

# DAIRY CONNECTION

Vol. 21, No. 3 September 2011

## EDITORIAL

Whew! These quarterly newsletters seem only weeks, not months, apart. In retrospect, the advent of summerlike weather and the approaching fall season were but a few weeks long.

The summer of 2011 was filled with record weather events. The floods along the Missouri and Souris rivers wreaked havoc of disastrous proportions, and the continued losses to those in the Devils Lake Basin are immeasurable. Furthermore, some cropland saw so much water that only 20 to 30 percent of the potential crop was seeded in the northwest. Add to that more prevalence of crop disease and escalating input costs of

cash crop and feed grains, and the challenges do seem rather extreme for many North Dakotans as well as our neighbors in the surrounding Midwest and Canada, many of whom depend on agriculture.

Needless to say, the stressors are high for many. However, after experiencing the frustration of those dealing with the encroaching Devils Lake and volunteering with Lutheran Disaster Response for three days to help flood victims in the Minot area, I am reminded that it could be worse for me. So while I cannot change history or influence weather, I can encourage you to monitor your family and friends for the symptoms of what can seem like overwhelming odds, and be thankful if you were fortunate enough to avoid a calamity this year. Or if you need help, be assured that you can reach out. I witnessed the benevolence in people this summer and have to admit that being able to at least provide some hope for others less fortunate gave me renewed energy.

We in the Extension Service have access to many sources of information that may help. As you communicate with others, encourage them to check out the Extension Service in your county for help on a variety of topics, from family to business and from livestock to plants. And, if you have Internet access, check out [www.extension.org/](http://www.extension.org/), the only peer-reviewed source of its kind on the Web with no commercial agenda.

Since my last edition, I am happy to report that in June, Rachael Rott from Anamoose was crowned the 65th North Dakota dairy princess. This is the longest running contest in the nation.

Unfortunately, the State Dairy Show scheduled for Minot in July was canceled. But fortunately, the show was invited to New Salem in August. At that 65th annual event, the top honors went to the Gregg and Kristie Klusmann family, who exhibited the Supreme Heifer (Klus-Grove Plaid Lucy), and the Mark and Kristy Doll family for Supreme Cow (Hillside-H Damion Gabriel). Doll's Hill also was named Primer Exhibitor. Primer Breeder was awarded to the Glyn Hoger family.

Looking ahead, mark your calendars for the 2011 North Dakota State Dairy Convention. Remember, this is now a one-day event, which means you have but one chance to attend. This year that is **Wednesday, Nov. 2**, at the Seven Seas hotel in Mandan. Educational topics will include robotic milking technology, the cost of raising that heifer and a panel of North Dakota dairy producers who have implemented automated calf feeders. We also will have a trade show and the traditional awards banquet. Plan now to attend.

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My hope for you is that you are keeping pace with the quickly changing seasons. I hope this newsletter provides useful reference. Also, be reminded that you can receive this newsletter electronically. Simply apply by calling me at (701) 231-7663 or send an email to [jw.schroeder@ndsu.edu](mailto:jw.schroeder@ndsu.edu). You also can go to my website at [www.ag.ndsu.nodak.edu/aginfo/dairy/dairyext/Newsletters/Connections/dairyconnections.htm](http://www.ag.ndsu.nodak.edu/aginfo/dairy/dairyext/Newsletters/Connections/dairyconnections.htm) to retrieve any past edition.

May all your labors be fruitful.



NDSU Extension Dairy Specialist

## ■ MARKETS

### All-milk Price Could Average Above \$19

Tight crop supplies and record farm prices dominated a midyear update from the Food and Agricultural Policy Research Institute (FAPRI), a dual-university research program at the University of Missouri-Columbia and Iowa State University.

And while a slight dip in the all-milk price is predicted for 2012 from this year's expected level of \$20.10 per hundredweight (cwt), the five-year outlook puts the all-milk price above \$19 per cwt each year through 2016.

The new baseline update, released the last week of August, does not represent a full baseline report. That updated baseline report will be used later for independent economic analysis of farm, budget and biofuel policies as debates begin on the upcoming Farm Bill.

