NORTHWEST NEW YORK DAIRY, LIVESTOCK & FIELD CROPS TEAM

A Very Early Start for Winter Wheat!



By: Mike Stanyard

any winter wheat producers put their first shot of nitrogen on wheat at the end of March/beginning of April (sometimes on frozen ground). This year I saw tracks across fields the first week of March and some may have even hit the last days of February! The first half of March was a perfect time to get some nitrogen on the wheat. You could really see it starting to green up the second week, a couple weeks ahead of schedule. You will not see this article until the first week of April so let's focus on a possible second application of nitrogen and herbicide and fungicide needs.

The past couple of seasons I have discussed counting the number of tillers to determine if you should put all of your nitrogen up front, split it into two applications, or put it all on at a second application at Feekes Stage 5 (jointing). Below is the chart from Phil Needham's work as a reference. The additional tillers. Wheat takes off quickly after this stage so be diligent and prepared.

Weed control is also crucial this year. The weeds are getting an early start along with the wheat. The earliest planted fields should be scouted first and sprayed if weed pressure warrants spraying. Some of the earlier planted fields may

have been sprayed last year with the warmer fall. Field research by Needham shown has that there is a y i e l d advantage to separating the herbicide and nitrogen applications.



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Tiller Numbers (per Sq. Yard)

| <300 | 60 units of N at green up, rest applied at GS 5-6 |
|---------|---|
| 450-600 | 45 units of N at green up, rest applied at GS 5-6 |
| >700 | 30 units of N at green up, rest applied at GS 5-6 |
| | |

second application is very important especially if you had a high tiller count and did not apply any nitrogen early. The timing should coincide with stem elongation which means nitrogen is going towards increasing the number of seeds per head and seed size, not



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Mission Statement

The NWNY Dairy, Livestock & Field Crops team will provide lifelong education to the people of the agricultural community to assist them in achieving their goals. Through education programs & opportunities, the NWNY Team seeks to build producers' capacities to:

- Enhance the profitability of their business
- Practice environmental stewardship
- Enhance employee & family well-being in a safe work environment
- Provide safe, healthful agricultural products
- Provide leadership for enhancing relationships between agricultural sector, neighbors & the general public.

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Who Will Be Milking Your Cows in 2012?

By: Libby Gaige

I mmigration policy reform may be old news to some, but as no new federal legislation has been passed, it continues to be a relevant topic to those involved in the agricultural industry. Since an estimated 70% of employees who perform labor intensive agricultural jobs nationwide are unauthorized, any changes to the current system could have farreaching effects. In New York State the dairy, fruit and vegetable sectors would be the most influenced.

The Legal Workforce Act (H.R. 2885), a bill meant to make E-Verify usage compulsory, is an intensely debated piece of legislation. E-Verify is an internetbased system that allows employers to check the legal status of their employees. By comparing the information provided on the employee's Form I-9 with millions of government records, E-Verify provides almost instantaneous feedback as to whether or not the employee is eligible to work in the United States. The major concern for agricultural employers is that the bill will be passed without additional provisions to ensure the availability of an agricultural workforce. Although numerous guest worker proposals have been drafted, most only address ways for new immigrants to enter the U.S. legally; they do not propose a solution for employees who would be found unauthorized if E-Verify became mandatory. The big question is this: if a large portion of the current agricultural workforce were to be sent home today, would we be able to replace it with qualified workers quickly enough to avoid endangering the viability of our farm businesses?

