SCNY Dairy & Field Crops Digest

Cornell University
Cooperative Extension
South Central New York Dairy & Field Crops Team

Winter Dairy Management 2015

THURSDAY MARCH 12
10AM - 2:30PM

NY STATE GRANGE
100 Grange Place, Cortland

IMPACTING PROFITABILITY VIA MILK COMPONENTS

TOPICS:

- Impact of Milk Components on Milk Check
- Understanding Income Over Feed Costs and its Impact on Profitability
- Dairy Nutrition's Impact on Milk Components
- Farm Example — Local Farmer who increased profitability by raising milk components and applying nutrition and environmental changes

SPEAKERS:

Kathy Barrett
Senior Extension Associate, PRO-Dairy

Tom Overton
Cornell University Professor of Animal Science,

$25/PERSON (LATE/WALK-IN $30)
Please call ahead if you're going to pay at the door

Pay by credit card online at scnydfc.cce.cornell.edu

For more information contact: Betsy Hicks
(607) 753-5213 or by email at bjh246@cornell.edu

PRE-REGISTRATION BY MARCH 10
SEE PG. 2 FOR REGISTRATION FORM

FEBRUARY/MARCH 2015

Cornell Cooperative Extension South Central NY
Dairy & Field Crops Program

Inside this Issue	Pg. #

We are pleased to provide you with this information as part of the Cooperative Extension Dairy and Field Crops Program serving Cortland, Chemung, Tioga and Tompkins Counties. **Anytime we may be of assistance to you, please do not hesitate to call or visit our office.**

The views and opinions reproduced here are those of the authors and are not necessarily those of the SCNY Area Dairy and Field Crops Team of Cornell Cooperative Extension. We strive to provide various views to encourage dialogue. The information given herein is supplied with the understanding that no discrimination is intended and no endorsement by Cooperative Extension is implied. Permission is granted to reproduce articles from this newsletter when proper credit is given. Electronic copies are available upon request. If we reference a website that you cannot access and would like the information, contact Sharon.

Janice Degni
Team Leader &
Field Crops Specialist
CCE Cortland County
(607) 753-5215
jgd3@cornell.edu

Fay Benson
Small Dairy
Technologies Educator
CCE Cortland County
(607) 753-5213
afb3@cornell.edu

Betsy Hicks
Area Dairy Specialist
CCE Cortland County
(607) 753-5213
bjh246@cornell.edu

Ellen Fagan
Organic Dairy Assistant
CCE Cortland County
(607) 753-5077
etf22@cornell.edu

Dairy Digest Designed By: Amanda Montgomery, Administrative Assistant, CCE Cortland County, (607) 753-5078, am2229@cornell.edu.

I Chose to Look the Other Way

By Don Merrill
Permission Granted by: American Training Resources, Inc.; Mark Trentacosta; www.atr.inc.com

I could have saved a life that day, But I chose to look the other way. It wasn't that I didn't care; I had the time, and I was there.

But I didn't want to seem a fool, Or argue over a safety rule. I knew he'd done the job before; If I spoke up he might get sore.

The chances didn't seem that bad; I'd done the same, he knew I had. So I shook my head and walked by; He knew the risks as well as I.

He took the chance, I closed an eye; And with that act, I let him die. I could have saved a life that day, But I chose to look the other way.

Now every time I see his wife, I know I should have saved his life. That guilt is something I must bear; But isn't' something you need to share.

If you see a risk that others take That puts their health or life at stake, The question asked or thing you say; Could help them live another day.

If you see a risk and walk away, Then hope you never have to say, "I could have saved a life that day, But I chose to look the other way."

PRO-DAIRY

Winter Dairy Management Registration Form

Thursday, March 12
$25/Person (Late/Walk-In $30)

USDA RMA

Name_____

Address_____

Telephone_____ Email_____

Registration with payment is due by March 10, 2015. Make checks payable to "Cornell Cooperative Extension"
Mail to: **Cornell Cooperative Extension Cortland County**
Attn: Betsy Hicks, 60 Central Avenue, Rm. 105; Cortland, NY 13045

Crops

Preparing for Next Cropping Season

By Janice Degni

Isn't it great that every year we get a "do over" with our annual crops, an open book for new opportunity to capture quality and yield? Change happens with intention and planning. Since spring is less than 45 days away it's not too soon to be preparing for spring's work.

Where's the opportunity on your farm? I recently attended a Precision® Planting workshop. Whether you use their products or not, the agronomic principles are sound. Good seed to soil contact, even stands and emergence all work to support the yield potential of the crop.

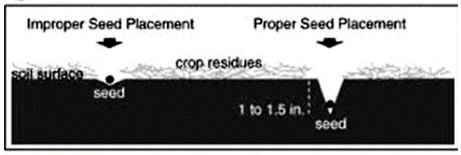
The Value of Improved Spacing
2.5 bu. loss
for every 1" increase in standard deviation

<3"	16% of fields
3-6"	60% of fields
>6"	24% of fields

Source: Stand Establishment Variability in Corn, Dr. R.L. Nielsen, Purdue University

Can your corn stands be improved? Are you starting with proven hybrids; the right fertility regime; the right population for the conditions; good, even emergence; timely planting and weed control? Going through the planter and taking care of any needed maintenance now will have you ready to roll when planting time is here. Calibration and replacement of worn parts of the seed metering units is equally important. See Planter Checklist for 10 steps to review.

Figure 1.



Capturing Quality at Harvest!

Hay crop quality varies with the weather each year but closely follows plant maturity. Spring scissors cut programs and measuring sticks help us target the desirable NDF level for harvest. Why is this important? See Thumb Rules that have withstood the Test of Time and Guidelines for NDF: You have to follow crop development pretty closely in the spring to target timing for first cutting. Timeliness for 1st cutting is critical because we get the bulk of the season's yield in first cutting and it sets the harvest schedule for the year. There are plenty of information sources to help keep you up to date on stage of plant maturity, like newsletters, sales people and web based information.

NDF Guidelines for Forages:	% 0f DM
Grasses	50-55
MMG (70% Grass)	42-50
MML (70% Legume)	40-45
Legumes	38-42

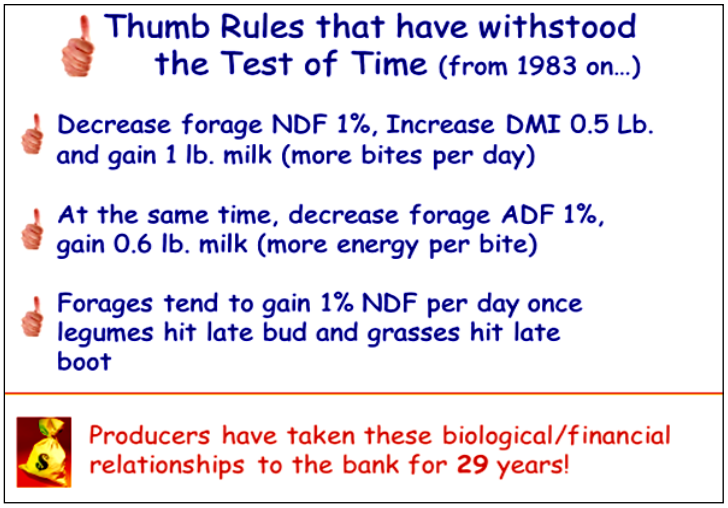
There are also tools available to help you develop a strategy for a timely first cutting. One example is *The Forage Harvest Window Calculator*, developed by Paul Cerosaletti of CCE Delaware County. It is a spreadsheet that helps forage harvest planning by calculating the number of acres that need to be harvested per day and per mow/dry/harvest cycle to achieve a desired harvest window for first cutting. See Figure X for the parameters that you need to define.

10 Things to Check Before Planting Season

PLANTER CHECKLIST

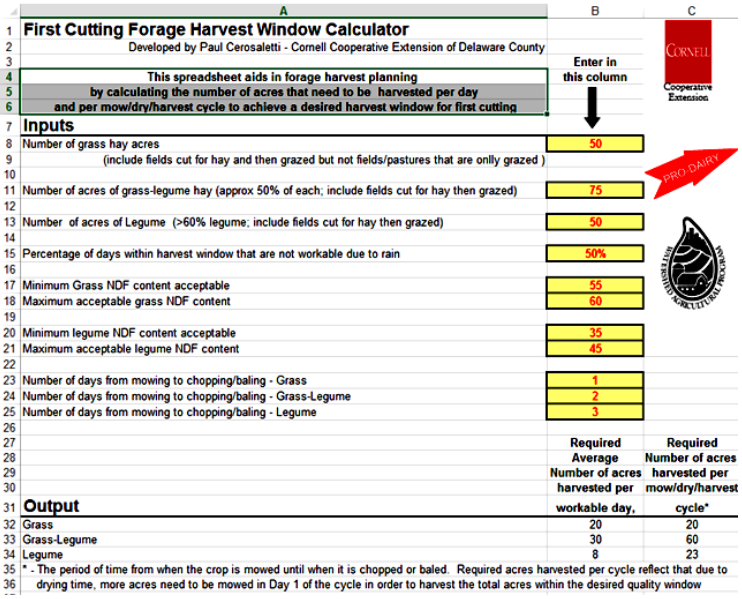
1. **Level the planter.** Check hitch height. Make sure the tool bar is level (vertically) or running slightly uphill. When planters tip down, coulters run too deep and closing wheels run too shallow.
2. **Check bushings and parallel linkage.** Worn bushings increase row bounce and thus seed bounce. Stand behind the row unit and wiggle it up and down and back and forth checking to make sure bushings are tight.
3. **Check drive system.** Check every chain. Kinked chains shake the meter. Start with fresh, lubricated chains and check them daily.
4. **Calibrate meters.** Take your meters and samples of your seed to a certified MeterMax representative for calibration. Calibrated meters can add 6 more bushels per acre.
5. **Inspect double disk openers.** Test for good contact between the double disks. Slide a business card from the top down along the front of the disks until it stops. Mark that spot with chalk. Then, slide the card from back to front until it stops. Mark that spot. If the distance between the two marks is less than 2", reship or replace the disks. Generally, the disks must be more that 14.5" in diameter.
6. **Look at seed tubes.** Inspect seed tubes for wear at the bottom. If the tubes have a small dog ear flap on the left side, replace them. You'll see better spacing.
7. **Think about closing wheels.** Consider an alternative to rubber closing wheels. For cool, moist conditions, consider running one 15" spike wheel and one 13" rubber wheel. The spike wheel can improve fracturing and sealing in those conditions. For no-till, get the most aggressive closing action with two 13" spike wheels and a drag chain.
8. **Check closing wheel alignment.** With your planter sitting on concrete, pull ahead about five feet. Look at the mark left behind the planter by the double disk openers. The mark should run right down the centerline between closing wheels. If not, adjust the closing wheels to bring them back to center.
9. **Add and adjust row cleaners.** If you have substantial residue, row cleaners will sweep it from the row, warming the soil around the seed trench, reducing wicking and seedling blight. But make sure they move the residue and not the soil. Watch them run. They shouldn't turn constantly, but gently turn sporadically, especially through areas of thick residue.
10. **Aim for uniform germination.** Uniform germination adds an average of 6 bushels per acre. Keeton Seed Firmers set seeds to the bottom of the trench, so they absorb moisture uniformly and emerge evenly.

