

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



NORTHWEST NEW YORK DAIRY, LIVESTOCK & FIELD CROPS TEAM

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# June Dairy

By: Jerry Bertoldo

O n occasion you run into a find that comes along at just the right time. A stack of vintage Hoard's Dairyman magazines from the early 1900's came into my possession a few weeks ago. As an amateur historian I thought what better way to reflect on June as Dairy Month than to see what was happening in the dairy world a century ago. Not pertinent to what we face today? You might be surprised.

This was a time period on the verge of great change. Horses and mules were being replaced by steam traction engines and the new fangled gas and kerosene tractors. Pasteurization was not routinely used or mandated by law for milk bottlers.

It was not until 1908 that the first US city, Chicago, required pasteurization of milk to be sold within the city limits. Unsanitary conditions, attributable infant mortality and milk borne brucellosis and tuberculosis drove legal action that made pasteurization wide spread within a decade.

With the permission of Hoard's Dairyman and a little imagination let's take a journey back in time through a quote or two and advertisements from the June 2, 1905 edition of that publication along with a bit of editorial comment.

There were pieces on improving dairy cattle by using "good stock", a really



retro article entitled "Alfalfa Two Thousand Years Ago" based on the writings of Roman historian Pliny, complaints about oleomargarine competing sales of for butter. maintaining milk fat what test. pasteurization could do for milk quality and calf health and advise on how to cure mastitis. Do things really ever change? Your call!

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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.

All cows were turned out to pasture seasonally in the 1900 world. Natural carotene and other botanical tinting agents gave milk and particularly butter a nice yellow color. Of course, stored feeds do not impart the same degree of coloring to milk as pasture based diets. As a marketing ploy you could add a bit of warm weather color to your cold weather butter just like the oleomargarine folks!



Home cream separation was very common in the early 1900's. No less than 11 separator ads appeared in the June 2, 1905, edition of Hoard's Dairyman. Milk fat then was worth an average of \$.09 per lb. versus \$1.60 per cwt. for milk. Home churned butter was worth around \$.22 per lb. Between butter and cream dairymen could glean the most value from their milk instead of shipping to the creamery. The skim milk was often fed to hogs or calves. Competition from oleomargarine was evident even in 1905. In the September 8, 1922 edition of Hoard's Dairyman an entire half page featuring "Butter Facts for Farmers" states: "Oleomargarine consumption displaces the products of two million cows. When you eat this axle grease, you reduce the price of butter and should kill one of your cows".





Starting in the 1880's steam power on the farm proved a great advantage over horses and mules for sheer working ability. The advances in the internal combustion engine led to the rapid displacement of steam use in tractors after World War 1. By 1927 the last steam "traction engine" rolled off a US assembly line. World War 2 scrap drives doomed many steamers still in working condition to the steel furnaces.



Cooling milk before mechanical refrigeration was easy if you had a spring house close by to put cans into. Another means was to supply cold water from a well to a milk cooler or as we would call it today a plate cooler. As now, the waste water could be fed in to a stock tank. Before widespread pasteurization, quick cooling of milk was valued for reducing bacterial spoilage of milk, an important taste and health consideration particularly for young children. Aeration was an added feature since it was considered helpful in reducing the off odors from pasture weeds and wild garlic consumed by cows.

# Alternative Energy Systems – Part II: Solar

By: Timothy X. Terry Dairy Strategic Planning Specialist

L ast month I reviewed ag waste digesters and cogenerations systems, but not everyone has cow numbers sufficient to run a digester. Solar systems, however, can be sized to fit almost everything from the largest commercial operation to the smallest residential application, but these, too, are not without their pros and cons.