There have always been risks involved in hiring immigrants, but although unemployment remains high, the pool of American applicants continues to be unenthusiastic about milking cows. So who can we expect to be milking our cows by the end of 2012? A recent publication from Cornell's School of Applied Economics and Management suggests that no drastic changes will be made this year (*Maloney*). With the presidential election in full swing, we will be hearing a lot about immigration. Yet it is unlikely that any changes will be made that meet the criteria set forth by agricultural employers. Federal-level E-Verify legislation is at a standstill and farm employers will continue opposing it unless a viable agricultural worker program is proposed. Immigration enforcement, especially through I-9 audits, is expected to continue. The best way to safeguard your current workforce is to prepare yourself for an I-9 audit. Take the time to make sure that your employee records are up to date and that you know how to answer any legal questions regarding immigrant workers. For more information on I-9 audits, visit this website: <http://www.ice.gov/doclib/foia/dro_policy_memos/ formi9 inspection overview.pdf>

Sources:

Maloney, Thomas R and Smith, Marc A. "Chapter 8: Decisions Facing New York State's Labor Intensive Agriculture Sector". 2012 New York Economic Handbook. http://dyson.cornell.edu/outreach/index.php

E-Verify. U.S. Citizen and Immigration Services. 6/17/2011. < <u>http://www.dhs.gov/e-verify</u>>





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1998 Int'l Paystar 5000, N14 Cums, 460 h.p., 18 spd., eng.brake, 607,450 miles, rubber block su sp., 20 alum. box, tri axle, 20,000# F/A, 46,000# R/A.



2004 Freightliner FL70, C7 CAT 190 h.p., 6 spd., 2004 Preightmier PE/8, 07 054 Day in.p., 0 spor. 10°, spring susp., steel comp., 22.5 tires on all steel, S/A, 12,000# F/A, 21,000# R/A, 60,358 miles, good runner, low miles, \$23,900.



1999 Mack MR688S Garbage Trucks, MackE7, diesel auto, 134,115 miles, Camelback susp., 22,5 on all steel, 212^t w.b., 17A, 20,000# F/A, 46,000# R/A, stb# 3662, \$21,900, many different makes & models of Volvos, Macks & In 1 is in stock! 2000 Mack DM690, Mack 300 h.p., 8LL trans, Camelback. susp., 224" w.b., triaxle, 156, 247 miles, 20,000 #F/A, 46,000 #F/A, 10.5 CYmber, willseparate, \$28,900. Many Mixers In Stock - Ken worth, Peterbilt, Volvo& In 11



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1999 Western Star 4964SX C&C, CAT 600 h.p., Eaton Fuller RTLO 18 spd., Chalmers susp., 4 lift axles, 225 drive tires, new 44565R22.5 steer tires, dual staels & air cleaners, 20,000# F/A, 46,000# full locking R/A, 277" w.b.

16



2000 Sterling LT9500 w/Fasse 240SE Drywall Boom, CAT G12395 h.p., diezel, 8L Ltans., eng.brake, 288,494 miles, 22.5 on all steel, 274″ w.b., tri axte, 18,000# F/A, 46,000# F/A,25′ deckw/acket stars, 29′ of frame, 202″ C-T, will separate, rear air lift tag, st\# 3930, \$39,500.



1998 Kenworth T800, CAT 475 h.p., Jake Brake, 8LL trans., 20,000# F/A, 44,000# R/A, 14,000# T/A, D.F., 25' frame behind cab, 248km iles, current flatbed w/knuckle boom, will separateto make C& C



2005 Sterling, 14L Det. 515 h.p., Jake Brake, 8LL trans., Haulmaxx susp., 24.5 on alum/steel, 210" w.b. tri axle, 18,000# F/A, 46,000# R/A, 230k miles, 16"alum. body, \$54,900.



2002 Ken worth T800, C12 GAT 445 h.p., diesel, 10 spd., eng. brake, air ride, 4.30 ratio, 179″w.b., 22.5 on alum., T/A, 13,2204 F/A, 46,000# F/A, 456,597 miles, verviciean, stk# 3616, \$34,500.



(2) 2006 Peterbilt 335 Cums ISC 315 h.p. diesel, 8LL trans., 70k miles, Haulmax susp., 22.5 tires, 214 w.b., T/A, 20,000# F/A, 46,000# R/A, stk# 3750/3753, \$61,900.