Source:



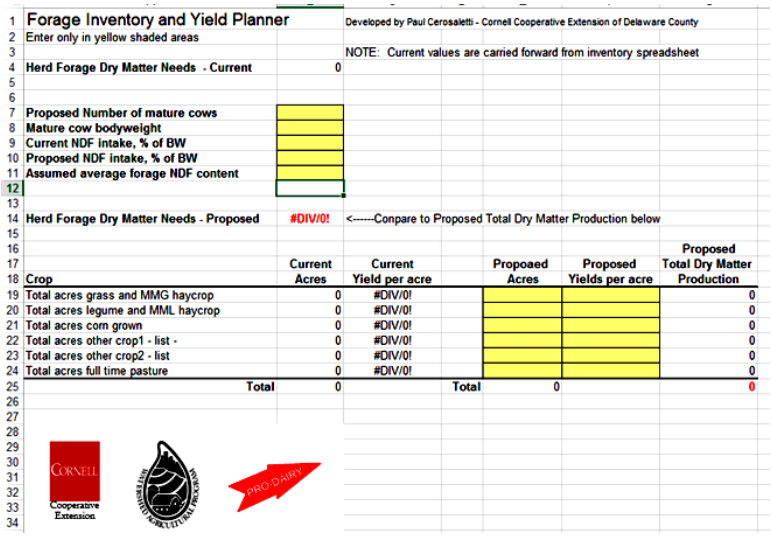
The Forage Yield and Inventory Calculator is another spreadsheet tool developed by Paul Cerosaletti that helps with crop planning and harvest strategy and accounts for grazed acres too.

If you are interested in either spreadsheet, please contact Janice at 607-753-5215 of jgd3@cornell.edu.



First Cutting Forage Harvest Window Calculator		
Developed by Paul Cerosaletti - Cornell Cooperative Extension of Delaware County		
This spreadsheet aids in forage harvest planning by calculating the number of acres that need to be harvested per day and per mow/dry/harvest cycle to achieve a desired harvest window for first cutting	Enter in this column	
Inputs		
Number of grass hay acres (include fields cut for hay and then grazed but not fields/pastures that are onlly grazed)	50	
Number of acres of grass-legume hay (approx 50% of each; include fields cut for hay then grazed)	75	
Number of acres of Legume (>60% legume; include fields cut for hay then grazed)	50	
Percentage of days within harvest window that are not workable due to rain	50%	
Minimum Grass NDF content acceptable	55	
Maximum acceptable grass NDF content	60	
Minimum legume NDF content acceptable	35	
Maximum acceptable legume NDF content	45	
Number of days from mowing to chopping/baling - Grass	1	
Number of days from mowing to chopping/baling - Grass-Legume	2	
Number of days from mowing to chopping/baling - Legume	3	
Output	Required Average Number of acres harvested per workable day,	Required Number of acres harvested per mow/dry/harvest cycle*
Grass	20	20
Grass-Legume	30	60
Legume	8	23

* - The period of time from when the crop is mowed until when it is chopped or baled. Required acres harvested per cycle reflect that due to drying time, more acres need to be mowed in Day 1 of the cycle in order to harvest the total acres within the desired quality window



Forage Inventory and Yield Planner					
Developed by Paul Cerosaletti - Cornell Cooperative Extension of Delaware County					
Enter only in yellow shaded areas					
		NOTE: Current values are carried forward from inventory spreadsheet			
Herd Forage Dry Matter Needs - Current	0				
Proposed Number of mature cows					
Mature cow bodyweight					
Current NDF intake, % of BW					
Proposed NDF intake, % of BW					
Assumed average forage NDF content					
Herd Forage Dry Matter Needs - Proposed	#DIV/0!	<------Conpare to Proposed Total Dry Matter Production below			
Crop	Current Acres	Current Yield per acre	Propoaed Acres	Proposed Yields per acre	Proposed Total Dry Matter Production
Total acres grass and MMG haycrop	0	#DIV/0!			0
Total acres legume and MML haycrop	0	#DIV/0!			0
Total acres corn grown	0	#DIV/0!			0
Total acres other crop1 - list -	0	#DIV/0!			0
Total acres other crop2 - list	0	#DIV/0!			0
Total acres full time pasture	0	#DIV/0!			0
Total	0		Total	0	0

Dairy

U.S. Milk Production Review for January 23, 2015

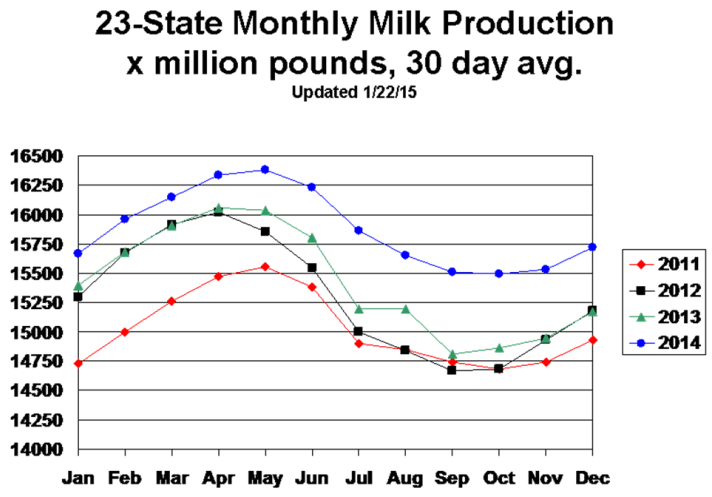
USDA Dairy Market News
Rick Whipp, International Dairy Market Reporter

Please Note: The graphs below reflect USDA data that has been worked to reflect 30 day averages. It is my view that such an average gives a better picture, to compare and contrast per month milk production and the factors involved in milk.

USDA's NASS Milk Production Summary:

December Milk Production up 3.2 percent

Milk production in the 23 major States during December totaled 16.2 billion pounds, up 3.2 percent from December 2013. November revised production at 15.5 billion pounds, was up 3.5 percent from November 2013. The November revision represented an increase of 12 million pounds or 0.1 percent from last month's preliminary production estimate.

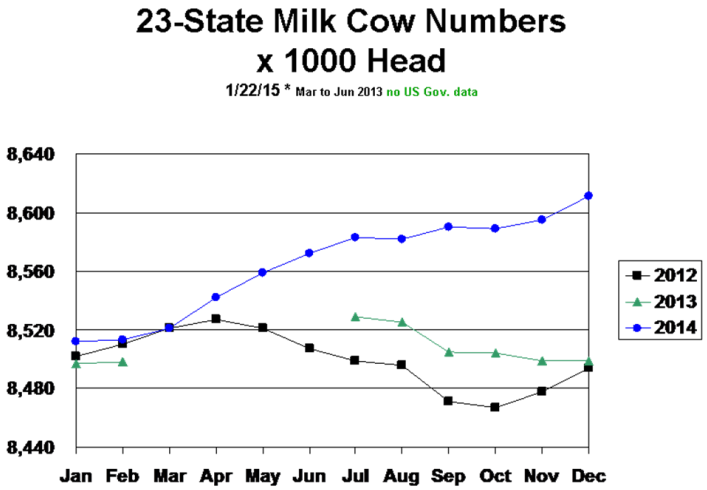


The dairy herd for the 23 states

The number of milk cows on farms in the 23 major States for December was 8.61 million head, 107,000 head more than December 2013, and 16,000 head more than November 2014.

Data Points to Ponder:

- 20 of the 23 states showed milk production increases compared to December 2013, ranging from +0.5% to +9.7%. Note California production dropped slightly below year ago levels.
- 3 of the 23 states recorded reductions in herd size, while 4 states held steady.
- 21 of 23 states increased milk production per cow with 1 state unchanged and 1 lower.

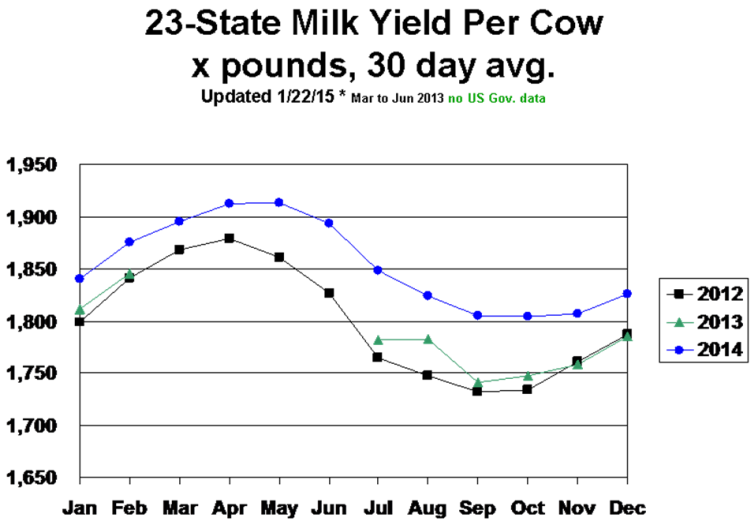


Milk Cows and Production – 23 Selected States: December 2013 and 2014

[May not add due to rounding]

State	Milk cows [1]		Milk per cow [2]		Milk production [2]		
	2013	2014	2013	2014	2013	2014	Change from 2013
	(1,000 head)	(1,000 head)	(pounds)	(pounds)	(million pounds)	(million pounds)	(percent)
Arizona	191	194	1,985	2,040	379	396	4.5
California	1,781	1,780	1,950	1,950	3,473	3,471	-0.1
Colorado	140	145	2,055	2,115	288	307	6.6
Florida	123	124	1,600	1,650	197	205	4.1
Idaho	565	579	1,960	1,980	1,107	1,146	3.5
Illinois	96	94	1,630	1,650	156	155	-0.6
Indiana	178	180	1,820	1,865	324	336	3.7
Iowa	206	209	1,870	1,935	385	404	4.9
Kansas	136	143	1,845	1,870	251	267	6.4
Michigan	380	402	2,020	2,060	768	828	7.8
Minnesota	460	460	1,665	1,705	766	784	2.3
New Mexico	323	323	2,050	2,060	662	665	0.5
New York	613	615	1,820	1,890	1,116	1,162	4.1
Ohio	267	268	1,680	1,710	449	458	2.0
Oregon	124	125	1,675	1,655	208	207	-0.5
Pennsylvania	530	530	1,675	1,730	888	917	3.3
South Dakota	95	98	1,815	1,870	172	183	6.4
Texas	440	470	1,820	1,870	801	879	9.7
Utah	94	96	1,820	1,940	171	186	8.8
Vermont	132	132	1,650	1,705	218	225	3.2
Virginia	94	93	1,600	1,630	150	152	1.3
Washington	266	277	1,955	1,970	520	546	5.0
Wisconsin	1,270	1,274	1,805	1,855	2,292	2,363	3.1
23-State Total	8,504	8,611	1,851	1,886	15,741	16,242	3.2

[1] Includes dry cows. Excludes heifers not yet fresh.
[2] Excludes milk sucked by calves.



