New Thoughts On An Old Question: Should We Feed Forage To Calves?

Xavier Suárez, Calf and Heifer Specialist, Provimi North America, Jud Heinrichs, Professor of Dairy Science PSU, Coleen Jones, Research Associate PSU

Feeding forage to calves has been the subject of much debate over the years, in part because even though we know that fermentation of grain is essential for rumen development, sometimes in research and on farms calves fed hay have shown improved performance. If we focus on the rumen environment rather than the specific feeds we are providing, we can start to make sense of both the calf's requirements and ways we can meet her needs.

Research in the 1950s showed that volatile fatty acids (VFA) produced from the fermentation of starch stimulated rumen development more than the VFA resulting from forage fermentation, and feed programs for young calves began to focus on milk and grain and exclude forage. But on farms and in research studies the effect of feeding forage to calves is not consistent – sometimes calves fed forage perform better than those without it. Looking at calf performance through a different lens may shed new light on this question.

Just like cows, calves can experience ruminal acidosis, and just like for cows, forages may play a role in helping calves overcome this challenge. Rumen development requires a source of fermentable carbohydrate, so good quality calf starters typically contain a high concentration of starch. However, calves tend to eat big meals in proportion to their body and rumen size, and high starch levels in starter can lead to acidosis. The form of the starter also influences the risk of acidosis. Grains need to be finely ground to form a good quality pellet, but this reduction of particle size makes the starch more rapidly available in the rumen. Heat and moisture used in the pelleting process also make starch more fermentable. A textured starter containing whole or minimally processed grains and a supplemental pellet does not prevent calves from eating large amounts of starch at once, but the starch in coarse grains will be available only after calves chew and break down the grain, which often happens as they ruminate several hours after eating. As a result, calves eating textured starter will have lower risk for acidosis than calves fed a pelleted diet. When the starter is a cause of acidosis, adding forage to the diet will help buffer the rumen. In some cases, particularly older calves who are eating more starter, feeding forage improves starter consumption.

We tend to generalize forages for calves, but forage physical form and nutritional quality affect intakes of both starter and forage. Calves seem to eat chopped hay more consistently than long hay and will sometimes prefer highly palatable

Cornell Cooperative Extension

Steuben County
hay over starter. Consumption of low quality chopped hay tends to be quite consistent, and in 3 independent studies intake of chopped straw was about 4% of calves’ total dry feed intake. In some cases bedding can supply this small amount of straw, so type and frequency of bedding may also influence the time at which calves need to be offered forage.

When designing a calf feeding program, we need to balance the risk of acidosis with adequate grain intake to stimulate rumen development and ensure a smooth transition at weaning. If we feed too much forage too early, calves may not consume enough energy, because forage is less energy dense per unit than grain and the complex, structural carbohydrates in forages are digested at a slower rate than starch in grain. Forage is also bulky and can quickly fill the limited space in a calf’s digestive tract, sending the brain a signal to suppress appetite. In addition, as mentioned above, the VFA produced from forage fermentation do not stimulate rumen development, and forage intakes can be highly variable.

Keratin buildup on the rapidly growing rumen papillae is another potential issue related to diet, as it has been suggested that it may reduce the absorptive capacity of rumen papillae and alter early rumen development. Either forage or textured starters with whole or partially processed grains have demonstrated that they can provide physical abrasiveness that helps to prevent the buildup of keratin. Using textured starters instead of forage to maintain a healthy rumen prior to weaning can be advantageous since textured starters won’t reduce energy intake and slow down rumen development like forage does.

Starter ingredient composition, physical form, and intake level are important factors to consider when making a recommendation as to when forage should be fed, and these will change with different management practices. In the past it has been suggested that forage be fed to calves when starter consumption reaches 5 to 6 pounds per day, at around 7 to 8 weeks of age. This recommendation is appropriate for textured starter with coarsely processed or whole grains. However, when feeding a completely pelleted starter with high amounts of ruminally digestible starch, forage should be fed by 5 to 6 weeks of age to prevent acidosis. Lowering the starch concentration in the pellet could also prevent acidosis and the need to feed forage, but at the high price of reduced rumen development by weaning time.