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Dairy Skills Training & Employee Management in Spanish

Managing employees on a dairy farm can be a complicated task, one which only becomes more challenging when some or all of the employees are Spanish-speaking. Chances are that if you're reading this, then you already know just how true that can be! How can you make sure that your employees are not only well-trained, but also motivated to do their job well? Making the extra effort to communicate with them in their native language can be the key to ensuring that your employees understand not only what tasks they are expected to complete, but why it is important to: wear gloves while milking, sanitize calf pails, cool colostrum quickly...you name it.

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Dairy Skills Training Programs

Wyoming County Dairy Institute and NWNY Team Continue to Collaborate

By: Bill Maddison,

Facilitator Wyoming County Dairy Institute

The Wyoming County Dairy Institute (WCDI) in L collaboration with the North West New York Dairy, Livestock and Field Crops (NWNY) Team are offering dairy work-force development modules throughout Northwestern New York. This collaboration combines the skills of current NWNY Team members with other locally based veterinarians and dairy professionals to offer high quality dairy work force training modules. The WCDI functions to coordinate, promote and develop the modules with the assistance of specific team members. This working relationship has grown to be a win-win for both organizations.

Two upcoming Dairy Modules that will be offered during the months of April and May, 2012 are "Producing Quality Milk" and "Dairy Comp 305". Producing Quality milk will focus on udder anatomy and physiology, milk letdown and hormonal regulation, somatic cell counts, milk components, milking system analysis, machine maintenance, mastitis and its treatment, and evaluation of milking systems and routines to maximize efficiency and milk quality. This course will be held Tuesday, May 1st, 3rd, 8th, 10th from 6:30-9:00pm, with an on-farm session to be held on Saturday, on May 12th. Registration for the "Producing Quality Milk" is due April 26th. This format combines a mix of science based lectures and practical on-farm procedures that allow for the enhancement of "hands-on activities" and skill development.

The on-line Dairy Comp 305 program will begin the end of April. The course runs collaboratively with the WCDI, NWNY Team, Alfred State, and the College of Veterinary Medicine at the University of Minnesota. This is a 4 or 8 week program depending on the track selected and is asynchronous and can be completed as fast or as slow as a person desires. According to Dr. Rapnicki of the University of Minnesota, coordinator for this course at the College of Veterinary Medicine, participants typically spend on the average 4-10hrs/week to complete the course. The program takes a step by step approach to the logic of data capture and entry, and the management reports that are possible with Dairy Comp 305. Participants can opt to take either of these courses for college credit through Alfred State College or for continuing education through the University of Minnesota.

There are 3 tracks offered within the Dairy Comp 305 module. The level 1 basic track is open for 8 weeks. It contains 8 units. This is an introductory course recommended as a starting point before considering an advanced course. Within the level 2 category there are the Bredsum and Somatic Cell Count courses. Both are open for 4 weeks and contain 4 units each. To participate in this course registrations are due by <u>April 7th</u>

In addition, a number of Dairy Skill Training modules will be offered during the spring, fall and winter months of 2012. These work-force development modules are to be offered in Warsaw, current home of the WCDI, and in another county as determined by the NWNY Team. The formats for these offerings are a combination of lectures on Tuesday and Thursday evenings from 6:30-9:00pm followed by on-farm sessions to be held on the following Saturday.

As the facilitator for the WCDI, one of the absolute positives that these modules offer is the quality and depth of knowledge that the instructors bring to these programs. All are actively engaged in the dairy industry as veterinarians or dairy professionals with some sharing time in cutting edge dairy research. These modules have been offered since 2007 and feedback from producers has been very positive. Please stay tuned and look for future flyers and notices regarding these Dairy Skills classes. Any questions or to register please call 585-786-2251 or visit<u>WyomingCountyDairyInstitute.com</u> on line.