In the FAPRI baseline, corn prices increase on average from \$5.25 per bushel to \$6.46 for the 2011-12 crops to be harvested this fall. Likewise, soybeans rise from a projected \$11.25 this year to \$13.53 per bushel for 2011-12.

The baseline starts from the U.S. Department of Agriculture's August estimates of 2011 crop production. Those estimates showed below-trend yields for corn, soybeans and several other crops.

Short crops contribute to higher feed costs, which pressure livestock and dairy producers and increase risks. Higher feed prices contributed to slower growth in livestock production, higher meat prices and a decline in domestic per-capita meat consumption since 2007.

According to the report, the national dairy herd remains steady at 9.1 million cows until dropping to 9 million in 2014.

The average all-milk price, projected at \$20.10 in 2011, eases to \$19.47 by 2016.

FAPRI assumes that provisions of the 2008 Farm Bill will continue even though many are scheduled to expire. The ethanol tax credit and tariff are assumed to expire as scheduled at the end of 2011.

Meanwhile, consumer demand improved for beef and pork, particularly in international markets. Poultry producers remain in a difficult situation. If consumer demand improves as expected during the next couple of years, beef and pork producers should endure higher input costs without further downsizing of herds.

Consumers will see increasing meat prices into 2012, according to FAPRI.

In the beef herd, FAPRI projects another half million head decline in cows to 30.4 million by the start of 2012. By 2016, cow numbers should increase to 31.5 million head.

Beef supplies remain low as the cow herd rebuilds. Beef production declines by a billion pounds between 2011 and 2014. That leads to stronger prices the next four years. Fed cattle go from an average of \$112 per hundredweight in 2011 to \$120 in 2015. The baseline ends at 2016 with steers at \$116 per hundred.

A similar trend occurs in feeder steers, from \$134 per hundredweight to \$147 in 2014, dropping back only to \$138 in 2016. Prices are based on 600- to 650-pound steers at Oklahoma City.

Report authors caution that this update should not be confused with a "full" FAPRI-MU baseline exercise. The focus of this report is on the near-term outlook for a few major commodities, and the projections are not subject to external review. Work on the next full 10-year FAPRI-MU baseline will begin later this fall, with the development of a preliminary baseline that will be reviewed at a workshop. Reviewer comments and other new information will be incorporated in the final baseline, which will be prepared in early 2012.

*Source: FAPRI*

### All-milk Price Hits Record

According to the USDA's "Agricultural Prices" report on the last day of August, the all-milk price hit \$22 per hundredweight in August, barely edging the previous record. July's all-milk price originally was reported higher than that, but it was a preliminary number and the USDA revised it down to \$21.90 in the latest report.

Despite the record-high milk price in August, the milk-to-feed profitability ratio reported by the USDA – 1.89 – was less than stellar. Buying feed and producing milk is not considered profitable until the ratio reaches 3.

The USDA used the following feed costs to calculate August's milk-to-feed ratio: corn, \$6.62 per bushel; soybeans, \$12.90 per bushel; and alfalfa hay, \$191 per ton. The hay price may, in fact, be an underestimation because many dairy farmers have to pay \$250 to \$325 per ton for premium alfalfa hay with a relative feed value of 170 to 185.

The price of fine-ground or steam-rolled corn used in dairy rations has gone up 65 to 80 percent in the last year, depending on what part of the country a producer is from. Premium alfalfa hay has gone up 50 to 70 percent.

*Source: Dairy Herd Network, Aug. 31, 2011*

## ■ ENVIRONMENT

### Web Tool Assesses Air Quality

As stewards of the environment, many dairy producers are concerned about their impact on the land, water and air. Much has been learned and understood about these resources, but producers still feel ill-equipped to deal with air emissions.

Now, thanks to a new tool developed with the help of the USDA's Natural Resources Conservation Service Conservation Innovation Grant, livestock producers, consultants and third-party advisers have an easy way of understanding emissions based on their individual situations.

You can make your own decisions based on your operation using the Nation Air Quality Site Assessment Tool (NAQSAT).

An educational tool, NAQSAT aids in determining the areas in livestock operations with opportunities to make changes that result in reduced air emissions.