It is important to continue meeting calves’ nutrient requirements after weaning to support growth. When calves stop receiving milk starter consumption increases rapidly, and good quality, high starch starters need to be supplemented with forage. The amount of forage to be added will depend on forage quality, starter composition, and the physical form of forage and starter. A good quality textured starter/grower will need to be supplemented with only 5 to 10% forage up to 16 weeks of age. The need for forage when feeding pelleted starters will depend on the starch and fiber level in the pellets. High fiber pellets will not require forage in the diet as the pellets effectively contain that forage, however pellets alone typically do not provide enough abrasiveness to prevent keratin buildup.

New York Certified Organic Sets 2016
Winter Programs:
Jan 12, Feb 9, Mar 8

Geneva, NY. New York Certified Organic, a group of grain and dairy farmers meeting together since 1994 to increase their practical

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<td>Jason Gerber</td>
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<td>Stephanie Mehlenbacher, Horticulture</td>
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<td>Kelley Jo Elliott, Local Food Educator</td>
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<td>DeLisa Drum, Agriculture Community Educator</td>
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<td>Hans Walter Petersen, Grapes</td>
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<td>Brett Chedzoy, Forestry</td>
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Cornell Cooperative Extension of Steuben County
Website: www.putknowledge2work.org
Phone: 607-664-2300
knowledge and expertise with the organic production of crops and milk, has announced its Winter 2016 programs. Each program begins at 10 am in Jordan Hall at 630 West North Street at the New York State Agricultural Experiment Station in Geneva, NY. There is no cost or need to register for the meetings; participants are asked to bring a dish to pass at the potluck lunch.

The 2016 NYCO Winter Meetings are as follows:

January 12: Three Sessions on Organic Crop Management Through Good Years and Bad Sessions will cover What to Do When the Cultivating Window Does Not Open Very Wide, The Effects of Long-Term Management on Weed Competition in Organic Soybean, and Using Crimped Cover Crops for Soybean or Squash Production.

February 9: Four Sessions on Managing Soil Health with Crop Rotations and Forage Production Sessions will cover Putting Soil Health Knowledge and Crop Rotations into Practice, Alternative Forage Rotations to Protect Soil on Marginal Land, and Reducing Pasture Compaction with Daikon Radish. A farmer panel will discuss How to Decide Whether to Sell Forages to Dairy Farmers or Plow Them In for Green Manure.


The New York Crop Insurance Education Team, and Cornell Cooperative Extension provide support for these meetings. There will be a brief description of how crop insurance can benefit organic farmers at each of the 2016 meetings. The popularity of the NYCO winter meetings has grown from a gathering of six organic grain producers in the Martens Farms farmhouse kitchen in Penn Yan in 1994 to the Jordan Hall auditorium with more than 150 farmers attending meetings in 2015.

For more information, contact Fay Benson at 607.745.3807, afb3@cornell.edu.

**USDA Safety Net Coverage in 2016**

“The choice between ARC and PLC is completed and remains in effect through 2018, but producers must still enroll their farm by signing a contract each year to receive coverage,” said FSA Administrator Val Dolcini. (Josh Bergeron)

WASHINGTON — U.S. Department of Agriculture (USDA) Farm Service Agency (FSA) Administrator Val Dolcini today announced that producers who chose coverage from the safety net programs established by the 2014 Farm Bill, known as the Agriculture Risk Coverage (ARC) or the Price Loss Coverage (PLC) programs, can begin visiting FSA county offices starting Dec. 7, 2015, to sign contracts to enroll in coverage for 2016. The enrollment period will continue until Aug. 1, 2016.

“The choice between ARC and PLC is completed and remains in effect through 2018, but producers must still enroll their farm by signing a contract each year to receive coverage,” said Dolcini.