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NY's Dairy Farm Businesses in 2011 – Preliminary Results

By: John J. Hanchar

<u>Summary</u>

- While milk sold per cow was relatively stable, milk receipts per hundredweight (cwt.) rose \$4.02 to \$21.94 in 2011 when compared to 2010.
- In 2011, the total cost of producing a cwt. of milk was \$19.16, an increase of 12 percent relative to 2010.
- Preliminary results suggest that the same 56 farms in Cornell University Cooperative Extension's Dairy Farm Business Summary Program as of February 23, 2012 achieved greater levels of profitability in 2011 compared to 2010 -- for example, in 2011, the rate of return on all assets without appreciation averaged 12 percent compared to 6.9 percent in 2010.

Introduction

The following preliminary results were first compiled and reported by Linda Putnam, Extension Support Specialist, The Charles H. Dyson School of Applied Economics and Management, Cornell University, on February 23, 2012 using data from Cornell University Cooperative Extension's Dairy Farm Business Summary Program. The results reported below represent averages for the same 56 farms cooperating in 2010 and 2011.

<u>Size of Business</u>

- The average number of cows per farm rose from 561 in 2010 to 576 in 2011, an increase of about 2.7 percent.
- Worker equivalents per farm rose about 5 percent to 13 in 2011.
- Total tillable acres increased from 1,087 to 1,119 acres.

Rates of Production

- Milk sold per cow fell from 25,269 pounds in 2010 to 25,082 pounds in 2011, a change of negative 0.74 percent.
- Hay dry matter per acre was relatively stable at 3.4 tons, while corn silage per acre declined from 19 to 15 tons.

Income Generation

- Gross milk sales per cow increased from \$4,529 in 2010 to \$5,503 in 2011, an increase of 21.5 percent.
- Gross milk sales per hundredweight (cwt.) rose from \$17.92 to \$21.94.

Cost Control

- Dairy feed and crop expense per cwt. of milk rose from \$6.53 in 2010 to \$7.57 in 2011, an increase of 16 percent.
- In 2011, purchased input cost of producing a cwt. of milk was \$17.22, an increase of 12 percent relative to 2010.
- Total cost of producing a cwt. of milk rose from \$17.11 to \$19.16, an increase of 12 percent.

Profitability

- Net farm income without appreciation per cwt. of milk averaged \$4.72 in 2011, an increase of 85 percent compared to 2010.
- Rate of return on equity capital without appreciation rose to 16.6 percent in 2011 from 9.0 in 2010.
- In 2011, the rate of return on all assets without appreciation was 12.0 percent, an increase of 74 percent relative to 2010.

For descriptions of profitability measures, please see Joan Petzen's article in this issue.

Final Thoughts

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

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Does an Early Start to Spring Mean More Insect Problems?

By: Mike Stanyard

I have been getting lots of questions regarding how this warmer than average winter will affect the insect pest populations this spring. Our insect pest pressure can be divided into those pests that overwinter in New York and those that migrate from the south each year. Some insect pests that call New York home include: cereal leaf beetle, alfalfa weevil, soybean aphid, corn borer, and corn root worm. Others that vacation in the south and visit each year include: potato leaf hopper, black cutworm, and common armyworm.

Our "normal" NY winters can get a lot colder but we usually have a blanket of snow that actually benefits overwintering insects and buffers them from freezing temperatures. Insects did not need a blanket this winter and early spring-like temperatures (68 degrees as I write this on March 15) will allow them to wake up and emerge early. I have received reports that alfalfa weevils were found this week in Wyoming County! What does this mean? Well, the weevils will begin to lay eggs in the stems of alfalfa plants but the warm temperatures have also allowed the alfalfa to break dormancy and also start to grow earlier. If this nice weather continues, the two may develop together and an early harvest may result before weevil larvae damage becomes economic. If for some reason the alfalfa growth slows down (wet weather) and the weevil larvae continue to develop, then we will have problems.

Cereal leaf beetles are another pest that overwinters as an adult. These beetles prefer spring grains like oats. If an early emergence occurs, there will not be many acres of oats up to feed on. This means the



beetles will move to its next favorite food, winter wheat. Early leaf feeding by the larvae can drastically reduce the food making capability of the wheat which will result in lower grain weight and yield.

