For more information: www.cceniagaracounty.org
- 3-5 Monroe County Fair, <u>NEW LOCATION</u>: 6565 East River Road, Rush. For more information: www.mcfair.com
- 11-18 *Wyoming County Fair*, 70 East Main Street, Pike. For more information: www.wyomingcountyfair,org
- 13-18 Wayne County Fair, 300 W. Jackson Street, Palmyra. For more information: www.waynecountyfair.org
- 15 *Raising Pigs on Pasture*, Flint & Steel Farm, 250 Basset Road, Naples. For more information, contact: Caroline Boutard-Hunt @ 315-536-5123 or cb239@cornell.edu
- 18 Progressive Ag Safety Day, 9:00 a.m. 3:00 p.m., NY Steam Engine Pageant Ground, 3349 Gehan Road, Canandaigua. <u>RSVP</u> by: July 16 at <u>www.cceontario.org</u>. Space is limited! All youth must have a registration/release form signed by a parent. Forms also on the website. QUESTIONS??? Call 585-394-3977 x429 or alm72@cornell.edu, see page 18 for more details.
- 28 No-Till & Never-Till Soil Health Workshop, 12:00 p.m. 5:30 p.m., Branton Farm, 8538 Route 237, Stafford. Preregistration fee: \$15, Door Registration: \$25. <u>RSVP by: August 17</u>. For more information, contact: Dennis Kirby at 585-589-5959. DEC & CCA credits pending.