#### **Pros:**

- 1. Renewable Even on cloudy days the sun still comes up and energy can be produced at some level.
- Abundant Of the light energy reaching the earth approximately 30% is reflected into space, 20% is absorbed by the atmosphere, and 50% actually reaches the ground. This equates to a little over 100 watts per square foot (ft<sup>2</sup>) per hour or about 438 KW per ft<sup>2</sup> per year.
- Sustainable The actual source is a thermonuclear reaction about 93 million miles away, and scientists estimate that the sun has enough fuel to last another 6 billion years.
- Environmentally Friendly There are no toxic by -products or greenhouse gases produced in the conversion of light energy to thermal or electrical energy.
- 5. Good Availability The sun shines everywhere except underground or where there are no windows.
- 6. Reduced Energy Costs Through the production of your own electricity, hot water, or passive heat.
- 7. Many Applications Solar fuels, solar electricity, solar heat, solar hot water.
- 8. Shared Solar Opportunity to achieve an economy of scale by pooling resources.
- 9. Silent There are no moving parts no pumps, no generators, no cooling fans, etc.
- Low Maintenance No bearings to grease, oil to change, or by-products to dispose of. You will, however, have to keep the snow, leaves, bird



Figure 1 - Photovoltaic Cell Panel (Courtesy processindustryforum.com)

droppings, etc. cleaned off the panels.

#### Cons:

- Expensive Even with some of the grants and incentives the initial investment can be high. Fortunately, this seems to be improving as time goes on.
- 2. Intermittent Reduced production on cloudy or snowy days, and no production at night.
- 3. Energy Storage Expensive NiCd or NiMH batteries are expensive if the power is not being immediately conditioned and put out on the grid.
- Associated with Pollution During manufacturing, not use. Some newer technologies use heavy metals like cadmium, tellurium, or gallium, but the amount in a square meter of panel is roughly equivalent to only a Csize rechargeable battery.
- 5. Exotic Materials Tellurium supplies are limited.
- 6. Large Footprint Even at more than 100 watts/ft<sup>2</sup> you still need several square yards of panels to power an average home, and several acres to supply a small community or manufacturing business.

#### **Principal Forms**

As mentioned earlier there are many applications of solar energy – solar fuels, solar heat, solar electricity, and solar hot water being the primary ones. The last three -- solar heat, solar electricity, and solar hot water -- are the applications most commonly associated the term "solar energy".

Solar heat, or passive solar heat, is what provides warmth to greenhouses and some well-designed homes. Simply put, visible and ultraviolet (UV) light pass through glass or plastic sheeting and are reflected off the building's contents. This is what allows you to see the objects' shapes and colors. In all this bouncing around some of the light is converted to infrared (IR) light. IR light's wave length is so long that it cannot pass back through the glass or plastic and is therefore trapped inside and this trapped energy can be felt as heat. As more light enters more IR is produced, trapped inside, and the space heats up. Quite often, a large stone or concrete floor is included in the design and acts as a thermal mass storing excess heat during the day and then radiating it back into the space in the evening.

Solar electricity, or photovoltaic (PV) energy uses the sun's photon energy to create electrons. This is called the photoelectric effect. These are some of the panels you see up on the roof, and always what you may see in a field somewhere. (See Figure 1) The following video gives a good, concise overview of how a PV cell works: <u>https://www.youtube.com/</u> <u>watch?v=x2zjdtxrisc</u>. The electricity from a PV cell is direct current (DC) so it must flow first through an inverter and conditioner before going to storage, domestic use, or the power grid (See Figure 2).



Figure 2 - Photovoltaic Conversion (Courtesy NYSERDA)

In the July issue of Ag Focus we'll take a close look at solar hot water systems.

# Still Time To Plant Buckwheat



Guaranteed Price for this year is \$28.50 per cwt.

**Buckwheat** is fast growing—70 days from planting to harvest. It can be planted as late as mid-July in many areas, allowing for a double crop after wheat or rye.