23 State Production per Cow

Production per cow in the 23 major States averaged 1,886 pounds for December, 35 pounds above December 2013. This is the highest production per cow for the month of December since the 23 State series began in 2003.

Grocery Stores Are Running Out of Organic Milk

By Lydia Mulvaney, Bloomberg
http://www.bloomberg.com/news/articles/2015-02-10/not-only-hipsters-cry-when-u-s-grocers-run-out-of-organic-milk

About once a week the phone rings at the Dill Pickle Food Co-op in Chicago's artsy Logan Square neighborhood with the same question: Got milk? Organic, to be exact.

"I'll have people call up and say, 'hey, I know the truck's coming on Tuesday, can you put aside three half-gallons?'" said Dana Bates-Norden, 33, who works as the buyer of perishable goods for the store, which in 2014 started selling out of the glass-bottled milk it gets from Midwest organic dairies within two days. "When I first started two years ago, I felt like I ended up having to write off a lot of organic milk, and now, I really can't keep it in stock."

Americans spent an estimated $35 billion on organic groceries in 2014. About $5.1 billion of that went to dairy, more than doubling from a decade earlier, data from the Nutrition Business Journal published on the U.S. Department of Agriculture website show. With retailers like Wal-Mart Stores Inc. trying to attract more organic-food shoppers while McDonald's Corp. uses the milk -- which can cost almost twice as much as regular -- in some McCafe coffees, producers are struggling to keep up with demand.

Even in Wisconsin, the state with the most organic dairies, stores are posting signs warning of shortages, the USDA has said. At Fresh Madison Market in the state's capital city of Madison, sales of the milk have doubled over the past year and rising demand spurred a 10 -day shortage in early January, owner Jeff Maurer said by telephone Feb. 9.

'More Educated'

"You've got customers that are more educated on the benefits of organic," Jim Hyland, a spokesman for Milwaukee-based Roundy's Supermarkets, said in a Feb. 3 telephone interview. Some of the company's 149 stores in Wisconsin and Illinois had shortages of the milk in 2014, even though store space allotted to organic dairy products has doubled over the last five years. This "is not something that's going to shrink," he said. "It's only going to increase in demand."

It's not just hipsters going organic. About 45 percent of Americans seek out organic foods, according to a Gallup poll released in August. At Chicago's Dill Pickle, the customers range from younger singles to families with children and older buyers, Bates-Norden said.

Sales of organic milk jumped 9.5 percent in the first 11 months of 2014 to 2.26 billion pounds, the latest USDA data show. By contrast, consumption for the regular variety is slowing, with demand down 3.8 percent. Purchases of conventional milk are still much larger than organic, though, with 43.49 billion pounds sold over the same period.

Prices Climb

Retail prices for organic milk climbed 8.4 percent in the 12 months ended Feb. 6 to $3.89 for a half gallon, according to the USDA. Conventional prices rose 14 percent to $1.92.

Here's what consumers get for that $1.97 premium: Milk marketed as organic must come from cows that aren't treated with hormones or antibiotics, and the animals must be able to graze on organic pasture and eat only organic feed -- grains such as corn that aren't genetically modified and haven't been treated with certain chemical pesticides. All that is regulated by the government.

Turning a regular dairy farm into one that can get certified organic is lengthy and pricey.

Under current USDA regulations, the process can take three years as farmers convert the pastureland and feed crops. In the third transition year, farmers have to feed their animals organic-only feed, which can increase costs by about $365,000 at a 500-cow dairy, according to Andrew Dykstra, president of the Chico, California-based Western Organic Dairy Producers Alliance.

Supply Hurdles

"It's a big deal to transition over for most people," Dykstra said in an e-mail Feb. 2. "It's not something to take lightly."

Adding to the supply hurdles, rising dairy exports have kept conventional milk prices high, with futures in Chicago reaching a record in September. That means profits for organic milk have trailed conventional for four years, according to Matt Gould, a Madison, Wisconsin-based analyst for the Dairy & Food Market Analyst newsletter.

Milk futures for February settlement slid 0.2 percent to close at $15.75 per 100 pounds Tuesday on the Chicago Mercantile Exchange. The price touched an all-time high of $25.30 on Sept. 25.

Organic Valley, the largest cooperative of organic farmers in the U.S., pays part of the cost for dairies to make the conversion. In an effort to encourage conversions, the coop this year increased that compensation by 75 percent, George Siemon, the chief executive officer, said in a telephone interview Feb. 2.

Twin Oaks

For Kathie Arnold, who owns 140 milking-age dairy cows at Twin Oaks Dairy in Truxton, New York, rising prices are allowing her to invest in new equipment. Arnold estimates her milk sold in January fetched about 14 percent more than a year earlier, the biggest annual increase since she went organic in 1998.

"It means we can do more upgrades on the farm," Arnold said in a telephone interview Feb. 2. "We're at the point with our facilities where we can't expand without moving across the street. This is allowing us to put money aside to enable something like that in the future."

Shoppers are expanding purchases of organic milk because it's perceived as healthier, Bob Goldin, an executive vice president at the Chicago-based research firm Technomic Inc., said in a telephone interview Feb. 4. The healthy image isn't tied to specific nutrients, rather consumers are drawn to the fact that the animals aren't treated with hormones or antibiotics, he said.

"There's a heightened sensitivity among a growing number of consumers about those issues," Goldin said. "It's not necessarily a logical link, but that's what many consumers define as healthy. The definition of what's healthy is changing."

Tips on Dealing With Extreme Cold*

By Kimberly Morrill, PhD, CCE NNY Dairy Specialist
**Originally published January 2014 — updated 11.17.14.*

The goal of this article is to provide some cold weather tips to keep you and your livestock healthy and safe during the frigid days of winter.

THE ANIMALS

WATER — Regardless whether you have dairy cattle, beef, sheep or goats, *water is critical*!

Livestock require water to maintain their immune system and stay healthy. Decreased water consumption leads to decreased feed intake, decreased milk production, decreased reproduction efficiency and reduced metabolic function.

During winter months, check water sources throughout the day to make sure they are free of ice and properly functioning.

Lactating animals have increased water requirements compared to non-lactating and youngstock. These requirements do not changes in the winter just because it is cold outside. Look into options to divert the water from the plate cooler to the water tank for the fresh pen, or price out water heaters. Yes, there may be some increased costs in December, January and February to keep the water flowing, but it's likely better than the alternative of decreased milk production and sick cows.

Pre-weaned calves require water year-round. Though water in hutches does freeze when it's -10 (or +20) and it's not a fun job lugging buckets, having sick dehydrated calves is even worse. Providing warm water (102ºF) shortly after feeding milk is when the calves will get the most benefit. Collect the water buckets 20 to 30 minutes later. This prevents frozen buckets and provides another opportunity to observe the calves.

ENERGY — Animals use energy from their diet for growth, reproduction, production, maintenance and thermoregulation.

Thermoregulation is how animals (and people) are able to maintain a core body temperature when the temperature outside changes. When the temperature outside drops below the thermal neutral zone (TNZ) the animal must divert energy from the diet to maintain body temperature. This is energy that could have been used for growth, production or immune function.

Lactating cattle — Often we do not worry about cold stress with lactating dairy cattle because as they ruminate they are producing heat. However, if the temperature drops below zero, or cows are not housed in a dry and draft free environment adjustments may be needed to accounted for increased energy needs. Work with your nutritionist to make sure energy needs are being met for cold conditions. Not adjusting energy in the diet can lead to reduced milk production and losses in reproductive efficiency.

CALVES NEED MORE ENERGY!!!

When the temperature drops below 60ºF, calves need more energy! Calves are born with <5% body fat and do not have a functioning rumen to help keep them warm. If you do not increase the energy in their diet, they will use the energy from the milk or milk replacer to stay warm and will not grow.

To improve calf health, growth and thermoregulation:

- Feed adequate of milk or milk replacer to insure that calves get enough MCals/day to meet energy requirements
- **DO NOT** increase the amount of Milk Replacer powder without also increasing the amount of water. Adding more powder to the same volume of water increases the total solids content and can lead to dehydration.
- Milk should be warm when fed (minimum 102ºF), so the calf does not have to use energy to warm the milk during the digestion process.
- Read the mixing directions of your Milk Replacer; some require a warmer mixing temperature.
- A third feeding of milk/ milk replacer may be needed to get enough energy into the calves when the temperatures drop below zero.
- Provide each calf with a calf jacket as temperatures drop.
    - ◊ Make sure each jacket is clean before placing on the calf.
    - ◊ Regularly adjust leg and belly straps as the calf is growing.

- ◊ Remove once the temperature starts to increase or the calf begins to outgrow the jacket.
- Provide enough clean and dry bedding so the calves can nest.
- Make sure the calf is protected from the wind.

UDDER CARE — Udder prep, pre and post, is always important. In wintertime it is even more important as chapped or frozen teats are a great place for bacteria to thrive. Unfortunately, freezing temperatures and teat dip don't always mix. These tips will hopefully help keep your cows happy, healthy and help you get that Quality Milk Premium!

- Make sure teats are dry before the cows leave the parlor.
- Switch from a water-based to a glycerin-based teat dip.
- Store teat dips in an area that is less likely to freeze
- Freezing can inactivate some ingredients as well as cause ingredients to separate.
- Make sure milking systems are functioning properly as well as provide cows with clean, dry housing and protection from the wind.

THE BARN

Smoke & Fire detectors — Make sure these are in all of your barns and in your house and make sure they work. With all of the heater systems that get set up during winter, safety should be the #1 factor.
Windows & Doors — Double check that all windows and doors that have been opened during the day (or warmer weather) have been closed and latched to prevent water or other items from freezing. Everyone wants to get home at night, but take 5 minutes to double check things at night or create a check list and make this one persons responsibility.

Vaccines — Make sure vaccines, medication and other thermal-sensitive items are properly stored or temporarily relocated. Last winter a farmer told me it was so cold out that the vaccine was freezing in the syringe. This inactivates the vaccine, providing no benefit to the animal and costing the farmer twice the money as another round of vaccine had to be bought.

Space heaters — Space heaters can be the difference between freezing and 33ºF, but USE WITH CAUTION and COMMON SENSE! Do not place near flammable items such as paper towels or bedding.