Producers are encouraged to contact their local
The two programs were authorized by the 2014 Farm Bill and offer a safety net to agricultural producers when there is a substantial drop in prices or revenues for covered commodities. Covered commodities include barley, canola, large and small chickpeas, corn, crambe, flaxseed, grain sorghum, lentils, mustard seed, oats, peanuts, dry peas, rapeseed, long grain rice, medium grain rice (which includes short grain and sweet rice), safflower seed, sesame, soybeans, sunflower seed and wheat. Upland cotton is no longer a covered commodity. For more details regarding these programs, go to http://www.fsa.usda.gov/arc-plc.

For more information, producers are encouraged to visit their local FSA office. To find a local FSA office, visit http://offices.usda.gov.

The ARC and PLC programs were made possible by the 2014 Farm Bill, which builds on historic economic gains in rural America over the past six years, while achieving meaningful reform and billions of dollars in savings for taxpayers. Since enactment, USDA has made significant progress to implement each provision of this critical legislation, including providing disaster relief to farmers and ranchers; strengthening risk management tools; expanding access to rural credit; funding critical research; establishing innovative public-private conservation partnerships; developing new markets for rural-made products; and investing in infrastructure, housing and community facilities to help improve quality of life in rural America. For more information, visit www.usda.gov/farmbill.

—USDA-FSA

New York Beef Producer’s Association Winter Management Conference
bred. With a little genomic know-how and a lot of luck, it’s possible for even small-scale farmers to produce some of the world’s most robust, fertile and productive dairy cattle – and then sell them at a profit. And that’s what Austin set out to do.

**Study Uses Farm Data to Aid in Slowing Evolution of Herbicide-Resistant Weeds**
By: Stephanie Henry, University of Illinois

The widespread evolution of herbicide-resistant weeds is costing farmers, especially through decreases in productivity and profitability. Although researchers and industry personnel have made recommendations to slow this evolution, an understanding of the patterns and causes of the resistance has been limited.

Diversifying the herbicide mechanisms of action (MOAs) has been recommended to stop the spread of herbicide-resistant weeds. MOAs refer to the biochemical interaction that affects or disrupts the target site in the weed. Two common methods of diversifying MOAs involve rotating herbicides— from season to season or within the same season—or by using a mix of herbicides in the same tank. The question has been which of these methods is the most effective.

A recently published study by weed scientists at the University of Illinois and USDA-ARS, looking at glyphosate-resistant waterhemp, is providing valuable evidence that points to management practices as the driving force behind herbicide resistance, and that herbicide mixing, as opposed to herbicide rotation, is the most effective tool in managing resistance.

Pat Tranel, a U of I weed scientist and a co-author on the study, said this is not the first time researchers have presented evidence that herbicide rotation is not the best resistance management strategy. “This paper is valuable because these conclusions were obtained doing our experiment in a more ‘real-life’ fashion,” Tranel said. “This study confirmed previous conclusions that farmers should use herbicide mixing rather than rotation.”

During the study, the researchers evaluated glyphosate-resistance incidences, as well as landscape, soil, weed, and farm-management data from 105 central Illinois grain farms, including almost 500 site-years of herbicide application records. Having this data, collected between 2004 and 2010, helped the researchers identify relationships between past herbicide use and current glyphosate-resistance occurrences.

Tranel said when glyphosate-resistant waterhemp was first reported in Illinois in 2006, researchers working at the site saw some fields that were infested with waterhemp, but adjacent fields that were free of the weed.

“We asked, ‘what is different between these two fields? Is it what the farmers are doing?’ We asked a retail applicator to let us review all the management practices data from 100 fields—50 that have resistant waterhemp and 50 that don’t,” Tranel said.

“We took the results of what farmers have already done, and asked what is different in the fields that have resistance versus the ones that don’t,” he added.
After collecting the management data, sampling waterhemp from the fields, and screening seeds from the field for resistance back in their greenhouses, the researchers analyzed that data for management factors most associated with resistance. Overall the researchers examined 66 variables related to environment, soil, landscape, weed community, and weed management.

“We looked at every factor we could think of in terms of management and landscape,” Tranel said. “We found that it was management factors that are the most important. It doesn’t matter whether you’re next to a water course that might bring in new seed, what the waterhemp density of your field is, etc. It’s what you did in your field that matters.”