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# **Performance of Northwest NY Region Dairy Farm Businesses in 2015 – Preliminary Results**

#### By: John Hanchar and Joan Petzen

#### Summary

- While milk sold per cow was relatively stable, milk receipts per hundredweight (cwt.) fell 26.7 percent to \$18.49 per cwt. when compared to 2014.
- In 2015, the operating cost of producing a cwt. of milk was \$16.01, a decrease of 6.7 percent relative to 2014.
- As of May 10, 2016, preliminary results indicate that Northwest New York region (NWNY) dairy farms in Cornell University Cooperative Extension's Dairy Farm Business Summary (DFBS) Program achieved lower levels of profit in 2015 compared to 2014 -- for example, in 2015, the rate of return on all assets without appreciation averaged 1 percent compared to 12.5 percent in 2014.

#### Introduction

The results reported here represent averages for the following.

- 35 NWNY dairy farms cooperating in 2015, preliminary, data accessed May 10, 2016
- 44 NWNY dairy farms cooperating in 2014, final, data accessed May, 10, 2016

#### **Size of Business**

- The average number of cows per farm for 2015 to date is 920, compared to 783 in 2014.
- Worker equivalents per farm are 20 and 17 for 2015 and 2014, respectively.
- Tillable acres totaled 1,715 and 1,445 for 2015 and 2014, respectively.

#### **Rates of Production**

- Milk sold per cow averaged 25,092 in 2015 compared to 24,759 pounds in 2014.
- Hay dry matter per acre fell 5.6 percent to 3.6 tons, while corn silage per acre fell from 20 to 17.4 tons.

#### **Income Generation**

- Gross milk sales per cow decreased from \$6,247 in 2014 to \$4,639 in 2015, a decrease of 25.7 percent.
- Gross milk sales per hundredweight (cwt.) fell from \$25.23 to \$18.49.

#### **Cost Control**

- Dairy feed and crop expense per cwt. of milk fell from \$9.12 in 2014 to \$8.20 in 2015, a decrease of 10 percent.
- In 2015, operating cost of producing a cwt. of milk was \$16.01, a decrease of 6.7 percent relative to 2014.

#### **Profitability**

- Net farm income without appreciation per cwt. of milk averaged \$0.75 in 2015, a decrease of about 88 percent compared to 2014.
- Rate of return on equity capital as a percent without appreciation fell 99.3 percent in 2015 from 16.20 in 2014.
- In 2015, the rate of return on all assets as a percent without appreciation was 1 percent, a decrease of 91.7 percent relative to 2014.

#### **Final Thoughts**

Owners of dairy farm businesses cooperate in Cornell University Cooperative Extension's DFBS Program for the purpose of identifying strengths and weaknesses by comparing their results to results of other cooperators. Are you interested in realizing the benefits of DFBS participation? Call John Hanchar – for contact information, please see information at the front of this newsletter.

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# Estimating Forage Harvest

By: Tom Kilcer, Advanced Ag Systems, May Crop Soil News

E very analysis I have seen shows significant profit advantage to stopping corn planting and get the first cutting in at peak quality. YOUR INDIVIDUAL FIELDS SHOULD DETERMINE WHEN YOU SHOULD START HARVEST, using YOUR alfalfa as a predictor. The height of alfalfa can predict when it and grass fields, in your local climate, condition, and individual field, should be cut. It simply involves using a ruler and the following table: dry as well, the tedder and the subsequent rake/ merger will need to root in the dirt in order to pick up the crop and move it to a windrow.

So, what is a little dirt in the tons of forage? For starters you have just inoculated a highly digestible, high sugar forage with a range of wild and not so beneficial bacteria and molds. They are not good for your cows or for making silage. Second, Dr. Sniffen of Fencrest LLC found that going from 9 to 11 % ash will knock 1.9 pounds of milk off per cow per day. On a 100 cow dairy this is loss of over \$11,590 in a 305 day lactation of a high forage diet of 50%