YOU

You have spent all day out in the cold caring for the animals that are your livelihood. **You need to take care of yourself.**

WATER — Dehydration can occur in winter months just as easily as in the heat. Make sure you are drinking plenty of fluids and not just coffee! Signs of dehydration include, but are not limited to, headache, dizziness, fainting, tiredness and lack of appetite.

Clothing — Be prepared, have lots of extra layers available.

- Dress in layers.
- Wear clothes that wick away the sweat.
- Keep extra clothes in the barn and in your vehicle.
- If you get wet, don't "tough it out." Take a few minutes, put on warm, dry clothes and stay healthy. A few minutes added onto chores is a lot better than frostbite due to wet socks or a week in the hospital with pneumonia due to wet overalls.
- Buy some cheap, "stretchy" gloves—they fit well UNDER your milking gloves and help keep your hands a little warmer.

STRESS

With the challenges that come with the cold—people getting sick, cows and livestock needing extra attention, barns needing additional maintenance, and then having to make sure everything is running smoothly at home—it's important not to get overwhelmed.

- Take a 15 minute coffee/hot chocolate break to warm up and catch up with your kids and spouse.
- Create a schedule with managers and employees so that everyone can take some time off during winter. Even a day or two away from the farm can improve your mental and emotional wellbeing.
- If you are feeling overwhelmed, take a break. Call your neighbor, your spouse, a sibling or your local Extension Educator and find out what programs are coming up.

Farm Management

Land Rental Agreements

Peggy Murray, Farm Business Management, CCE Jefferson and Lewis Counties.

Most farms, at one time or another, lease land from another landowner. For many the land has been rented for as long as they have been farming, but sometimes the lease can be for one year only. Whatever the length of the rental, it is a good idea to have a written contract. The rental contract can be as detailed or as short and to the point as you want to make it.
When putting together a rental agreement, make a list of what both parties want to have spelled out in the agreement. Below is a list of items that should be listed in the agreement.

- ♦ the names of both parties (the landlord and the tenant)
- ♦ the number of acres that will be rented
- ♦ where the land is located (township, county)
- ♦ the price per acre
- ♦ the length of the lease (number of years)
- ♦ when the rent must be paid

The landowner has the right to say what can be done to his land, so it makes sense to describe what the land will be used for. "For agricultural practices" is a term that can be used to cover the basic farming practices such as plowing, planting, and harvesting. In some instances, the landowner does not want certain farming practices done on their land; if so, that should be included in the agreement.

Again the contract does not have to be complicated. If it's only land that is being leased, then a basic lease with the above items should satisfy both parties. Both parties should have a copy of the signed lease. It is a good idea to renew your leases every few years to make sure that both parties are happy with their arrangement.

A written lease agreement takes all the guess work out of what both parties thought they agreed to. Take the time to look at your agreements; if you don't have a written copy, add that to your to-do list this winter. You can contact Janice if you are interested in an example of a written lease.

Forage

Review Forage Inventory on Ground Hog Day

Ron Kuck, Cornell Cooperative Extension of Jefferson County

"February second, Candlemas day
Half your wood and half your hay,
You'll make it safely through 'til May.
Half the winter has passed away,
We'll eat our supper by the light of day!"
(Old English saying; author unknown)

We know February 2 as Groundhog Day, which is the mid-point between the first day of winter and the spring solstice. 2014 was a frustrating year for harvesting and storing high quality forages. With lower milk prices, feed costs moderating, and the Margin Protection Program, this would be a good time to see how much winter feed you have and make a record of it.

There is, however, no one best time to do an inventory. Doing an inventory at different times for different reasons may be beneficial.

October/November – At this time, make a projection to see if purchased feed will be needed or if consumption rate may need to be adjusted. This will allow needed purchases when commodity prices are apt to be lower in winter and will allow purchases before December 31, assisting in tax management. (Anytime you are required by a lender to provide a balance sheet, a feed inventory and the feed value is needed).

February/March – This is the time to make a mid-course correction prior to the harvest season. Estimates of density will be more accurate after having fed from storage for a while, so estimates of quantity stored will be more accurate.

June/July – Checking at this time can provide you with an early warning of inadequacy of feed supplies for the upcoming feeding season. Purchases of standing crops remain an option if deficiencies are discovered.

Worksheets are available at your local Extension office for help in doing your inventory and its management. Worksheets can also be downloaded from the Cornell PRO-Dairy website at http://www.ansci.cornell.edu/dm/factsheets.html.

Don't overlook the assistance available from nutrition professionals and Extension educators who can help you with these issues and decisions. This information might help you plan to make and preserve more feed, allocate acreage, or cull differently for the coming year. Take the time on Ground Hog Day to review your operation from last year and start planning for spring.

New Opportunities

Looking for Farm Sites For Weather Stations

The New York State Mesonet Weather Observing Network
By Dr. Jerald Brotzge, NYS Mesonet Project Manager

The New York State (NYS) Mesonet Early Warning Weather Detection System is an advanced, statewide weather station network. This network will be the first of its kind in New York and will consist of up to 125 surface weather stations that will detect weather phenomena across the entire state. This weather detection system will provide federal, state, and local communities with access to high-resolution, real-time data, and more robust predictive models.

Each of the Mesonet's 125 weather stations will measure surface temperature, relative humidity, wind speed and direction, precipitation, solar radiation, atmospheric pressure, and soil moisture and temperature at three depths. In addition, 17 sites will be outfitted with lidars and microwave profilers, providing wind, temperature, and moisture profiles in the vertical. Another 20 sites will measure snow depth and snow water equivalent for hydrological applications. All of this data will be transmitted in real-time to a central location, where the data will be quality controlled and archived, and then disseminated to a variety of users. Upon completion, real-time data along with graphical products/models will be available to the public via a website.

The NYS Mesonet promises a new generation of local weather observations that will support more accurate, more precise decision-making in agriculture, emergency management, energy, ground transportation and aviation. For example, localized soil moisture and temperature data will improve irrigation efficiency, and various pest models will be much improved with more local data inputs.

The NYS Mesonet is now beginning the search for permanent site locations. Each site consists of a 33-ft tower centered within a 33' x 33' plot of land. To ensure the highest quality of data each station must be at least 300 feet from the nearest obstacle (tall trees, buildings, etc.) or potential heat sources (pavement). If you would be interested in hosting a Mesonet site, please contact Dr. Jerald Brotzge at jbrotzge@albany.edu. If you would like to learn more about the NYS Mesonet, please visit our website at http://nysmesonet.org.

CROP PROTECTION MEETING

March 19, 2015
American Legion, 71 Old Ithaca Rd., Horseheads
Cost: $25 includes lunch / 2.0 *DEC credits, categories 1A, 21-25*
Registration at 9:30 am

Topics: (10:00 am to 2:00 pm)

Welcome & Introduction
-Janice Degni, Area Extension Field Crops Specialist

Nutritional Needs of Corn-Silage, Grain and Alfalfa
-Gene Gangwish, CPS Ag Products Manager

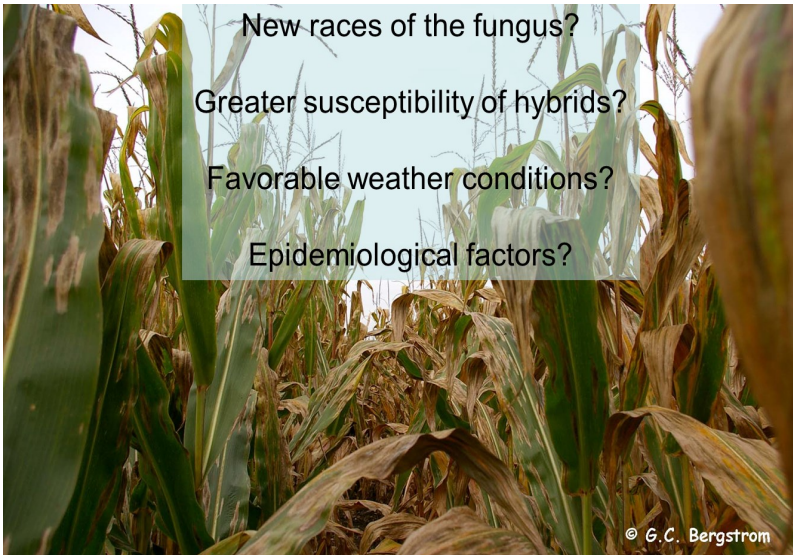
New Developments in Soybean and Small Grain Diseases
-Janice Degni, Area Extension Field Crops Specialist

Grass and Broadleaf Control for Corn, Soybeans & Alfalfa
-Gene Gangwish, CPS Ag Products Manager

Cover Crops
-Dr. Quirrine Ketterings

Crop Production Services

Co-Sponsored by CPS



Northern Corn Leaf Blight is an endemic problem

March 25, 2015

Dryden Fire Hall
26 North St., Dryden, NY
Registration at 12 pm
Instruction: 12:30-3:30pm
Cost - $20/snacks only
(You are welcome to bring a lunch)

Manuals available at an additional cost.
Please order books when registering.
Pre-register at 607-753-5078. Questions contact Janice at 607-753-5215.
(Pre-registration important to order books for exams)

Who Should Attend?:

- **Individuals seeking a license for use of pesticides on their own properties** (Private license).
- **Individuals seeking a commercial license.** *(Please note: This course will provide a basic introduction to safe pesticide handling and use but additional coursework and experience may be necessary for eligibility.)*
- **Current applicators seeking re-certification credits**

Agenda :

- **Pesticide Laws and Regulations**
- **The Pesticide Label**
- **Protecting the Pesticide Handler**
- **Guidelines for Proper Handling of Pesticides**
- **Pesticides and the Environment**
- **Integrated Pest Management**
- **Core & Category Manual Review and Practice Exam**

COVER CROPS & SOIL HEALTH

Monday, March 16, 2015

Dryden Fire Hall
26 North St., Dryden, NY
(Route 13, North of 4 Corners in Dryden)

11:45 am Registration and Topics 1 pm—3pm

11:45 am—1pm **Registration & Lunch**

1 pm **Welcome & Introduction**
-Janice Degni, Area Extension Field Crops Specialist

Cover Crops
-Dr. Quirrine Ketterings

2:30 **Measuring Soil Health with the Cornell Soil Health Test**
-Janice Degni, Area Extension Field Crops Specialist

Fall-planted Triticale with different rates of Nitrogen topdress applied in the spring

To Register: call 607-753-5078 or online at scnydfc.cce.cornell.edu

---

2015 Herd Health & Nutrition Conferences

March 17, 2015-Holiday Inn, Liverpool/Syracuse, NY

The Herd Health and Nutrition Conferences provide an opportunity for dairy producers, veterinarians, feed industry representatives and agriservice personnel to increase their knowledge of current herd health and nutrition management techniques while interacting with other professionals.