It looks at a whole host of emissions at the same time. Users can see how a single practice change will affect all types of emissions, thus helping to identify where trade-offs occur.

NAQSAT is a free tool that can be accessed only online at <http://naqsat.tamu.edu>. Completing the questions takes about 30 to 40 minutes.

At the end, results are displayed for each farm component and for each emission component: ammonia, hydrogen sulfide, dust, volatile organic compounds (VOC), greenhouse gas (GHG) and odor.

The program also can aid in future decision making. Producers looking to expand or make changes now can do that with air emissions in mind.

However, the tool does fall short because it doesn't address precise ways of curbing emissions or the economics of doing so.

It also is not meant to be a database and therefore does not save any information on the farm itself. Users have the ability to save their progress as they move through the tool and also can save a link at the end. That link then can be used to access and update information for 30 days.

For more information, a webcast of NAQSAT used for beef and dairy is available from the Livestock and Poultry Environmental Learning Center at [www.extension.org/pages/29400/naqsat-for-beef-and-dairy](http://www.extension.org/pages/29400/naqsat-for-beef-and-dairy).

*Source: Progressive Dairyman, Issue 13, Pages 57-58*

### Should You Care About Carbon Footprints?

Have you ever heard anyone say, "Do you really think anyone cares about the 'carbon footprint' of milk?" Dairy farms are vanishing, the industry is being destroyed by USDA regulations, and someone is actually concerned about phantom science. Give me a break!

The dairy industry is engaged in a public relations battle on many fronts. One of those fronts, of course, is the natural environment and how dairy is impacting it.

Perhaps you saw on the Time magazine website titled "How meat and dairy are hiking your carbon footprint." It was the usual anti-meat, anti-dairy diatribe. But some people believe this stuff and think it is objective journalism.

That is why the dairy industry must take the carbon footprint debate seriously and have a good argument in place for the critics.

I am no expert on the subject, but this summer in New Orleans, Dairy Management Inc. hosted a symposium where we heard several dairy scientists, including Jude Capper of Washington State University, speak on the issue numerous times. What she says makes sense: that dairy producers have reduced our carbon footprint by a significant amount in the past 60 to 70 years because there are fewer cows and the production systems have become more efficient. In 1944, there were 25.6 million dairy cows, nearly 17 million more than currently is the case. Seventeen million fewer cows means there is less methane produced.

Of course, it is more complicated than the total number of cows. There are a number of factors, including crop production and the inputs needed to produce milk. Scientists have determined that a typical dairy farm produces 1.35 pounds of carbon equivalent for every pound of milk produced. It's become a science, and we need to stay on top of it.

The animal rights activists and liberal media are doing everything they can to bring down modern agriculture. It is your duty to be aware of this and fight back.

*Adopted from T. Quaife, Dairy Heard Network, July 29, 2011*

## ■ FINANCES

### Establishing Your Estate Plan

In a July edition of Western Dairy Business, D. Emel of Genske, Mulder, & Co, LLP makes four excellent points.

From a general business standpoint, your ultimate goal is achieving a profit. Striving for profits maintains the continuity of your business and provides for the quality of life you want for yourself and your family. Although these objectives are important, you should not lose sight of long-term goals for your estate. Years of hard work could be pointless without a suitable estate plan.

A good estate plan is the key to passing on your assets to the next generation. Proper management and implementation of an estate plan through wills, trusts, partnerships and other devices can minimize estate tax while maximizing your goals for transferring your estate to your heirs.

To begin this process, you first should determine your net worth and your objectives. Then create an estate plan that meets those objectives while protecting your estate from high tax rates.

Be careful you do not abandon your estate plan once it is in place. It should be reviewed from time to time to ensure it still meets your needs and coincides with changes in federal (and sometimes state) tax law.

Currently, the estate tax exemption is set at \$5 million, with a top rate of 35 percent but only through 2012. The future of estate and gift tax rates and exemptions remains unknown, and the value of your estate will continue to change. Your current estate plan may be sheltered by low rates and a high exemption today, but what about when time runs out? Your estate plan should be in agreement with laws now and reviewed as those laws change.