Soybean aphids overwinter in the egg stage on buckthorn. Hatching de-



pends on the accumulation of degree days. They can remain, feed and reproduce on the buckthorn waiting for soybeans to emerge. Multiple generations flying onto small soybeans could lead to economic populations and spraying early. An insecticide seed treatment could put your mind at ease if this situation occurs. A late frost will also take care of many aphid populations!

Those pests that rely on weather systems to come north, like black cutworm, could be arriving this week with the southwest warm front. Female moths will search out green grassy or weedy areas to lay their eggs. The eggs will hatch and grow quickly at these temperatures. They will not be a problem until corn begins to emerge. These larger larvae will be able to cut and feed on a lot of small plants. Damage could happen in a short time frame and the window for control could be small.

The key to pest management this planting season will be to watch your crops carefully. Scouting will be crucial and early detection of growing pest populations may be the difference this year. Mother Nature will still have the last word in all of this. April could still have some cold and wet days with a few hard frosts!



On a Farm Near You...

Ithaca Water Buffalo

By: Nancy Glazier

Mike Gould, a recent Cornell grad, is wearing a few different hats these days. He took a position with Ithaca Water Buffalo as product

manager looking to develop water buffalo yogurt that is blended with Jersey milk. Some of the milk is sold to make mozzarella cheese. He also has assisted with AI, vet work and other things while they transition to a larger farm.

Mike didn't grow up with water buffalo, but with dairy cows on his family's farm,

Har-Go Farms in Pavilion, Genesee County. Though the cows and water buffalo are roughly the same size, that's about where the similarities end. Water buffalo have a long lactation but low production averaging 14-15 lbs a day. The goal is to bring production up to 20 lbs, 9.6% fat and 5% crude protein. They are fed baleage, corn silage and protein supplement; extra grain does not boost production but adds body condition instead.



Ithaca Water Buffalo is looking to tap into the local foods movement. Its cows' milk and water buffalo cheese is sold in various Finger Lakes locations under the label Ithaca Milk. Products are processed on-farm. One of the principals, Matthew Garner, is featured with the buffalo on their website, www.ithacawaterbuffalo.com. Α auick internet search found a blog posting that pairs the cheese with wine from Fulkerson Winery in Dundee, Yates County. on http:// Their milk is listed



www.ilovenyfarms.com, FingerLakes Farms, LLC, a company based in Ithaca. They are also on facebook; videos are posted on YouTube.

Other parts of the world rely on water buffalo for meat, draft power, transportation, fertilizer source (manure), credit, capital, and hides, to

list a few. Crop residues and farm by-products are utilized as feed in tropical regions. They are ruminants; recent research has shown rumen microbes may utilize the lower quality feeds more efficiently than cattle. They may not need a highquality pasture. Points to ponder.

The goal right now is to improve genetics. A few of the "wild ones" – too poorly behaved – were culled; Mike said they made great burgers. There are different lines of water buffalo – swamp, and Italian genetics that is more productive. The goal is to continue breeding with the genetics from Italy. Since heifers and cows only come into heat one time during the year, careful and close observation is needed. First calving occurs at about 3 years of age. That's quite a stretch before the cows are productive.

The farm is looking to develop a grazing system, which will be well suited for water buffalo. Mike has asked me for assistance with a grazing plan. Much will be the same: fence, forage, water, and lanes. I would venture a guess summer heat may be less of an issue since they are native to the tropics.

So, if you travel on Rt 414 through Lodi this summer, watch for the water buffalo!

Deworming before Turnout Makes Good \$ense "Raining on the Parasite Parade"

By: Jerry Bertoldo

Infestation with internal "worm-like" parasites (nematodes) can be a significant drain on growth rates for young stock and milk production particularly in first lactation heifers. *Totally confined livestock are rarely bothered with nematodes*. Newborns left on bedding packs infrequently bedded and previously occupied by shedding adults, however, can be at risk of infection at an early age.