If	THEN		
Alfalfa in/near a Grass field is 13 inches tall	Start to Cut Your Mostly Grass Stands		
Alfalfa in a 50% Alfalfa: 50% Grass Stands is 23 inches tall	Cut Your Mixed Stands		
Alfalfa in greater than 80% Alfalfa Stand is 30 inches tall	Cut Your Mostly Alfalfa Stands		

A more precise system is to go to http:// www.forages.org/index.php/tools-grassman Dr Cherney of Cornell developed this slick, accurate system. Click on the grass, alfalfa-grass, or the alfalfa estimator. For the latter two insert the alfalfa height, percent grass, NDF target, and the weather (normal, hot, cool) and it will tell you how many days until that field on your farm under your conditions is at peak quality for harvest. Using the predictor system to determine what fields to harvest first, allows you to harvest early fields and later fields at peak quality. Thus you have high quality for -age from ALL fields, even though the harvest may have started a week or more later for some fields. If you have fields that are in a low, warm, sheltered location, they are ready earlier than the rest of the farm. A well-drained soil will have forage ahead of a poor drained soil. A north facing slope will be further behind a south or south east facing slope. A clear alfalfa on well drained south facing field could be ready before a grass field on a wet north facing slope.

In addition to when you harvest to reach peak quality; how you harvest is just as important. Wide swath is critical for any chance of same day haylage. To dry forage you need air movement around and under it. If you scalped the field not only will it not legume. I calculated for two midwest farms this year that simple ash levels were costing them \$65,000 on one, and \$75,000 on the other from lost milk production by feeding 2% more ash. Adjusting cutting height, and/or putting on extended skid plates will leave taller stubble to allow for tedding plus raking/merging without skyrocketing ash levels.

You need to look at YOUR forage ash samples to see if you are leaving milk in the field by mowing to close. Yes, you can rebalance the ration at the cost of more grain in order to reach the same milk. Even this has its limits as Dr. Sniffen clearly points out: "the NDF concentration will go up; they balance on the presumed analysis and the fact is that the NDF is not really the higher NDF but the lower NDF. Thus they end up with inadequate effective NDF, and the cows get metabolic consequences."

#### Bottom line: flat knives, higher stubble for maximum forage quality. 3 Inch cut height Alfalfa; 4 inch cut height Grass



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# Adding Value to Market Cows

#### By: Nancy Glazier

The beef industry continues to put an emphasis on meat quality. A product of dairies is beef, an often undermanaged commodity. The latest Market Cow and Bull Beef Quality Audit showed that 18-20% of our annual beef supply comes from market or cull cows; 29-33% is from dairy cows and 9-11% is beef cows and bulls. This accounts for 4% or so of a dairy operation's revenue, and up to 20% for a beef operation. Depending on the plant, 60-75% of the meat is processed into whole muscle cuts. It is often a misconception that the entire carcass is ground.

On average, cull cattle are discounted about \$70 per head due to quality issues: injection site lesions, bruising, udders, or blemishes. Producers should work to increase their returns. Some of the ways include sufficient antibiotic withdrawal times, no lameness, adequate muscling, and proper animal identification. Culling timing is critical and protocols should be in place to assist with decisions.

Value can be gained by adding weight to cull cows. This added weight accounts for both muscle and fat, and feeding reduces yellow fat. Consumers prefer white fat; market cows tend to have yellow fat which adds to the discount. Many factors influence dressing percentage (carcass weight/body weight), such as breed, age, sex, and gut fill. Adding weight increases dressing percentage with added muscle (body condition) and fat, see table. revenue by \$211.25. Feed and other costs need to be considered. Each operation will need to do its own partial budget analysis to find their point when it makes sense to feed market cows, such as milk and cattle prices, production, labor, and feed costs. If milk prices are low and production falls below the breakeven point, an operation could be losing money continuing to milk her.