Aaron Hager, a U of I weed scientist and co-author on the study, explained that the occurrence of glyphosate-resistant waterhemp was greatest in fields where glyphosate had been used in over 75 percent of the seasons included in the analysis, where fewer MOAs were used each year, and where herbicide rotation occurred annually. “Simply rotating herbicide MOAs actually increased the frequency of resistance,” he said.

On the other hand, Tranel said that the farmers who were using multiple herbicides per application were least likely to have resistance. “When using an average of 2.5 MOAs per application, you are 83 times less likely to have resistance compared to if you used only 1.5 MOAs per application,” he explained.

Hager pointed out that this strategy will work only if each component of the tank mixture is effective against the target species. “Effective, long-term weed management will require even more diverse management practices,” he added.

Another piece of good news for farmers is that the researchers did not find an association of proximity between neighboring fields and resistance. “The good thing is not only does management matter, it’s what you do in your own field that matters. Even if a neighbor’s resistance moves, it’s at a small frequency. If you’re doing the right thing it will stay at a small frequency,” Tranel said.

Although there may be some concerns with herbicide mixing, Tranel said it is still the best tool to manage resistance. “We don’t say that mixing is the end-all solution. What we saw from this study, if success for farmers is measured by lack of resistance or lower frequency, then successful farmers use multiple herbicides per application.”

Opportunities for Raising Holstein Bull Calves for Beef

By: Nancy Glazier

The NWNY Team recently hosted a workshop covering the topic. JBS USA sponsored the event. They are looking for dairy steers for their facility in Nicholville in northern NY. They are currently sourcing loads of 700-800 lb steers from out of state and are looking for the possibility to purchase them in NY.
Fed (finished) dairy steers make up 15-20% of the beef in the US. Nearly all bull calves born on dairies in the NWNY region go out of state either raised for veal or fed out.

A critical component to dairy beef is proper recordkeeping for both finances and animal health. The question to ask yourself, what would it cost me to raise these animals? All costs related to production including feed, interest, and labor need to be included in budgeting. With the current purchase price range of bull calves and the selling price of feeders, the economics may not be there.

Treatment records need to be maintained to adhere to withdrawal times for residue prevention. Tom Gallagher, Livestock Specialist with Capital Area Agriculture and Horticulture Program reviewed some of the important points from the Dairy Beef Quality Assurance program.

The key to good dairy beef is feeding a high concentrate diet in order to increase muscle mass. According to presenter Mike Baker, Beef Cattle Extension Specialist at Cornell University, this is very achievable with Holstein steers. Holsteins do marble easily; if measured side by side with a beef steer of the same level of backfat, the Holstein steer would actually have more intramuscular fat, a good thing in the beef industry. Baker does cite some negatives to using Holsteins for beef: their rib eye muscling tends to be oblong instead of the round shape that consumers prefer, they generally have a lower dressing percentage (the difference between live weight and carcass weight) due to lower overall muscle mass, and they also use feed less efficiently than beef animals. If they aren't put on a high energy diet, Holsteins end up big and lanky: not ideal when marketing for beef. Baker ran some feed ration scenarios; those that included well managed pastures were the most profitable.

If you have the facilities, calves can be raised with heifer calves, at least through weaning. They can then be raised to feeder weight (700-800 lb) on pasture or refusals or finished to market weight. An important consideration is whether you have the capacity to raise animals separately for finishing or if you would prefer to sell them as feeder calves; this would be an opportunity to partner with another farmer, if the economics penciled out. Raising calves to 400 pounds or so and then selling them at a local livestock market is also an option.

Larry Rose from JBS reviewed provided an overview of the company and what they are looking for. They will be offering contracts for producers to reduce some of the financial risk. This option is developing and more information can be obtained from other contacts at JBS.