Internal parasites are economically the most important. Nematodes and coccidia have by far the most important economic impact of all parasitic diseases in the Northeast. Coccidia, tiny single-cell organisms, unfortunately are not controlled by any wormers. Coccidial control products such as Corid®, Bovatec®, Deccox® and Rumensin® must be used. Coccidiosis is a serious parasitic problem in young animals, but usually not after six months of age when resistance normally develops.

The most damaging part of the life cycle of nematodes occurs in the abomasum and intestines. As a result, diarrhea and poor feed efficiency can be seen. Deficiencies in energy, protein and micronutrients (vitamins and minerals) can occur depending on the severity. Mild cases may only affect the level of milk production a pound or so or the growth of young stock by a tenth or two of a pound of weight gain per day. Heavy infestation leads to poor body condition, faded rough hair coats, sickness, infertility and possible death in younger animals. Some nematode species create problems in the respiratory tract leading to coughing and sometimes pneumonia.

Subclinical infection is not easy to see. Subclinical infection, with subtle health problems and progressive loss of productivity, is the biggest issue. By far, internal parasitism is the most difficult to judge as far as the risk and need for action. Ironically, it is generally the most costly form occurring on the dairy.

What factors need to be considered in evaluating the threat of infection and potential economic loss from

"worm-like" parasites?

- * *Age*. The younger the animal the less resistance it has.
- ★ Stage of milk production. Fresh heifers (<100 DIM) are the most heavily impacted (reduced milk and body condition loss) of early lactation cows carrying significant worm loads.</p>
- Pasture contamination. 99% of all pastures supporting cattle for grazing or exercise are contaminated. Period. Intensity of contamination is the only question! Any lot with edible vegetation can be a source of infection. Frequent (<3 days use per lot) pasture rotation with a return after 10 days or more allows for the maximum destruction of infective larvae by a combination of sun, dung beetles and drying. Winter freeze-kill cannot be taken as 100% effective.</p>
- * *Stocking rate*. Worm eggs and larvae have lower survival rates when manure is distributed over a larger area. Heavy manure build up assures greater infective larvae numbers and exposure to cattle.
- * *Weather*. Warm and dry increases kill rates over damp and cool.
- * *Nutrition*. Parasites prefer animals that are undernourished.
- * *Immune status*. All animals have a limited ability to build resistance against internal parasites. This never approaches the degree acquired against viruses and bacteria, however. Poor nutrition, stressful times, the calving period and coincidental diseases lower the immune status.
- ★ Grazing environment. Grazing during lactation and rotational grazing of all ages present the highest risk of infection. Grazing during the dry period and access to an exercise lot with some grass offers moderate risk. Cows on dirt dry lots without grass are at low risk. Total confinement and concrete dry lots have very little contamination potential. Dew covered grass holds the most infective larvae (in the water droplets) of any vegetation in the pasture.



A dew drop filled with worm larvae on morning pasture.

Deworming strategies should vary by age.

There are two deworming strategies for adult cattle: the individual cow and the seasonal herd approach. Both require monitoring by fecal exam to determine contamination levels in the environment. Low contamination levels may require minimal or no treatment. Unfortunately, this cannot be judged by just looking over the animals.

The individual approach. (This strategy includes first calf heifers.)

- Cows in high and moderate contamination situations are treated at freshening and again 6 weeks into lactation.
- Low contamination level cows are treated only at freshening.
- Environments with little or no potential risk require no treatment, only monitoring.

The seasonal treatment approach.

- All springers and cows in high and moderate contamination situations are treated in late November to early December and again 6 weeks after turnout onto grass.
- Low contamination level cows are treated in the late fall only.
- Environments with little or no potential risk require no treatment, only monitoring.

Approach to young stock.

- Less than 300-400 lbs.: treat 3-4 weeks after turnout and again 3-4 weeks later
- Between 400 and 800 lbs.: treat at turnout, again 3-4 weeks later and a third time 3-4 weeks later
- Greater than 800 lbs.: treat at turnout and 4-5

weeks later

• NOTE: Any heifer treated in the late fall does not need deworming at turnout

Young stock under 300-400 lbs in the spring are not considered to have been exposed to parasites. The cycle of nematodes varies with the age of the animal. In younger heifers the cycle is 3-4 weeks as opposed to 6-7 weeks in the adult. This explains the timing differences between treatments by age.