Cornell beef cattle extension specialist Mike Baker and others conducted a study on feeding Holstein market cows. Sixty-five cows were purchased at an auction barn. Cows were split into 2 pens with 2 treatments within pen. These were feedlot-type pens at Cornell's old Teaching and Research facility in Dryden. Half of each pen was implanted with Revalor (Imp). One pen was fed Optaflexx (Opt), a beta agonist, for the last 28 days. Twenty-four were sent to slaughter prior to trial conclusion, primarily due to poor performance. They were fed dry hay for 8-10 days then stepped up to a high grain diet for 70 days. The diet included melengestrol acetate (MGA), mixed with feed for increased rate of weight gain, improved feed efficiency and suppression of estrus (heat). Fecal samples were collected to test for Johnes Disease and urine samples collected to test for antibiotic residues. Sixteen tested positive for Johnes, 5 tested positive for antibiotic residues.

Feeding a cow to increase body condition from 2 to 3, roughly 125 lb in this scenario, would increase

Influence of Body Condition on Dressing %						
Carcass Grade	BCS	Live Wt, lb	Dressing %	Price/lb, Live wt (1)	Total Price, \$	
Canner	1	1050	42%	0.65-0.74	682.50	
Cutter	2	1175	46%	0.65-0.75	763.75	
Boning Utility	3	1300	48%	0.75-0.85	975.00	
Breaking Utility	4	1425	52%			
Commercial	5	1550	58%	0.90-1.01	1,395.00	
(1) Prices from Finger Lakes Livestock Exchange, May 4, 2016						



#### Future Forest Consulting, Inc. DEC Cooperating Forest Consultant Corey Figueiredo

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Looking to BUY OR SELL Land? FUTURE FOREST PROPERTIES LLC www.futureforestproperties.com 585-374-6690 With the exception of ribeye area (REA), there were no differences in any of the performance factors as affected by treatment. Average daily gain tended to be higher in the implanted cattle fed Optaflexx. The cattle on the Opt + Imp treatment had a larger REA than the cattle with no implant or Optaflexx. While treatment had minimal effect on the performance of the Holstein cows, treatment tended to or made significant differences in the weight of the primal cuts. This demonstrated the added value of feeding. I'll post the full project report on our website. Link: http://nwnyteam.cce.cornell.edu/submission.php? id=550&crumb=livestock[10].

Here are some guidelines if you decide to feed cows when they exit the milk herd.

- Feed 70-90 days to increase white fat
- Feed refusals plus grain
- High energy ration (63 68 NEm mcal/lb)
- Step up diet gradually
- Target marketing times to capture higher prices
- Get them off concrete to help with lameness
- Market directly to a packer (through a broker)

- Use MGA, ionophores, implants
- Suggested vaccines IBR, BVD, PI3, BSRV, Clostridial types C&D (work with your veterinarian)
- Treat for external parasites

Buyers have seconds to make a decision to bid. Word from two Pennsylvania processors is they will be purchasing fewer emaciated cows. Inspectors are getting stricter, making it more difficult to process these cattle. This is an opportunity to improve returns and supply consumers with a higher quality product.

#### References:

National Market Cow and Bull Beef Quality Audits (NCBA/CSU, 1994, 1999 & 2007)

Mike Baker, Bill Henning, Celie Meyers, Drew Wilkins. Holstein Market Cow Feeding Project.



### Sample Guidelines for Human Resource Management on the Farm

By: Tom Maloney, Sr. Extension Associate, Dyson School of Applied Economics and Management, Cornell University

F armers care about their employees. We know this, but does everyone else? It has always been important to treat employees well, but with increasing scrutiny of dairy farms it's important to make sure that your Human Resource practices are up to par and put them into writing. Developing a set of HR Management guidelines for your farm is a great way to share your values and your HR practices with your employees, farm visitors, neighbors, etc. The guidelines below are intended to be an example of what a farm HR Management statement might look like. Some of the guidelines for HR practices are very specific and may not fit your farm. Please feel free to contact me with any questions. –Libby Eiholzer

We consider our employees to be the most valuable assets of our farm business. All employees involved in agricultural production will be treated with respect and dignity with emphasis on open communication between managers and employees. We recognize that motivation comes from within each employee. Each day we strive to create a work environment where employees will be motivated, satisfied, and can achieve their potential. We are proud to be in the business of producing food for the consuming public and we appreciate the critical role our employees play in that process. We adhere to the following positive and progressive set of guidelines with respect to our valued employees.