Some points were raised during the presentations. A truck load would equate to roughly 62 steers. A load would need to be within 3-4 months of age or fed in separate groups to bring younger calves' weights up to older ones. Another comment was on facilities. There may be some old barns on farms, but they may need to be renovated to provide a healthy environment for the calves. Dairy-beef crosses may be another option. Prices are fluctuating so what may not be profitable now could be profitable at a later time.

More information regarding contracting would be beneficial and would be the next logical next step. Many of the participants were not familiar with the terminology surrounding contracts and basis. If you would like more information or add your name to the email/mailing list, let me know.

**Time for a Winter Haircut? The Importance of Udder Hair Removal**

Heather Dann dann@whminer.com

Have you taken a look at udder hair length lately? I did while in the parlor gathering information for an upcoming study. It is probably time for another round of udder haircuts. Long udder hairs can become dirty with manure, thereby making it more difficult and time consuming to clean and disinfect teats before milking. In addition, the US Pasteurized Milk Ordinance (PMO), a set of minimum standards and requirements set by the Food and Drug Administration (FDA) for regulating grade A milk production and processing, states that udders...
should be clipped routinely to avoid incorporation of hair with the teat in the inflation during milking. Also, the Code of Practice for the Care and Handling of Dairy Cattle in Canada recommends the removal of hair from udders on a regular basis. Historically, hair was removed from the udder with clippers. Today, it is more common to flame-clip with a cool flame. It is faster, easier, and safer to singe off udder hair than to clip it with clippers. However, care must be taken to pass the cool flame quickly under the udder to singe the hair off without causing burns. Proper technique and equipment are critical for avoiding teat end burns and the negative consequence in can have on the milking procedure.

There are many udder health management practices that affect the risk of mastitis as well as herd somatic cell and bacterial counts. Udder hair removal is recommended as part of the NMC’s mastitis control program. Interestingly, the research to support this recommendation is equivocal. In a case-control study with 69 herds over a 2-year period, it was found that poor teat-end cleanliness was associated with higher bacterial counts in the bulk tank. As expected, shorter udder hair was positively associated with teat end cleanliness. In another study, herds that clipped udders more frequently had lower somatic cell counts than herds that clipped less frequently. A systematic review of 36 peer-reviewed publications identified udder hair management as one of many management practices that were related to herd somatic cell count.

In contrast to those studies, a 1-year study found no difference in the number or type of mastitis cases when udder hair was removed monthly by singeing or not at all. In a recent study, singeing udder hair did not affect the total, coliform, or bacterial counts. It is important to note that the cows used in the study were extremely clean based on their hygiene score and were less likely to have udder contamination compared to the average cow in many herds. Regardless of the research, cows with clean udders because of udder hair removal and/or excellent hygiene practices have a lower chance of contaminating the milk with manure or bacteria. This is a good thing for both the producer and the consumer.

Winter Crop Symposium
Steuben County Cooperative Extension

The 2016 Steuben County Crop Symposium will be held Tuesday, February 23 from 10:00 a.m. to 2:00 p.m. at the Civil Defense Center, in Bath. Program Topics include:

10:00 -10:30 a.m. – Registration
10:30-11:00 a.m. – Western Bean Cutworm Project Update, Carol MacNeil, Extension Vegetable Specialist, CCE Ontario County
   Carol will provide an update on the Western Bean Cutworm Project that is occurring throughout western NY. She will provide a summary of the Steuben County trap network and surrounding areas, as well as provide information about how to control the pest, related pests that you’d find in the fields, damage recognition, and management timing.

11:00 a.m. – NOON – Herbicide Resistance and mode of action, Nicole Carutis, Field & Forage Crops Educator, Penn State Extension
   A number of weed species that once were susceptible to and easily managed by certain herbicides have developed resistance. These weeds no longer are controlled by applications of previously effective herbicides. We will review weed identification of these species and discuss control options for each one, as well as general resistance management.

11:00 a.m. – NOON – Herbicide Resistance and mode of action, Nicole Carutis, Field & Forage Crops Educator, Penn State Extension

12:30 p.m. – Lunch
12:30 -1:30 p.m. – Update on Field Crops, Bill Cox, Soil and Crop Sciences Extension and Research Professor, Cornell University
   Professor Cox will provide an update on corn, soybean, and small grain production research. He will discuss important pests of these crops and their management techniques. Professor

Schuyler and Steuben – January 2016
Cox will also discuss organic cropping systems in field crops.