Egg shed does not begin until about 40 days after normal spring turnout and usually slows dramatically by July 1st in our climate. This explains the treatment recommendation weeks after turnout. This deworming is designed partly to keep pastures from further parasite build up.

Whether you have your own adult cattle or young stock on pasture or just raise heifers utilizing some grazing, there is a good deal of trial work to show the benefits of a strategic deworming program. It is important to note that pastures will never clean up from worm contamination while in use if these programs are not used.



Increasing Milking Frequency and Udder Health

By: Jackson Wright

In the dairy industry, producing high quality milk, efficiently, is a top priority and critical to profitability. Moreover, milk processors provide significant premiums for high quality milk with low SCC and preliminary incubation (P.I.) count, and healthy cows show greater peak milk yields and lactation persistency. Milk with a low SCC and P.I. counts are important to milk processors as milk with a high SCC has altered characteristics which can

impact its taste and usefulness for cheese or vogurt production, and milk with a high P.I. count has a decreased shelf life. Increasing milking frequency, such as 3X/dmilking throughout lactation or frequent milking during early lactation can improve milk efficiency. production However, many producers are still concerned over the potential negative effects of such management strategies on udder health and milk quality.

Intuitively one would suspect that because frequent milking increases exposure to the mechanical forces applied during milking it also would increase the occurrence of "inverted" teat ends, or teat end hyperkeratosis, and risk for clinical mastitis. However, when considering the effects of frequent milking on udder health one should recognize that teat end hyperkeratosis is probably a natural response to milking as some degree of teat end hyperkeratosis occurs in a significant proportion of animals in all herds. Moreover, only very severe teat end hyperkeratosis is associated with an increased risk of clinical mastitis and mild to moderate teat end hyperkeratosis actually decreases the risk for SCC >199,000 cells/mL when compared with "normal" teat ends.

Maybe more importantly, previous reports investigating the effects of increasing milking

frequency during early lactation have indicated that frequent milking has either no effect on SCC or even decreases SCC. In addition, when comparing a traditional 2X/d milking to cows on automated milking systems, animals on automated milking systems often visit the robot more frequently without exhibiting an increase in teat end hyperkeratosis.

Finally, when considering the effects of frequent milking on udder health, remember that when calves are allowed to nurse they feed an average of 7 times

per day for over 45 min/d. Therefore. management strategies such as 3X or 4X milking during early lactation appear mild at best when compared to the natural feeding interval of the calf. What appears to be a more important factor than milking frequency on teat end health is proper maintenance of the milking equipment. This includes ensuring that vacuum pressure is correct and that the automatic take-offs are set on a moderate setting to prevent

over-milking.

To learn more about these best management practices consider attending our Quality Milk Dairy Skills Training to be held on May 1st, 3rd, 8th, and 10th at Ontario County CCE and Wyoming County CCE.



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Continued from page 1

Last fall there were plenty of wheat fields that turned a light green/yellow color. Upon further investigation, the off-color of many of these fields was not due to wet conditions but foliar diseases. Both wheat rust and powdery mildew were very evident. Most of these affected fields were earlier planted and had plenty of top growth. Neighboring fields planted in mid/late October did not show signs of the diseases. A cold winter usually takes care of these fungi unless we get a blanket of snow early that protects them all winter. Well, we did not get a cold winter or a blanket of snow this year! Fields should be watched carefully this spring, particularly those that were planted earlier last year. These diseases could be present much earlier than anticipated and fungicide applications will be crucial for maintaining good yields.

One last thing to watch for this spring: Cereal leaf beetles will probably emerge earlier than normal. They will be hungry and looking for a host to lay its eggs. The first choice is oats but there may not be enough acres emerged yet and wheat would be the second choice. Economic threshold for insecticide treatment is three or more eggs and larvae per stem before the boot stage. to think it's happening only on

someone else's farm. Recent

research by Dr. Peter Scharf,

Ph.D., at the University of

Missouri, however, suggests

that losses are widespread.