#### 1) Open Communication with Employees

We welcome feedback and encourage employees to provide suggestions on how the business can improve. We also welcome suggestions about safety, work scheduling, housing and other working conditions. We have in place a process where employees can file an employment related grievance. Employees are encouraged to come to management with employment related questions or problems to be addressed. Where appropriate we provide employment information to employees in their native



Regular farm safety training is one way that employers show their commitment to providing a safe workplace.

Photo source: Libby Eiholzer

language. Employees are encouraged to come to any member of the management team at any time with workplace concerns or feedback.

#### 2) Wages and Benefits

We comply with all labor laws related to wages, hours, work breaks, and time off. We strive to make our wages competitive with other businesses to ensure that we attract the most talented and productive people. We clearly communicate performance expectations and provide appropriate wage increases as based on performance and longevity. With each paycheck employees receive a paystub detailing hours worked, rate of pay and any deductions made from the paycheck. An employee who has any questions about wage levels and how they are determined is encouraged to bring those concerns to their immediate supervisor.



#### 3) Work Schedules and Time Off

Our business operates 24 hours a day and seven days a week. Care of our animals and food quality are two of our highest priorities. We staff our business to ensure that both of these priorities are continually met. We strive to give each employee a minimum of one day off each week. We provide appropriate meal and rest breaks on every work shift over 4 hours. All breaks provided conform with New York State labor law. Each employee will have a minimum of 10 consecutive hours off per day to ensure adequate time for rest and sleep and to avoid fatigue.

#### 4) Equal Rights and Freedom From Discrimination

We pride ourselves on creating a workplace that is free from discrimination of any kind. Likewise, our business has a zero tolerance for harassment of any type. If an employee feels that they have been harassed or discriminated against, they should communicate the incident to a manager or supervisor immediately.

#### 5) Housing

We provide employees with housing as part of their compensation. Employee housing when provided comes with responsibilities to both the employer and the employee. Examples of employer responsibilities include, but are not limited to, adequate clean water, proper heating and cooling of the housing and adequate space and privacy for each individual. Accommodations for the health and safety of the workers housed are an important responsibility of the employer. Examples of employee responsibilities include maintaining a clean comfortable residence and notifying the employer if any of the appliances or mechanical systems in the house are not working properly. Responsibilities of both employer and employee are outlined in the employee housing agreement signed at the time of hire. When employees have visitors to farm owned housing, it is requested that the visitors sign in at the farm office.

#### 6) Workplace Health and Safety

We make every effort to provide a workplace that is free from health and safety risks to our workers and our family members who work on the farm. Our farm complies with the OSHA standards for safety. In many cases we go far beyond the minimum requirements of OSHA regulations. We provide the proper equipment and facilities to make the workplace as safe as possible. We also provide extensive training on workplace safety issues such as equipment operation, pesticide use and toxic substances found on the farm. When appropriate, safety information is provided in the worker's native language. In addition all workers on our farm are covered by Worker's Compensation.



## New Alfalfa-Grass NDF Estimation Tool for Smart Phones

By: Jerry Cherney, Cornell Forage Specialist

Our AGES (alfalfa-grass evaluation system) app is now available. It is a web-based app that works on the computer and should work on any smart phone. It does not work with MS Explorer (being phased out), but does work with Safari, Chrome, and Firefox. (It has worked with Explorer for me, but is not supposed to).

The app is currently at: <u>http://52.90.125.233:8080/</u>. It will eventually be transferred to forages.org. Pure grass or pure alfalfa estimates are available, based on the old system on our website, no picture required. For alfalfa-grass stands, a smart phone picture is automatically inserted into the program. A regular digital camera picture could be used with the program on a computer.