Full agenda and registration at:

Prodairy.cals.cornell.edu/HHNC

Or

Northeastalliance.com

"Good Help is Hard to Find": Learning to Effectively Manage Your Employees

Betsy Hicks, Area Dairy Specialist

Why is employee turnover so hard? To list just a few reasons, whether that employee left abruptly or not, they leave a gap in your workforce that takes time to fill and burdens you and your other workers. It's also very costly in terms of lost productivity, training cost and management time that could be spent in other areas of the business. Labor experts say that a *figure of 100-150 percent of the position's salary for hourly workers accurately represents the cost of employee turnover*. This means if an employee is making $10 an hour and their annual wage is about $26,000, the cost of their turnover can be as much as $39,000! It's a huge amount of money for just one employee, but for a farm with 20 employees and just 10% turnover per year, the cost could be between $75,000 and $90,000 per year.

Often I'll hear producers say, "I just haven't found the right person for the job". But while it's necessary for farms to hire someone that has the right skills for a farm workplace, it's also necessary to develop those that you do hire. Michigan State University Extension Specialists Phil Durst and Stan Moore started a Managing Dairy Employees project in 2012 to help the owners and managers of dairy operations improve their people skills. The project found that the *employee turnover rate as well as employee engagement varied widely* among the participating farms. The reason for this? How management viewed their workforce and actually interacted with their employees made the difference in whether employees stayed or left. So often today, producers are farmers because they're good at managing cows or machinery and have never had training in the management of people.

So as a producer, and by default, a manager, what items should you have in your toolbox for managing your workforce?

1. Employee Handbook: aids communication with employees, helps assure that all employees are treated fairly and consistently, and encourages employers to make decisions about employee policies
2. Employee Job Descriptions: duties and responsibilities are clearly laid out for the employee. Managers may even set a schedule for the employees' time during the day.
3. Standard Operating Protocols (SOP's): the first two tools listed tell how the farm operates and labels what is expected from the employee. This tool details exactly how the duties the employee has in their job description will be carried out.
4. Timely Performance Reviews: the basis for reviews has already been laid out with the job description the employee was given at hiring. The manager can evaluate how well the outlined duties and responsibilities are being carried out, based on SOP's or other feedback and set goals for the next time frame.

None of these items are something that is created overnight. As a manager, you may need to block out a part of your day once a week to start to create some of these documents. If your farm has none of these, you shouldn't feel alone – many producers know that they're important but have no idea where to start. The whole process is about creating a culture that is specific to your farm, and may take some time to fine tune. The culture idea may be completely foreign to your employees, but getting their buy-in by starting employee meetings may be a good place to start. The process can be outlined and you may even enlist the help of each employee to help detail what their day entails. Available online are templates for job descriptions, such as calf feeder or parlor manager, which can be duplicated and tweaked to be specific to your farm. The same can be found with creating SOP's – calving protocols, treatment protocols, parlor routines, etc, can all be found and tweaked to give you a basis for creating the tools in your management toolbox.

Dedication to creating a new culture for managing employees is necessary. It won't happen overnight, and you may find that some of your current employees just don't fit in with the culture you're trying to create. But by working through some of these documents, you may find your farm is more appealing to job seekers because of the fact that you have them, and your current employee engagement just might go up because their roles on farm have been clearly outlined. Both will get your farm farther in the end.

Durst and Moore share some thoughts on how to develop your employees:

1) Focus employees on achieving performance standards
- Producers and managers often have trouble setting goals – this leaves the employee without good direction
- Set and communicate standards
- Each employee should have their own standards to work towards

2) Provide employees the opportunity to learn
- Employers often underestimate the desire of employees to learn
- Learning should be progressive
- Learning should teach the why

3) Provide feedback regularly to employees
- The standards you set are the basis for the feedback – this way there are no surprises
- Feedback should be specific for the individual as well as the team
- Facilitate and encourage a team atmosphere
- Create reporting and communication between shifts
- Emphasize the need to support one another
- Use the mantra, "One team, team farm"

4) Give responsibility and authority to employees
- Encourage employee ideas and listen to them

Crop Insurance Deadlines Reminder

USDA Risk Management Agency

Original from UVM Extension draft by Bob Parsons

The new Farm Bill contains a number of important changes to USDA programs that will impact our farmers. They are outlined below.

- **Ag Risk Coverage (ARC) &Price Loss Coverage (PLC)** replace the Base Acres programs, leaving the decision of which program to participate in up to the producer. The Agricultural Risk Coverage (ARC) & Price Loss Coverage (PLC) programs are managed by the Farm Service Agency (FSA). Both programs are limited area risk programs, limited because of how little of the producer's risk is covered and will commit your farm for 2014-2018. More information on these choices is provided in the attached Vermont Corn Silage & Grain Corn fact sheet. These are complicated programs that need to be carefully reviewed in order that you make the best choice for your operation by the following dates:
  - ◊ **February 27:** deadline to update yields and re-allocate bases for ARC/PLC.
  - ◊ **March 31:** Final date to make an election in the ARC/PLC program.
  - ◊ *Contact your county Farm Service Agency (FSA) office for details.*
- **Crop insurance remains as the primary disaster protection** that can cover from 50% -85% of your expected crop value in addition to the ARC/PLC programs. This year's price election for corn silage is $38.50/ton, down from $41.25 in 2014. The cost of your premium is subsidized by the USDA up to 67% and the enterprise unit option can reduce premium costs by as much as 50%. A list of crop insurance agents is enclosed for your convenience. **NAP from FSA is available to provide protection up to 65% of the expected value of crops that are not insurable.**
  - ◊ **March 16: sales closing/policy modification deadline.**
- **Noninsured Crop Disaster Assistance Program** (NAP) has been expanded to include higher coverage levels, up to 65% of the crop yield, at 100% of the FSA established prices. NAP offers protection for crops not insured by other RMA policies. Contact your local FSA office for details.
  - ◊ **March 16: deadline to enroll/modify a policy.**
- **Whole Farm Revenue Insurance** provides insurance for all commodities on the farm, tied to your Schedule F. Protects specialty and organic crops and livestock and those locally and direct marketed.
  - ◊ **March 16: deadline to enroll**
- **Conservation Compliance**: In order to receive crop insurance subsidies for 2016 a producer must certify compliance with FSA by **June 1, 2015.** The registration period for 2016 coverage for the Dairy Margin Protection Program (MPP) is from **July 1 to September 30, 2015**. Nearly 70% of Vermont's dairy farms now have some form of price protection, either through MPP or Dairy Livestock Gross Margin (LGM) insurance.

-Any producers with questions are welcome to contact Fay Benson for more information at 607-753-5213 or afb3@cornell.edu-

PERENNIAL FORAGE GRASS CULTIVAR YIELD TRIAL SUMMARY - NEW YORK - 2014

Table 4: 2014 Perennial Forage Grass Yield Summary — **Ithaca, Tompkins Co., Sown 2011, 2012,2013, 2014**

T/A = tons per acre dry matter — **Marketing contacts listed on page 9**

5%LSD = claim statistically significant yield differences between two varieties, the yield difference must be equal to or greater than the LSD.

Heading date is date when 5 heads in a 3.5 x 16 foot plot were visible. Trials were harvested four times per year, unless otherwise noted.

Soils: 2011 plantings Williamson silt loam, 2012 and 2013 Niagara silt loam, 2014 Rhinebeck silt loam.

		2014			2013		2012		
		Total	Oct.	Heading	Total	Heading	Total	Heading	3 or 2-Yr.
	Marketer	Season	% Stand	Date	Season	Date	Season	Date	Total
		T/A			T/A		T/A		T/A
Timothy		**Sown May 11, 2011**							
Richmond	check	5.50	75	1-Jun	6.09	24-May	6.23	22-May	17.82
Summit	Seedway	5.32	75	30-May	5.95	24-May	6.21	19-May	17.47
Crest	Seedway	5.18	68	1-Jun	5.53	24-May	5.51	22-May	16.22
Climax	check	5.00	68	5-Jun	5.63	3-Jun	5.00	30-May	15.64
analyzed 2 reps.	LSD(.05)	0.82	9		0.72		0.61		
Timothy		**Sown May 18, 2012**							
TM0801	FFR	6.27	74	28-May	8.21	24-May			14.49
TM0802	FFR	5.94	76	3-Jun	8.19	29-May			14.13
Summit	Seedway	5.76	74	29-May	7.87	24-May			13.63
Crest	Seedway	5.56	79	4-Jun	7.46	29-May			13.02
Ovation	Semican	5.36	73	3-Jun	7.51	29-May			12.87
Climax	check	4.98	74	4-Jun	7.69	3-Jun			12.68
Kara	Semican	5.02	76	9-Jun	7.62	3-Jun			12.64
SummerGraze	BrettYoung	4.98	71	9-Jun	7.15	5-Jun			12.13
Clair	check	4.86	78	3-Jun	7.11	29-May			11.98
	LSD(.05)	0.24	6		0.28				
Timothy		**Sown May 18, 2013**							
Derby	Growmark FS	7.47	86	28-May					
Alternate	BrettYoung Seeds	7.31	83	1-Jun					
Zenyatta	DLF International Seeds	7.09	89	28-May					
TM9701	Allied Seed, L.L.C.	6.97	89	28-May					
Php 6C	DLF International Seeds	6.77	85	29-May					
Project	BrettYoung Seeds	6.65	85	29-May					
Clair	check	6.61	86	1-Jun					
Climax	check	6.15	83	4-Jun					
	LSD(.05)	0.49	5						
Orchardgrass		**Sown May 11, 2011**							
Extend	Seedway	4.44	45	18-May	7.46	10-May	7.07	9-May	18.97
IS-OG 53	DLF International Seeds	4.29	35	18-May	7.27	13-May	7.20	10-May	18.76
Potomac	check	4.16	55	18-May	7.31	10-May	6.90	9-May	18.37
Olympia	Pennington Seed	4.11	55	28-May	7.14	19-May	6.86	20-May	18.11
	LSD(.05)	0.27	23		0.28		0.32		
Orchardgrass		**Sown May 18, 2012**							
Checkmate	PICKSEED	4.84	45	25-May	9.19	19-May			14.03
PPG-0G102	Mountain View Seed	4.81	43	27-May	9.14	19-May			13.95
PPG-0G101	Mountain View Seed	5.04	45	27-May	8.60	13-May			13.65
Potomac	check	4.89	43	21-May	8.75	13-May			13.64
PPG-0G103	Mountain View Seed	4.29	33	6-Jun	9.23	20-May			13.52
Orca	PICKSEED	4.75	53	25-May	8.32	17-May			13.07
Niva	DLF International Seeds	4.27	40	27-May	8.09	22-May			12.36
	LSD(.05)	0.36	8		0.54				
Orchardgrass		**Sown May 18, 2013**							
Pawnee	Seedway	5.87	73	21-May					
Pennlate	check	5.65	63	18-May					
Bounty	Seedway	5.62	70	19-May					
Haymaster	Growmark FS	5.61	60	18-May					
Potomac	check	5.52	60	19-May					
Harvestar	Preferred Seed	4.93	45	27-May					
Extend	Seedway	4.93	48	18-May					
OG 62	DLF International Seeds	4.81	45	23-May					
OG 61 M2	DLF International Seeds	4.56	35	27-May					
	LSD(.05)	0.34	9						
Bromegrass		**Sown May 11, 2011**							
Peak	Seedway/FSG	5.49	78	22-May	7.01	19-May	4.59	14-May	17.08
Hakari	Barenbrug	4.40	55	1-Jun	6.89	25-May	6.17	22-May	17.46
	LSD(.05)	0.46	12		1.14		0.66		
Bromegrass		**Sown May 18, 2013**							
BAR BiF1GRL	check	6.95	83	23-May					
York	check	6.78	90	23-May					
Peak	Seedway/GROWMARK FS	6.29	90	23-May					
Success	Allied Seed, L.L.C.	6.11	43	23-May					
	LSD(.05)	0.95	10						