Missouri Ruralist, "MU

study," Dr. Scharf noted

growers an estimated 1.5

billion bushels of corn -

In an April 2011 article from

scientist joins climate change

that nitrogen deficiency cost

valued at around \$6 billion -

from 2008 through 2010. Wet

weather was the driver that

caused most of the nitrogen

loss in those years, due to

volatilization, leaching or

You can close the door on

stabilizer products can

dramatically reduce

nitrogen loss. AGROTAIN®

nitrogen loss at a cost of just

pennies per pound of N. By

blocking the enzyme urease,

denitrification.

Nitrogen Miser

Don't leave the door open to losses By Harold Brecht

You would not leave your front door open during the middle of winter. The heat loss would be enormous. A closed door keeps the heat where you need it. AGROTAIN® nitrogen stabilizer works just like your door, keeping nitrogen fertilizer in the ground and available for the plants where they need it.

You can see an open door and feel the cold coming in, but nitrogen loss happens without being noticed. The results appear late in the season when a grower sees plants "firing up" from the bottom, reduced plant vigor and lower yields. The fact is, the first N losses can begin the moment ureabased nitrogen is applied-through the process known as volatilization.

Because nitrogen loss often goes unnoticed, it is tempting

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AGROTAIN® stabilizer allows corn plants immediate access to the nitrogen they need, while controlling losses for the first critical weeks after application.

As you plan crop inputs for 2012, consider adding cost-effective AGROTAIN® stabilizer. It always costs less to prevent a problem before it happens ... than to pay the price later on.

If you have a question for the Nitrogen Miser or would like more information on Stabilized Nitrogen Technology, don't hesitate to contact me at harold.brecht@kochind.com or 570-245-8675.

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Save the Date...

April 2012

23 Dairy Comp 305, On-Line Training, Registration deadline: April 7, For more information or register contact: CCE-Wyoming Co., Amy Berry: 585.786.2251 x132

May 2012

- 1 Dairy Skills Training: Quality Milk Production, CCE-Ontario & CCE-Wyoming Co., 6:30 9:00 p.m., Cost: \$50.00 per person, Registration: Amy Berry: 585.786.2251 x132 or WCDI@cornell.edu
- 3 Dairy Skills Training: Quality Milk Production, CCE-Ontario & CCE-Wyoming Co., 6:30 9:00 p.m., Cost: \$50.00 per person, Registration: Amy Berry: 585.786.2251 x132 or WCDI@cornell.edu
- 5 The Business of Pasture Poultry Production, 9:00 a.m., HLW Acres, 1727 Exchange St. Rd., Attica, Speaker: Tim Koegel of Windy Ridge Natural Farm, Registration *deadline: April 28th*, Cost: \$35 per person or \$50 for 2. For more information or to register contact: Hermann Weber: 585.591.0795
- 6 Processing your Own, Cost: \$20 per person, HLW Acres, 1727 Exchange St. Rd., Attica, For times & to register, please call us, Hermann & Laura Weber: 585.591.0795, We have limited space for this part as it will be hands on. <u>Pre-Registration is a</u> <u>must!</u>
- 8 Dairy Skills Training: Quality Milk Production, CCE-Ontario & CCE-Wyoming Co., 6:30 9:00 p.m., Cost: \$50.00 per person, Registration: Amy Berry: 585.786.2251 x132 or WCDI@cornell.edu
- 10 Dairy Skills Training: Quality Milk Production, CCE-Ontario & CCE-Wyoming Co., 6:30 9:00 p.m., Cost: \$50.00 per person, Registration: Amy Berry: 585.786.2251 x132 or WCDI@cornell.edu
- 12 Dairy Skills Training: Quality Milk Production, On farm location (TBA), 9:00 a.m. 2:00 p.m.