At a minimum, you should have a living trust. The flexibility of a living trust gives you the power to implement changes throughout your lifetime while offering protection from probate and speeds up the distribution process upon your passing. Although more difficult to implement and maintain than a will, a trust will offer a good defense in keeping your wishes. If a trust is part of your estate plan, then properly execute your plan by moving assets into a trust.

Maintaining the right documentation is critical. Always follow the guidelines provided by any professionals assisting you in establishing your estate plan.

You may decide to set up partnerships or other business arrangements to gift interests in your assets to your heirs. Perhaps you want to take advantage of the lifetime gift tax exclusion currently set at \$5 million and move your business into a structure that allows you to give some of your assets away right now. When doing so, have agreements in place, keep them up to date and follow through with them.

Legal documents and estate plan strategies are costly to prepare and require a considerable amount of time to comply with their provisions. They are well worth the money in the long run, but only when you follow through with their requirements.

Consider including buy-sell (buyout) agreements as part of any business proposal. These arrangements protect your interests and the interests of your partners (potentially your heirs) from being transferred to or purchased by unwanted parties.

Proper coverage from a life insurance policy can relieve some financial burden in carrying out the buy-sell agreement. A buy-sell agreement coupled with adequate financial coverage can provide protection to heirs who want to carry on your business from those who do not want to be a part of its continuation.

A proper estate plan ensures that your desires for the future of your estate are carried out. You likely know now what you want to happen with your estate and who you want to continue your business. Without the appropriate documentation, your wishes might not become the reality.

So keep unity among your heirs and reduce unnecessary legal fees by taking the needed steps toward establishing your estate plan. The cost to implement a good estate plan is great, but the benefits to you and your heirs when the time comes to enact the plan will be even greater.

*Source: Western Dairy Business, July 2011*

## ■ MILK QUALITY

### Milkers Can Ensure High Quality

Adaptation of the European ovine standards of 400,000 somatic cell count (SCC) geometric means may have stalled for now, but that's no reason not to continue your efforts to produce the highest quality milk. Low SCCs means increased pay incentives, greater milk production and healthier cows.

Production of high-quality milk is an important goal of every dairy operation. Many factors in the management of a dairy, such as herd health, environmental conditions, housing, bedding, nutrition, milking management and milking system, affect milk quality. Although milkers cannot control all of the factors that influence milk quality, certain conditions and actions are entirely in control of the milker and can have a major impact on the quality of the milk produced.

Milkers should think "clean" during the milking process. This means clean hands, clean aprons, clean udders, clean milking equipment, clean teat dippers or sprayers, and clean cow platforms. Milkers also should be observant for signs of mastitis and udder health problems. Being aware of the following areas and practices in the milking parlor each time cows are milked will help ensure the production of high-quality milk with low bacteria and somatic cell counts.

Most dairies have developed unique milking procedures and routines to attain better milk quality and parlor throughput. Milking procedures are the actual steps, and cow-side activities are required to milk a single cow. The milking routine is how milkers move around the parlor and carry out a given milking procedure with multiple cows. Following the specified udder preparation steps (forestrip, predip, wash, dry, post dip, etc.) and milking technique (machine attachment, alignment and removal) as specified is important for each particular dairy. Being consistent is vital. Do the same procedure on every cow at every milking.

- Teats must be clean and dry before attaching the milking unit. The teat end needs special attention because it may be harder to clean.
- Watch for inflamed, swollen or hard quarters. Check for abnormal milk by forestripping before machine attachment. Identify and separate cows with mastitis.
- Keep the external surface of the milking unit clean at every turn. Wash dirty units with drop hoses before using them on the next cow.
- Keep the inside and outside of the teat dip cups clean at all times. If the solution becomes dirty, discard the remaining contents, wash the cup and refill it with fresh teat dip.
- Keep the teat spray system clean. Do not allow sprayers to come in contact with the floor. When washing floors, walls and equipment, do not let washing residue come in contact with sprayers.
- Keep towel aprons and towel storage containers clean because dirty aprons and containers may contaminate the towels used to clean and dry the teats.