For **alfalfa-grass** fields, you take a picture and measure AMAX (maximum height of alfalfa to terminal bud), it will estimate:

- $\Rightarrow$  <u>Grass%</u>: Based on processing a photo through artificial intelligence software.
- $\Rightarrow$  <u>Sample NDF</u>: NDF concentration for parameters entered for the current sample.
- $\Rightarrow \underline{\text{Average Field NDF}}: \text{ The average NDF} \\ \text{concentration for all samples added to the current} \\ \text{field average.}$
- $\Rightarrow$  <u>Range in samples/field</u>: The range in NDF concentration for the current field from minimum to maximum.
- ⇒ Estimated days to harvest: Based on average field NDF, target NDF at harvest, and estimated weather conditions, this indicates the number of days to harvest to achieve target NDF.
- ⇒ Target AMAX or GCPY at harvest: Target max height of alfalfa or grass canopy height to achieve target harvest NDF.

It also tells you the number of samples taken per field that are included in the current average NDF.

Format takes a little getting used to. Range in height allowed is 16-30" for pure alfalfa, 12-30" for pure grass, and 12-40" for alfalfa-grass, although the upper/lower limits could be pushing it. For alfalfagrass, Grass% evaluation is based on the entire photograph. Make sure the camera is level, about 3 feet above the canopy, and entire area in the picture is of the stand.

I have tried it out on hundreds of photos I have on my computer, that were not used for app development. Seems to work well for spring harvest, good stands.

Does not work well for:

- 1. <u>Regrowth harvests</u> (we will need to sample and generate another equation for this).
- 2. <u>Weedy fields, or poor stands</u> in general.
- 3. <u>Headed out grass</u>.

**NOTE**: Changing the AMAX for a given picture will change the estimated grass percentage for that picture, because "visible" grass vs. actual percent grass changes some with maturity.

Changing the height that the picture is taken at will affect estimated grass percentage, be consistent and close to 3' from canopy.

We still don't know how many pics per field are optimal. This will depend on field uniformity. Probably 6 minimum to 12 or so. You can observe the range in pics to help sort this out.

## **Upcoming Webinars:**

#### Barn Design for Robotic Milking June 13, 1:00 - 2:00 p.m. Presented by: Jack Rodenburg, Ontario Ministry of Agriculture, DairyLogix http://www.hoards.com/webinars



# Beef Up Your Bottom Line

#### By Chelsey Downs and Joan Petzen

The beef industry in New York State is growing. This growth is driving a demand for a farm analysis tool that can help determine if the operation is profitable, as well as financially positioned to be competitive with other producers. The Cornell Beef Farm Business Summary Program is an excellent tool for beef producers who are looking to progress their business as well as make themselves more competitive.

The Cornell Beef Farm Business Summary Program is a relatively new program being developed by Mike Baker, Beef Cattle Extension Specialist of Cornell University and a group of livestock and beef educators across the state. Through the use of FINPACK, a farm business analytical tool developed by the University of Minnesota, benchmarks can be developed specifically for New York State beef producers to use to compare the efficiency and profitability of their operation. Due to the geography of New York State as well as climate, benchmarks are slightly different than other states. FINPACK generates various financial statements including balance sheets, cash flow statements, income statements, and budgets. These financial statements can be helpful in determining where the business has the greatest room for improvement as well as aspects that the operation is already excelling. Involvement for multiple years will allow producers to be able to determine how their individual businesses are doing from one year to the next.

The Cornell Beef Farm Business Summary Program will give producers the ability to compare their average weight at weaning as well as average finishing weight to the state average. Financial analysis data will also be given including current ratio, debt to asset ratio, operating profit margin, and asset turnover rate. All personal financial information is kept confidential.