PERENNIAL FORAGE GRASS CULTIVAR YIELD TRIAL SUMMARY - NEW YORK - 2014

PERENNIAL FORAGE GRASS CULTIVAR YIELD TRIAL SUMMARY - NEW YORK - 2014

		2014			2013		2012		
		Total	Nov.	Heading	Total	Heading	Total	Heading	3 or 2-Yr.
	Marketer	Season	% Stand	Date	Season	Date	Season	Date	Total
		T/A			T/A		T/A		T/A
Tall Fescue		**Sown May 11, 2011**							
KY 31 E-	check	5.44	74	25-May	8.85	21-May	7.46	14-May	21.74
KY 31 E+	check	5.23	73	25-May	9.11	21-May	7.05	13-May	21.39
Enhance	Seedway	5.08	74	25-May	8.71	21-May	6.77	14-May	20.56
Tower 647	DLF International Seeds	4.81	65	28-May	8.32	24-May	6.58	22-May	19.71
	LSD(.05)	0.33	6		0.44		0.69		
Tall Fescue		**Sown May 18, 2012**							
Tuscany II	PICKSEED	5.69	64	27-May	9.20	20-May			14.89
Flourish	Seedway/ Allied	5.79	73	28-May	9.10	22-May			14.89
Kora	DLF International Seeds	5.85	60	28-May	8.94	22-May			14.79
Tower	DLF International Seeds	5.18	61	1-Jun	8.89	24-May			14.07
PPG-FTF101	Mountain View Seeds	5.69	70	25-May	8.98	19-May			14.66
PST-5CAN	BrettYoung	4.55	74	25-May	7.45	19-May			12.00
KY 31 E+	check	5.56	66	28-May	8.98	22-May			14.54
KY 31 E-	check	5.67	70	27-May	9.28	22-May			14.94
BARFaFL 118701	Barenbrug	5.06	64	28-May	8.92	20-May			13.98
BARFaFL 118702	Barenbrug	5.27	68	28-May	8.72	22-May			13.99
	LSD(.05)	0.32	7		0.58				
Tall Fescue		**Sown May 18, 2013**							
Jesup MaxQ	Pennington	7.53	83	23-May					
KY 31 E+	check	7.45	80	23-May					
KY 31 E-	check	7.32	80	23-May					
KYFA9821 / AR584	U of Kentucky	7.17	80	23-May					
KYFA9301 / AR584	U of Kentucky	7.03	84	23-May					
FTF 70B	DLF International Seeds	6.80	75	27-May					
GT213 AR584	AgResearch USA Limte	6.65	79	23-May					
FTF 73C	DLF International Seeds	6.60	83	25-May					
AGRFA-200 AR584	AgResearch USA Limte	6.02	63	29-May					
AGRFA-179 AR584	AgResearch USA Limte	5.57	55	27-May					
	LSD(.05)	0.38	8						
Perennial Ryegrass and Festulolium			**Sown May 11, 2011**						
Tetramag	Mountain View Seeds				6.13	24-May	6.09	22-May	12.22
Gain (Festulolium)	Seedway				6.28	22-May	5.11	14-May	11.39
Boost	Seedway		**Trial**		5.83	21-May	5.31	19-May	11.14
Spring Green (Festuloli	check		**Winterkilled**		5.59	21-May	5.46	14-May	11.06
Tetrasweet	Mountain View Seeds				5.49	22-May	4.63	20-May	10.11
Tivoli	DLF International Seeds				5.61	3-Jun	4.32	1-Jun	9.93
Linn	check				4.04	14-May	4.51	13-May	8.55
	LSD(.05)				0.29		0.33		
Tetraploid perennial ryegrass Tivoli, Tetrasweet, Boost; Hybrid Ryegrass - Tetramag; Diploid perennial ryegrass -Linn; festulolium									
Perennial Ryegrass and Festulolium			**Sown May 18, 2012**						
Hostyn (Festulolium)	DLF International Seeds	4.25	30	4-Jun	8.02	22-May			12.28
Perun (Festulolium)	DLF International Seeds	4.10	28	4-Jun	8.01	22-May			12.10
Spring Green (Festuloli	check	4.06	45	1-Jun	7.27	22-May			11.33
Zenital	BrettYoung	4.27	53	11-Jun	6.36	3-Jun			10.62
Calibra	check	3.81	48	6-Jun	6.74	24-May			10.55
Torgal	BrettYoung	4.08	43	9-Jun	6.11	24-May			10.20
Linn	check	3.13	48	28-May	5.18	17-May			8.31
	LSD(.05)	0.35	7		0.47				
Tetraploid perennial ryegrass-Calibra, Diploid perennial ryegreass - Zenital, Torgal, Linn; Festulolium-Spring Green, Perun, Hosty									
Perennial Ryegrass and Festulolium			**Sown May 18, 2013**						
Festulolium									
Mahulena	DLF International Seeds	7.69	81	18-May					
FOJTAN	DLF International Seeds	6.96	81	25-May					
ReBAB	DLF International Seeds	6.79	80	27-May					
Hipast	DLF International Seeds	6.56	68	27-May					
Spring Green	check	4.95	48	27-May					
Perennial Ryegrass									
RAD-MFP142	Allied Seed, L.L.C.	4.92	55	9-Jun					
Calibra	check	4.75	53	4-Jun					
RAD-MRF145	Allied Seed, L.L.C.	4.60	53	1-Jun					
Linn	check	4.24	71	23-May					
Full Throttle	Columbia Seeds	Winter killed							
	LSD(.05)	0.56	7						
	Marketing Co.								

PERENNIAL FORAGE GRASS CULTIVAR YIELD TRIAL SUMMARY - NEW YORK - 2014

I thought the Cornell Forage Trial Results might be useful for picking your grass species & varieties. For the full report, go to: **http://plbrgen.cals.cornell.edu/sites/plbrgen.cals.cornell.edu/files/shared/documents/**

-Janice

TTNDFD – It's a Mouthful

Betsy Hicks, Area Dairy Specialist

Here's a new acronym for the nutritionists out there to remember – **TTNDFD – Total Tract NDF Digestibility**. TTNDFD is a new tool, developed by Dr. David Combs from the University of Wisconsin-Madison, to better evaluate digestibility of forages and monitor total digestibility of dairy rations.

So what makes TTNDFD different from other measurements of fiber digestibility? Other measurements, in basic terms, only take into account the digestibility of the NDF portion at a specific time point - many times, at 24, 30 and 48 hours or give just the amount of indigestible NDF (iNDF) after everything has been digested. TTNDFD is different because along with the amount of fiber that can be potentially digested, it factors in the rate of digestion of the fiber, as well as the rate of passage through the animal (Figure 1). Another way of thinking about TTNDFD is how far you can travel on a tank of gas. To find the answer, you need to know how many gallons the tank is (potentially digestible NDF) as well as the miles traveled per gallon (rate of fiber digestion).

So why should we start to use TTNDFD? It has been well determined that balancing NFC and NDF is critical to the high producing dairy cow, both in terms of health and milk production. Combs states that while the variability in starch digestibility can account for 3-5 lbs of milk production per day, he argues that the variability of fiber digestibility is worth more than that at 6-7 lbs of milk per day. The hard part, however, is assessing just how well fiber is being digested at the rear end of the cow. If you've ever had your high group's manure screened, you might know that a 40% digested sample doesn't look much different than a 50% digested sample. But, the difference in milk production can be huge: a 2-3 unit change in total fiber being digested corresponds to a 1 lb change in milk yield.

So what should my forages look like using TTNDFD? An <u>average</u> TTNDFD for corn silage and alfalfa haylage will be around 42%, ranging from 25% (very poor) to over 50%. Grasses are slightly higher at 44% on average, with 25% being poor to over 55% being excellent. A good rule of thumb for a goal for corn silage and alfalfa would be 48% or higher, grasses at 50% or higher. A BMR corn silage sample can range from 30% (poor) to over 60%, with an average around 46%.

How can I use TTNDFD? The power of TTNDFD really comes to light when looking at changing forages, whether from one crop year corn silage to the next, or one cutting to another. As mentioned before, the scale can be used to compare across different types of forages, as well as across the entire diet. Previously when we only had NDF and