1:30-2:00 p.m. – Soybean seed Treatments, Bill Cox Soil and Crop Sciences Extension and Research Professor, Cornell University
Professor Cox will provide a short update on the effectiveness of various soybean seed treatments. He will review his research on this subject.

DEC Pesticide Applicator Recertification Credits for the event include 3 credits in approved Categories 1a, 10, 21, and 23 and .5 credits in Category 4. You must be present at 10:00 a.m. and have your applicator ID with you to receive this credit. RSVP’s appreciated; contact CCE-Steuben at 607-664-2300 or email ksb29@cornell.edu. $15.00 per person, lunch provided.

Locally Grown Food Festival
Cornell Cooperative Extension of Steuben County is pleased to invite you to attend the 2016 Locally Grown Food Festival on Friday, February 12, 5:00-8:00pm, at Union Hall in Corning (100 Center Way, Corning, NY 14830).

Last year 400 people attended this free local foods event! Farmers from across the Finger Lakes region participate to sample and sell locally produced livestock, fruit, vegetables, maple, honey, preserves, and other local products. Join us to learn what is being produced in this area, meet and support local farms, and celebrate locally grown food!

If you would like to be a vendor at the 2016 Locally Grown Food Festival, please register through CCE-Steuben by Friday, January 29th. Questions can be directed to Kelley Elliott at 607-583-3358, kje36@cornell.edu, or Kerri Bartlett at 607-664-2311, ksb29@cornell.edu.

Individual Pig Care, Treatment Protocols and Industry Practices at Annual Meeting in January
On Saturday, January 16th, New York Pork Producers will hold its 2016 Annual Meeting at the Holiday Inn in Waterloo, NY. The emphasis this year is on individual pig care, treatment protocols and industry practices. Producers as well as 4-H youth are invited and encouraged to attend.

Pre-registration is encouraged by January 8th. Everyone who pre-registers will be eligible for the door prize. Please visit www.newyorkpork.org and click the Annual Meeting registration link at the bottom of the webpage, complete and submit the form to register. If you have questions, please call Krista at 716.697.3031 or email info@newyorkpork.org. PQA Plus certification participants must indicate PQA when pre-registering to have a manual and exam ordered for you.

Beginning with registration at 8:30 AM, this free, one-day meeting will feature informational speakers, a silent auction and an excellent pork buffet sponsored by Pork Check Off. The New York Pork Producers’ Annual Member Meeting will follow this event. Speakers for this exciting and educational meeting include Mr. Bill Winkelman (NPB Pork Check Off & Antibiotic Update, NPPC Strategic Improvement Program), Mr. Jon Cloud (Marketing and Processing Practices), Mrs. Jennifer Schmidt Rovnan (Individual Swine Care & Treatment Protocols and PQA Plus Certification Training and USDA FSA Administered Programs).

The silent auction always includes interesting, useful and fun items. A spirit of friendly competition reigns as participants enjoy bidding against each other. All proceeds from the auction go to the Empire Swine Youth Scholarship Contest.

Don’t forget to mark your calendar for January 16th for the chance to network with fellow producers, “win” something fun at the silent auction, have a delicious free meal and take home some practical advice from these swine industry experts.

2016 Pesticide Training and Recertification Classes
Canandaigua, NY: A series of pesticide training and recertification classes are being offered by Cornell Cooperative Extension. Anyone interested in obtaining a pesticide certification and meets the D.E.C. experience/education requirement or current applicators seeking pesticide recertification credits should attend. **This training NOT a 30-hour certification course.**

The Pesticide Training and Recertification classes will be held at Cornell Cooperative Extension-Ontario County on Mondays, February 1, 8, 15, 22, 2016 from 7:00 p.m. to 9:30 p.m. with the exam being offered on Monday, February 29, 2016 from 6:30 p.m.-11:00 p.m.