- Use disposable rubber gloves during milking to prevent the spread of mastitis-causing organisms. Keep gloves as clean as possible, and wash them periodically during milking.
- After each group of cows, use a large-volume hose to wash any manure from the milking platform. Do not hose down the platform while cows still are present because dirty water can splash onto udders and teats.

Source: [www.nmconline.org/transl/elLecheroMilkerPoster.pdf](http://www.nmconline.org/transl/elLecheroMilkerPoster.pdf)

## History of SCC Regulations

During the National Conference on Interstate Milk Shipments (NCIMS) held April 28- May 4, 2011, in Baltimore, Md., voting delegates failed to approve a proposal to reduce the somatic cell count (SCC) regulatory limit in the U.S. from the current 750,000 cells/milliliters to 400,000 cells/milliliters. The final vote was 25 in favor and 26 opposed.

The NCIMS meets every other year to consider proposed changes to the Pasteurized Milk Ordinance (POM), which establishes the conditions under which Grade A milk is produced, inspected and packaged in the U.S. Conference participants include representatives from the dairy industry, government and universities. Voting delegates are limited to the state regulators.

So why should we be concerned about somatic cell count? The relationship between somatic cell count and abnormal milk has been known for more than 100 years. In 1910, in the *Journal of Infectious Disease*, Prescott and Breed wrote: "For some time, sanitarians have felt that it was important to be able to determine the number of body cells in milk. Large numbers have been held to be undesirable in as much as such conditions seem to be associated with abnormal conditions of the udder."

Another 50 years went by before action was taken on a national level in the U.S. to establish regulatory limits on milk somatic cell counts. Interestingly, the NCIMS took the first step to regulate SCCs. In 1963, the NCIMS appointed the Abnormal Milk Committee to study mastitis problems and recommend a course of action. At the 1967 conference, the committee presented the Abnormal Milk Program, which was approved and incorporated into the PMO. The program phased in a SCC limit of 1.5 million cells/milliliter, with a final effective date of July 1, 1970.

In 1975, the NCIMS had a discussion on changing the SCC limit but retained the action level at 1.5 million cells/milliliter. Then, at the 1983 conference, delegates approved a proposal to reduce the standard to 1 million cells/milliliter, effective July 1 1986.

A proposal to reduce the SCC limit to 750,000 cells/milliliter was submitted in 1989, but no action was taken by the NCIMS.

In 1991, the National Mastitis Council (NMC) submitted a proposal to the NCIMS to reduce the SCC limit to 500,000 cells/milliliter. Voting delegates approved an amended NMC proposal, which set the SCC standard at 750,000 cells/milliliter, effective July 1, 1993.

The first proposal to lower the SCC to 400,000 was submitted in 1997 by K. Larry Smith of Ohio State University. No action was taken.

For the next four conferences (1999, 2001, 2003, 2005), the NMC submitted proposals to lower the SCC to 400,000. (A few proposals also were submitted by other organizations during this time.) The NMC felt a SCC limit would lead to harmonization of standards for international trade and dairy products, reduce the risks of residues and potential human pathogens and their toxic products in the milk supply, and improve consumer confidence in the safety and wholesomeness of the U.S. milk supply. Each year, the NCIMS took no action and the SCC limit remained at 750,000 cells/milliliter.

Many thought that 2011 was going to be the year the NCIMS would approve a reduction in the SCC limit. Both the National Mastitis Council and National Milk Producers Federation submitted proposals to reduce the SCC limit. While lowering the SCC limit had considerable industry support, as well as support from the U.S. secretary of agriculture, ultimately it did not have enough support from state regulators. As a result, the SCC regulatory limit in the U.S. will remain at 750,000 cells/milliliter.

But regardless of the federal or state SCC standards, if the U.S. is to access the global market, producers need to meet the international standards. Lower cell counts are a "win-win situation" for all involved: the cows, dairy farmers, processors and consumers. You have plenty of good reasons to lower the SCC, regardless of your position.