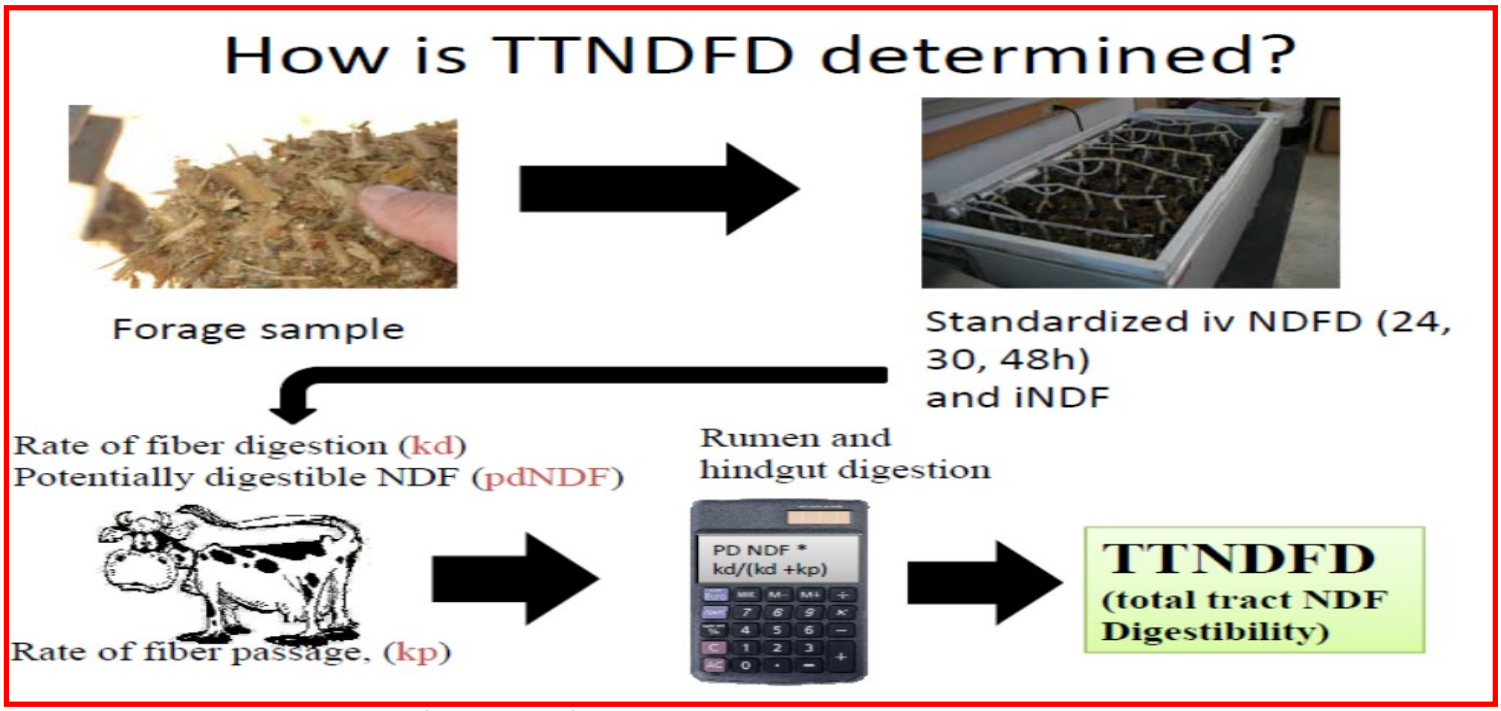


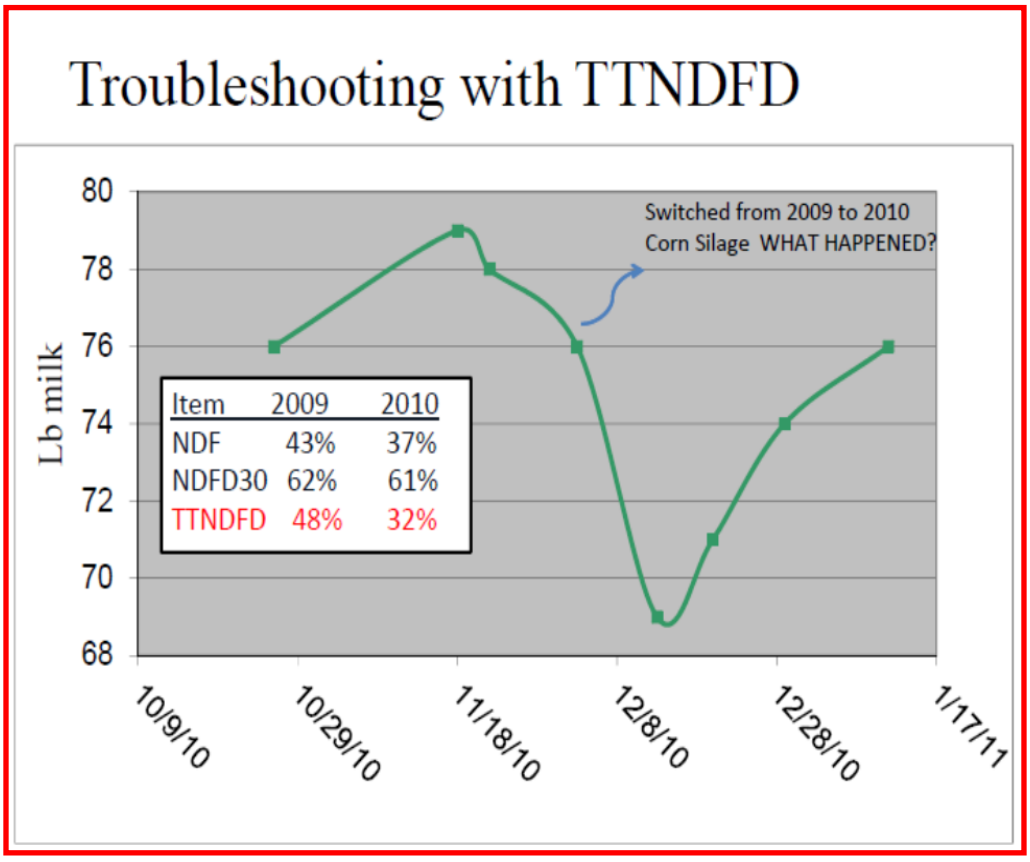
Figure 1 – How TTNDFD is Determined (Combs, 2014)

NDFD30 to compare forages, we weren't seeing the whole picture. Figure 2 from Combs' notes illustrates how we can troubleshoot changing from one year's corn silage to the next. This particular farm used only NDF and NDFD30 to plan for their change in corn silage, and saw a huge decrease in milk as soon as they hit new crop CS, even though the NDF was lower and NDFD30 was about the same. The nutritionist worked their magic and brought in other digestible fiber sources and milk rebounded. TTNDFD wasn't around in 2010, so the farm had no way of knowing what went on until the stored corn silage samples were ran when Combs was doing his research. When the samples were ran for TTNDFD, the samples were seen to be completely different, with '09 CS being excellent at 48% and '10 CS being actually pretty poor at 32%. The interesting thing about what this farm experienced was that it's exactly what Combs says the units of fiber digestion add up to in pounds of milk – every 2-3 units of fiber digestion represent 1 lb of milk. The farm saw a decrease in fiber digestion from the corn silage from 48% to 32% (16 units) and milk dropped from 76 to 69 lbs (~7 lb), exactly that 5.5-8 lb of milk that Combs predicts. Had TTNDFD been around, the nutritionist could have taken into account the drastic differences in digestibility of the two corn silages, brought in the other digestible fiber sources upon switching, and potentially avoided the crash in milk.

Currently, Rock River is the only laboratory that is measuring TTNDFD. This measurement is a licensed procedure, meaning that in order for a lab to call this measurement TTNDFD it must exactly follow the guidelines that were established by Combs and pay a licensing fee. This way, the test will be standardized across all labs. Other labs are starting to think about adding the procedure to their panels, so if it's a number that you want to start measuring on your forages, you must talk to your nutritionist about addressing this with the lab you send samples to. There is a conversion to make the number compatible with CNCPS as well as the AMTS software, which the lab will do automatically for the nutritionist.

Take home points for TTNDFD:

1) Fiber digestibility has a big impact on milk yield – 2-3 unit change in ration TTNDFD corresponds to a 1 lb change in milk yield
1) The TTNDFD test was developed to predict fiber digestibility in high producing dairy cattle – it can be used across forage types and byproduct feeds as well as used in ration balancing and evaluation
2) 42% is an average for corn silage and alfalfa haylage, 44% for grass
3) 48+% is the goal for all forages



TTNDFD is the prediction of NDF digestibility for a feed (or a diet – the two can be compared on the same scale) in a 1400 lb cow consuming 53 lb of dry matter from a diet containing 28-30% NDF, a cow that is typical of one that is high producing. The scale can be used for forages and by product feeds as well as the entire diet fed to the cow to aid in ration balancing and evaluation.

Dairy Market Watch

February 2015

Funded by Cornell Pro-Dairy. Compiled at Cornell Cooperative Extension of Chautauqua County by Katelyn Walley-Stoll, Community Educator.

Milk Component Prices			Milk Class Prices				Statistical Uniform Price & PPD					MPP
Month	Butterfat	Protein	I (Boston)	II	III	IV	Jamestown, NY		Albany, NY		Albany $/gal. to farmer	Milk Margin Minus Feed Costs ($/cwt)*
Jan 14	$1.79	$4.19	$24.73	$22.21	$21.15	$22.29	$21.78	$0.63	$22.38	$1.23	$1.93	$12.70
Feb 14	$2.01	$4.60	$25.27	$23.73	$23.35	$23.46	$23.27	($0.08)	$23.87	$0.52	$2.06	$13.91
Mar14	$2.04	$4.52	$26.89	$24.22	$23.33	$23.66	$23.82	$0.49	$24.42	$1.09	$2.11	$14.01
Apr 14	$2.12	$4.71	$26.90	$24.74	$24.31	$23.34	$24.31	$0.00	$24.91	$0.60	$2.15	$13.65
May 14	$2.27	$3.96	$27.72	$24.44	$22.57	$22.65	$24.09	$1.52	$24.69	$2.12	$2.13	$12.26
June 14	$2.44	$3.34	$26.11	$23.94	$21.36	$23.13	$23.23	$1.87	$23.83	$2.47	$2.05	$11.65
July 14	$2.63	$3.18	$26.27	$24.41	$21.60	$23.78	$23.60	$2.00	$24.20	$2.60	$2.09	$12.68
Aug 14	$2.84	$3.15	$27.12	$25.34	$22.25	$23.89	$24.26	$2.01	$24.86	$2.61	$2.14	$13.74
Sep 14	$3.24	$3.49	$26.88	$26.11	$24.60	$22.58	$25.01	$0.41	$25.61	$1.01	$2.21	$15.40
Oct 14	$2.85	$3.74	$27.44	$21.93	$23.82	$21.35	$23.20	($0.62)	$23.80	($0.02)	$2.00	$15.62
Nov 14	$2.20	$3.90	$27.31	$19.91	$21.94	$18.21	$21.11	($0.83)	$21.71	($0.23)	$1.87	$13.39
Dec 14	$2.10	$2.74	$25.78	$19.09	$17.82	$16.70	$19.87	$2.05	$20.47	$2.65	$1.76	$10.66
Jan 15	$1.69	$2.67	$21.83	$16.18	$16.18	$13.23	$16.42	$0.24	$17.02	$0.84	$1.47	not available

January Utilization (Northeast): Class I = 36%; Class II = 22%; Class III = 23%; Class IV = 19%

Class I *= fluid milk;* ***Class II*** *= soft products, cream, and yogurt;* ***Class III*** *= cheese (American, Italian), evaporated and condensed products;* ***Class IV*** *= butter and milk powder*

*At a milk margin minus feed costs of $8 or less, payments are possible depending on the level of coverage chosen by the dairy producer.