The Program series includes the following topics:

- Class 1: Pesticide Laws and Regulations
- Class 2: Pesticides and the Environment
- Class 3: Pesticide Safety
- Class 4: Pesticide Mixing and Equipment Calibrations

The cost for the pesticide training to obtain certification is $175.00, includes training manuals and attendance at all four classes. This does not include the $100.00 DEC exam fee, due the day of the exam. Certified applicators, private and commercial applicators seeking recertification credits will receive 2.5 core credits per class. The cost for recertification is $25.00 per class.

To receive registration material or for additional information, contact Cornell Cooperative Extension of Ontario County at 585-394-3977, ext. 427, email nea8@cornell.edu or ext. 436, email rw43@cornell.edu. The registration form and more information is available on-line at www.cceontario.org

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<td>$15.94</td>
<td>$(0.78)</td>
<td>$16.54</td>
<td>$(0.18)</td>
</tr>
<tr>
<td>July 15</td>
<td>$2.11</td>
<td>$2.61</td>
<td>$19.78</td>
<td>$14.70</td>
<td>$16.33</td>
<td>$13.15</td>
<td>$15.76</td>
<td>$(0.57)</td>
<td>$16.36</td>
<td>$0.03</td>
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<tr>
<td>Aug 15</td>
<td>$2.27</td>
<td>$2.57</td>
<td>$19.53</td>
<td>$14.54</td>
<td>$16.27</td>
<td>$12.90</td>
<td>$15.75</td>
<td>$(0.52)</td>
<td>$16.35</td>
<td>$0.08</td>
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<tr>
<td>Sep 15</td>
<td>$2.75</td>
<td>$1.98</td>
<td>$17.68</td>
<td>$15.36</td>
<td>$15.82</td>
<td>$15.08</td>
<td>$16.53</td>
<td>$0.71</td>
<td>$17.13</td>
<td>$1.31</td>
</tr>
<tr>
<td>Oct 15</td>
<td>$2.91</td>
<td>$1.70</td>
<td>$19.09</td>
<td>$16.44</td>
<td>$15.46</td>
<td>$16.43</td>
<td>$16.45</td>
<td>$0.99</td>
<td>$17.05</td>
<td>$1.59</td>
</tr>
<tr>
<td>Nov 15</td>
<td>$3.18</td>
<td>$1.32</td>
<td>$19.73</td>
<td>$18.26</td>
<td>$15.30</td>
<td>$16.89</td>
<td>$17.17</td>
<td>$1.87</td>
<td>$17.77</td>
<td>$2.47</td>
</tr>
</tbody>
</table>

**November Utilization (Northeast): Class I = 36%; Class II = 23%; Class III = 26%; Class IV = 13%.

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 Market Watch

#### Milk Class Prices

- **I (Boston)**: $27.31
- **II**: $19.91
- **III**: $21.94
- **IV**: $18.21

#### Statistical Uniform Price & PPD

- **Jamestown, NY**: $21.11, $(0.83)
- **Albany, NY**: $21.71, $(0.23)

#### MPP

- **Albany $/gal. to farmer**: $1.87
- **Milk Margin Minus Feed Costs ($/cwt)**: $13.39

- **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.

The registration form and more information is available on-line at www.cceontario.org
Comments: All of Santa’s cookies needed some milk this holiday season, but it wasn’t enough to help bring up dairy prices. Prices have continued to decline into December, and we will see lower milk prices in the first quarter of 2016. Cheese prices, which closed at $1.43 per pound for a 40-pound block on December 24<sup>th</sup>, have likely bottomed out, but may remain low for some time, although optimistic forecasts show a slight uptick over the coming months. Butter prices, still up from the holidays, will continue to decline, while nonfat dry milk and dry whey prices should at least hold. December’s Class III price will round out to about $14.50 compared to $15.30 in November, and Class IV should round out at $15.79, down from November’s $16.89. Class III prices will likely bottom out in the low $13’s at the start of this year, and Class IV could be lower than that. There continues to be a large amount of milk on the market, still adjusting from last year’s 2.3% increase in milk production followed by this year’s 1.1% increase. However, that increase in milk production slowed in the past few months, amounting to 0.3% in October and 0.6% for November nationally, but was 3.3% in New York. (Cropp, Bob. Memo to Dairy-L. December 19, 2015).