Cornell Cooperative Extension Northwest New York Dairy, Livestock and Field Crops Team (NWNY Team) is currently seeking beef producers who are interested in participating in the Beef Farm Business



Summary program for 2016. The more participation the more reliable the benchmarks will be.

Chelsey Downs, senior agriculture business intern from SUNY Morrisville will be gathering producer data across the region. The NWNY Team is excited to have Chelsey on board for a 15-week internship. She hails from Attica where her family has operated a heifer growing operation for many years. In 2013, Chelsey's fiancé transitioned the farm to a dairy where they are now milking 110 Jersey cows. With coursework in Farm Management and Finance, Ag Financial Decision Making, **Business** Communications and Marketing of Agricultural Products, Chelsey brings a strong skill set for helping the team to ramp up this project.

To participate in the Beef Farm Business Summary Program contact Chelsey Downs or Joan Petzen at the Wyoming County Office at (585)786-2251 or by emailing cmd337@cornell.edu or jsp10@cornell.edu.





Preparing payroll may not be most people's idea of a good time, but for Farm Credit East payroll service expert John Capone, nothing says fun like preparing payroll. In fact, all of our payroll experts love helping our clients manage their payroll, whether your business is large or small, seasonal or yearly.

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New research helps dairy producers optimize their herd reproductive efficiency. Come hear about ways to enhance repro performance like how to select the ideal voluntary waiting period.

Time: 7-9 PM

Ice Cream Provided

Contact your Program Area Specialist to register by June 20th. \$5 at the door.

#### For more information, contact:

Libby Eiholzer Program Area Specialist geg24@comell.edu 607-793-4847

Supported by:





# Summer Dairy Reproduction

# Update



Julio O. Giordano, DVM, MS, PhD St. John Family Sesquicentennial Assistant Professor – Dairy Cattle Biology & Management Department of Animal Science



Matias Stangaferro, DVM, MS PhD Student—Dairy Cattle Biology & Management Lab



Robert Lynch, DVM Dairy Herd Health & Management Specialist PRO-DAIRY Program

June 13th Murrcrest Farm 31721 NY-12 Copenhagen, NY 13626 **June 14th** Koval Brothers Dairy 313 Burke Rd. Stillwater, NY 12170

Warsaw, NY 14569

June 20th

Walnut Ridge Farm 31 Holden Rd. Lansing, NY 14882

June 21st Remmillard Farm 1127 Fuller RD Peru, NY **June 22nd** \*New CCE Wyoming County Office 36 Center St. Suite B

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Cooperative Extension Association of Livingston NWNY Dairy, Livestock & Field Crops Team 3 Murray Hill Drive Mount Morris, NY 14510

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#### **JUNE 2016**

## Save the Date...

- 2 *Small Grains Management Field Day,* 9:30 a.m. 12:00 p.m., Musgrave Research Farm, 1256 Poplar Ridge Road, Aurora. For more information: http://fieldcrops.cals.cornell.edu
- 5 *Agri-Palooza*, Noon 4:00 p.m., McCormick Farms, Route 78, Bliss, NY.
- 22 Summer Dairy Reproduction Update, 7:00 9:00 p.m., CCE-Wyoming Co. Agriculture & Business Center, 36 Center St., Suite B, Warsaw. Cost: \$5.00, Please <u>RSVP by: June 20.</u> For more information contact: Libby Eiholzer at 607-793-4847 or geg24@cornell.edu
- 30 *Soil Health & Cover Crop Workshop*, 9:00 a.m. Noon, Elba Fireman's Recreational Hall, 7143 Oak Orchard Rd., Elba. To register for this <u>FREE</u> event, please contact: Dennis Kirby at 585-589-5959 or Dennis.Kirby@ny.nacdnet.net
- 30 *Manure Gas Safety Demonstration*, 7:00 p.m., Eugene Zimmerman Farm, 484 Middle Rd., Rushville. For more information contact: Nancy Glazier at 585-315-7746 or nig3@cornell.edu

#### JULY 2016

- 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/