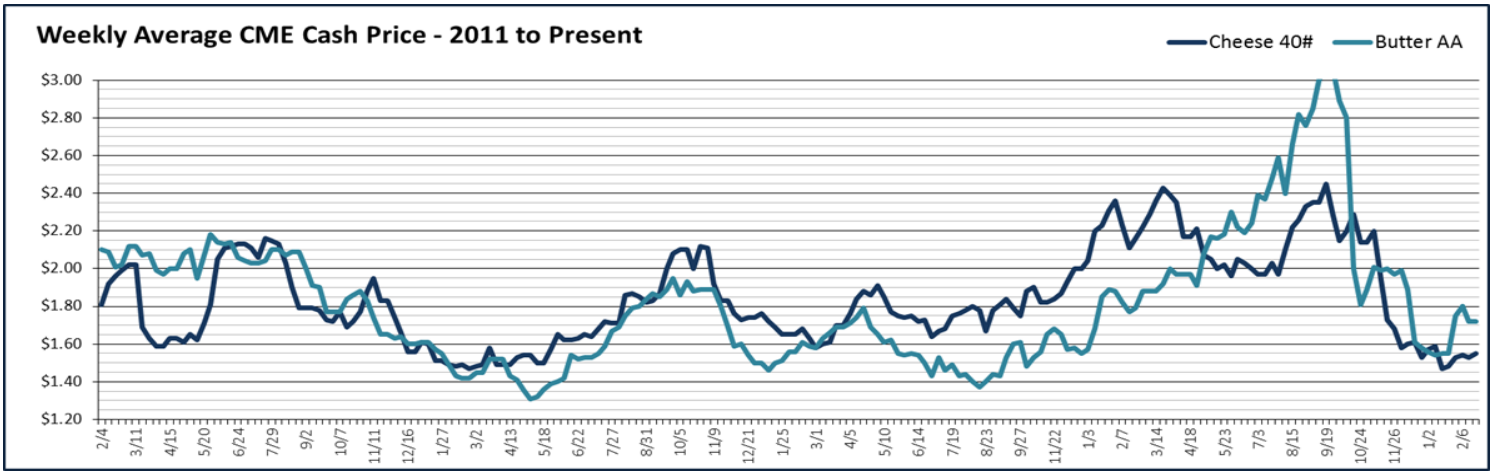
Dairy Commodity Markets (USDA Dairy Market News)

Cheese: Cheese markets are in a stable period, with little price movement through the week. Prices near the $1.50 level are resulting in building inventory for retail sales and cheddar aging. There is strong current buying interest and activity for both purposes. Manufacturing schedules are full in many cheese plants. A number of plants with capacity to manufacture various dairy commodities are directing milk into cheese vats as the top profitability

Fluid Milk: Farm milk production trends across the southern tier of states are increasing from week to week as warmer weather patterns settle into those areas. Across the northern tier, the Northwest states are also showing upward trends in milk production. Dairy producers in the North Central and Northeast areas report steady milk production, unfazed by recent subzero temperatures. Bottler demand is very strong in the Northeast and Mid-Atlantic areas, spurred by consumer demand ahead of recent winter storms. Most other areas also report a decent uptick in fluid milk demand for the week, especially where stores are offering gallon or half-gallon weekly feature items.

Dry Products: Dry dairy product markets are mixed. Nonfat dry milk markets are firm, despite building inventories, and prices moved up. Dry buttermilk production is active with some plant operators reporting seasonally increasing farm milk volumes are translating to more dry buttermilk powder. Dry whole milk prices gained support as international prices took a sizeable step higher. The dry whey market is weak as production is active, stocks are building, and the usual outlet of exporting to the Far East is currently at a standstill. Although work has resumed at Western ports, the backlog of ships to be unloaded and reloaded translates to further delays in serving offshore customers.

Butter: Butter prices are stable. The market tone is steady to unsettled, depending on the region, as market participants take a wait-and-see approach on pricing. Inventories are building for print butter. Bulk butter buyers report having sufficient supplies on hand. Retail demand has started to pick up as the spring holidays near. Due to higher milk volumes, churns have been running at or near capacity.



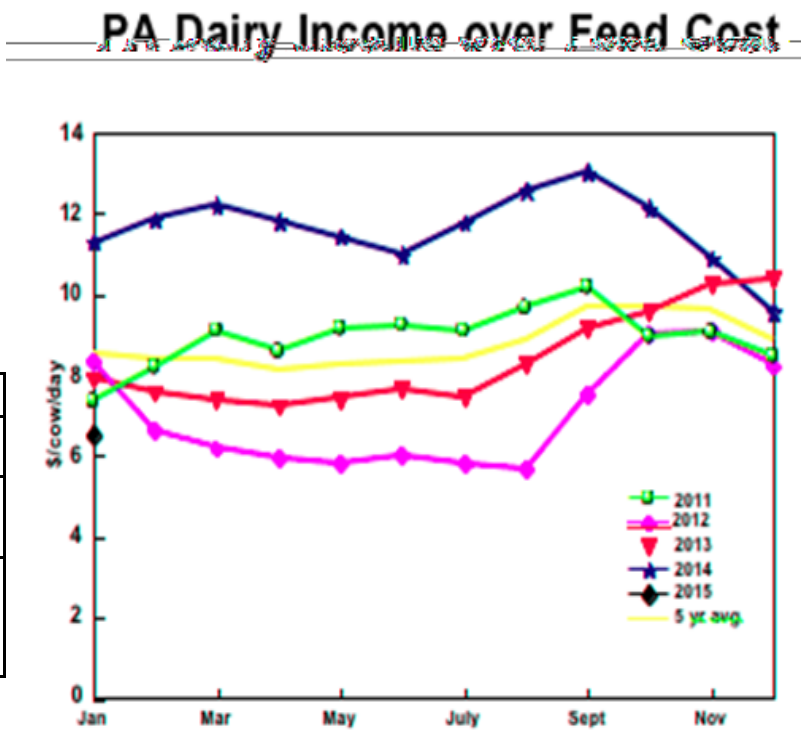
Comments:

Milk prices have continued to fall as we move into 2015. February's prices will be around $15.55 for Class III and $14 for Class IV. A year ago in February, Class III was $23.35 and Class IV was $23.46. There is still a lot of uncertainty as to how low milk prices will reach for the remainder of 2015. However, dairy futures have rallied recently and may not reach as low as originally predicted. Class III futures are still in the $15's through May, but are showing increases to the $16's in July, and the $17's for the rest of the year. Class IV futures are in the $15's for May, and follow the Class III trends through 2015.

The recent increase in price projections has been driven in part by the drought in New Zealand. The world's largest dairy exporter is forecasting a 3% decrease in milk production, helping to brighten our own market futures. Many of these producers are reporting a low or even negative cash return for making milk in the current conditions. Russia is also expected to lift its ban on dairy imports from the EU-28 by August, and around that time China should be resuming imports pending stockpile usage. The EU-28 dairy producers are currently suffering from low milk prices which should slow 2015's milk production as the end of their quota system draws near. However, some countries have milk production that exceeds the existing quota, and many of these producers may face fines if they don't reduce their production before the quota's end in April.

Predicted milk production levels have also decreased for the U.S., which may help to soften the gloomy milk price forecasts if this trend continues. The USDA's prediction of a 2015 milk increase at 2.8%, as compared to 2014, has now fallen to 2.6% reflecting recent milk production data. Cheese sales will be pushing domestic growth, but exports will be lower as compared to 2014. However dry products and lactose are expected to do well. (Cropp, Bob. Memo to Dairy-L. February 2015).

As milk prices fell and feed prices rose last month, Penn State's Income Over Feed Cost (IOFC) calculation for January was $6.53/cow/day - a 32% drop from December's value of $9.55. Feed costs rose by 3.8%, with higher prices for corn, soybean meal and hay. IOFC reflects the daily gross income minus feed costs for an average cow producing 65 pounds of milk per day. This chart shows IOFC data by year since 2011. (Dunn, Jim. Penn State Dairy Outlook. February 2015).



Friday CME Cash Prices					
Dates	1/23	1/30	2/6	2/13	2/20
Butter	$1.55	$1.75	$1.80	$1.72	$1.72
Cheese 40# Blocks	$1.48	$1.53	$1.54	$1.53	$1.55

Cornell University
Cooperative Extension
South Central New York Dairy & Field Crops Team

Change Service Requested

PRSRT STD
U.S. POSTAGE PAID
CORTLAND NY
13045
Permit No. 1

South Central New York Area Dairy & Field Crops Team

60 Central Avenue
Cortland, NY 13045
Phone: (607) 753-5077
http://scnydfc.cce.cornell.edu

Like us on Facebook:
https://www.facebook.com/SCNYDairyandFieldCropsTeam

Building Strong and Vibrant New York Communities

"Diversity and Inclusion are a part of Cornell University's heritage. We are a recognized employer and educator valuing AA/EEO, Protected Veterans, and Individuals with Disabilities."

CALENDAR OF EVENTS

MAR 5 **MILK QUALITY MEETING #3: Importance of Record Keeping for Mastitis Control**
NYS Grange, 100 Grange Place, Cortland. 10:30am — 3:30pm. $35/session. Contact Betsy Hicks at 607-753-5213

MAR 10 **NY CERTIFIED ORGANIC (NYCO) MEETINGS # 3: Organic Grain** 10am — 2pm.
Jordan Hall; 614 North St; Geneva, NY. Contact Fay Benson at 607-753-5213 with questions

MAR 10 **CENTRAL NY DAIRY DAY: Breeding, Raising & Managing Your Future Herd of Super Cows**
Magros Banquet Hall; 110 Sanitarium Rd.; Sherburne, NY. 10am — 3pm. $30 Pre-Registration by March 2.
Contact CCE Herkimer County at 315-866-7920. Register online at cnydfc.cce.cornell.edu.

MAR 12 **WINTER DAIRY MANAGEMENT — Impact Profitability via Milk Components:** NYS Grange, Cortland, NY
9:30 am registration. 10am - 2:30pm. $25 by Mar. 11. Register online at scnydfc.cce.cornell.edu

MAR 16 **COVER CROPS & SOIL HEALTH** — 11:45am Registration & Lunch, 1-3pm Topics. Dryden Fire Hall
See Page 11 For Registration Information.

MAR 17 **2015 HERD HEALTH AND NUTRITION CONFERENCES —** See Page 11 for Registration Information

MAR 18 **AG CELEBRATION DINNER:** Tinelli's Hathaway House, 3976 Route 41, Cincinnatus.
6:30pm Cocktails/ 7pm Dinner—Keynote Speaker: Richard Ball, Commissioner of NYS Ag & Markets. The Annual Geraldine Young Friend of Ag award will be presented. $15 pre-paid to Cortland County IDA/BDC, 607-756-5005.

MAR 19 **CROP PROTECTION MEETING:** American Legion, Horseheads NY. **2 DEC Credits**
9:30 am registration 10am - 2pm. $25 by Mar. 13th. Register online at scnydfc.cce.cornell.edu or call 607-753-5078.

MAR 20 **ANNIE'S DISCUSSION GROUP FOR FARM WOMEN #3: Insurance for the Farm and Business Structures (Partnerships, LLC, Corporation, Etc.)** CCE Tompkins County; 615 Willow Ave; Ithaca, NY. 10:30am-Coffee Program 11:00am — 3pm. Pre-register at scnydfc.cce.cornell.edu or by calling 607-753-5078.

MAR 25 **PESTICIDE APPLICATOR TRAINING:** Dryden Fire Hall—12:00pm Registration, 12:30-3:30pm Instruction
$20—See Page 10 for More Details and Registration Information.