Early December brought good cheese and butter sales, but demand virtually halted once the holiday sales were filled. Exports continue to take a hit due to excess worldwide product, decreased demand from market driving countries like China and Russia, and a strong U.S. Dollar. Butter exports were 57% lower in October 2015 compared to October 2014, while butter stocks increased 21%. The price of butter and cheese, which is well above world values, makes an attractive import market for those products coming into the US. (Cropp, Bob. Memo to Dairy-L. December 19, 2015).

Feed costs this winter are looking to be lower than last year, at least for the first half of 2016, helping to hold income over feed costs above catastrophic levels, but milk prices will be too low to really feel “comfortable”. This will likely lead to higher cow slaughter and slower rates of increasing milk per cow. Sales of butter and cheese should continue to grow after this holiday season. Depressed milk prices in major exporting countries should lead to lower world milk production, which will help to ebb away at the worldwide buildup of stocks. Recent trading on the Global Dairy Trade has shown some strengthening of prices, which should help US export prices in the 2<sup>nd</sup> half of the year, along with our declining domestic prices. Some futures show overall dairy prices holding in 2016 – Class III price could be in the $15’s by the third quarter, and $16’s towards the end of 2016. (Cropp, Bob. Memo to Dairy-L. December 19, 2015).
Seasonal Holiday orders, which were helping to keep dairy prices afloat, have all been filled, and stock piles continue to remain well-supplied, leading to low 1st quarter prices in 2016. Penn State’s November value of Income Over Feed Cost is $7.13, a 5.2% decrease from October as feed prices rose and milk prices stayed the same.

December’s Class III price will likely end up at $14.50, but will decline to the low $13’s into the first quarter of 2016. Class IV could be even lower than that, but will round off at $15.79 this month. Many farms will increase slaughter rates as milk prices decline, which will lead to less milk on the market. This, along with more favorable export conditions, may help rally prices in the second half of 2016.

Global Dairy Trade prices are low, resulting in decreased export opportunities, due to China and Russia’s decreased purchasing, global unrest in Africa and the Middle East, and increased worldwide milk production. But, with New Zealand’s continued decrease in production and the return of the El Nino weather pattern on the horizon, things could start to look up for U.S. export opportunities.

Penn State’s October value of Income Over Feed Cost is $7.49, a 0.4% decrease from September’s value as feed prices rose more than milk prices. November’s Class III price will likely end up at $14.50, but will decline to the low $13’s into the first quarter of 2016. Class IV could be even lower than that, but will round off at $15.79 this month.

Many farms will increase slaughter rates as milk prices decline, which will lead to less milk on the market. This, along with more favorable export conditions, may help rally prices in the second half of 2016.
Youth who will be 14 and over by March 1, 2016 are eligible to take the course. Please go to the following website for more information http://putknowledgegetowork.org/4-h-youth/club-programs/tractor-machinery or contact Kim Randall at 607-583-3185, or e-mail, ksb3@cornell.edu

**February 12, 2016-Locally Grown Food Festival**
Union Hall, Corning, NY 5:00-8:00 p.m. See page 8 for more details.

**February 17, 2016-Advanced Beekeeping**
Human Service Complex, 323 Owego St., Montour Falls, NY, 6:00-8:00 p.m. $20.00/person
Phone: 607-535-7161

**February 23, 2016-Winter Crop Symposium**
Civil Defense Center, Bath, NY 10:00 a.m.-2:00 p.m. DEC Pesticide Recertification Credits available. Cost is $15.00/person with lunch provided. See page 8 for more details

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**TRADING POST:**

**For Sale:** 4 x 4 round bales of mixed hay and wheat straw bound with twine. Hay has been tested. Large quantities available. Please call: 607-535-4903