Source: *Udder Topics*, Vol. 34, No. 3

## ■ HERD HEALTH

### Treating Heifer Mastitis

Well-known mastitis researchers Steve Nickerson, Ph.D., from the University of Georgia, and Bill Owens, Ph.D., from the Louisiana State University Agricultural Center, advocate treating pre-partum heifers with dry-cow therapy if greater than 5 percent of animals in the herd are freshening with *Staph. Aureus* mastitis.

Individual therapy also is important for heifers known to be infected. The researchers suggest routine visual and manual examinations of the developing udder, mammary fluid and teat skin to identify swollen quarters and abnormal secretions (clots and flakes). Heifers with teat scabs and abrasions also are likely to be infected and should be treated.

While producers may worry that stripping the teats of pre-fresh heifers will destroy the productive keratin plug in the teat canal, Nickerson and Owens say the practice is safe as long as (1) teat ends are properly sanitized, (2) samples are taken aseptically and (3) teats are dipped with a barrier product after sample collection.

The researchers also offer the following practical tips for treating heifers intramammarily:

- Treat heifers at a time that is convenient for the dairy, such as at the time of artificial insemination, during pregnancy diagnosis or when cows are moved to the close-up pen.
- Administer treatment no less than 45 days prior to expected calving to prevent violative antibiotic residues.

- Restrain heifers in a squeeze chute equipped with a head gate.
- Scrub teat ends with cotton balls soaked in 70 percent alcohol or with the alcohol pads packaged with mastitis tubes.
- While administering therapy, use the partial insertion method to avoid damaging the interior teat tissue and introducing new bacteria.
- Dip each teat after treatment with a barrier product.
- Conduct residue testing before mixing milk from treated animals with herd milk (the potential for residues is especially likely in animals that freshen early).

The researchers also note that treatment of bred heifers may constitute extra-label drug use and should be carried out under the supervision of the herd veterinarian and within the context of a valid veterinary client-patient relationship.

*Source: S.C Nickerson and W.E. Owens; Mastitis Detection, Prevention, and Control in Dairy Replacement Heifers, DAIReXNET*

## Risk Factors for Heifer Mastitis

What makes heifers susceptible to mastitis infections?

The risk factors are numerous, according to the results of an epidemiological survey of 171 dairy farms from five regions in Spain. Researchers found that they included:

- Calving in summer
- High herd somatic cell count (SCC)
- Presence of Staph. Aureus and Mycoplasma species on the farm
- Absence of fly control
- Feeding calves mastitic waste milk
- Close contact among calves
- Absence of antibiotic therapy to heifers
- Contact between heifers and adult cows
- Inadequate milking practices after calving
- Poor housing conditions

Another study showed that intramammary mastitis infections at calving increased the risk of clinic mastitis within the first week of calving. Mastitis prior to calving and within the first week after calving increased the risk of further cases of mastitis and culling during the first 45 days of lactation.

A third study showed that horn flies are a particularly active source of Staph. Aureus infections in heifers. Researchers found that the flies rapidly spread the bacteria from scabs on the heifers' teats to the teat canals of the entire heifer population, causing widespread intramammary mastitis infections.

This research underscores the importance of focusing on mastitis prevention and control well before heifers enter the milking string.

*Source: Dairy Calf and Heifer Association. Tip of the Week, August 2011*

## ■ FORAGES

### Transitioning Into New-crop Corn Silage

You'll soon be reaping the benefits of the time, effort and capital you put into producing corn for high-quality silage. Transitioning into new forage slowly and monitoring your herd closely during the transition will help ensure that you get the best return on your investment.

Considering your feeding goals and taking inventory of the quantity and quality of silage available will allow you to make more informed management decisions on overall ration changes. This is more important than ever in times of high commodity prices.

When preparing to feed a new silage crop, consider how crop conditions might impact silage quality: Does the silage contain a high level of grain? Was the moisture level ideal at time of harvest? Was the crop immature or even overly mature?

Also ask yourself some questions about your operation: How much dry-ground, high-moisture or steam-flaked corn can be replaced with corn silage? Which production groups should you target for higher levels of silage? What are your feeding goals?

Many questions can be answered by taking a forage sample of the new crop. Test for fiber digestibility, starch digestibility and fermentation profile.

When you open the storage structure, discard any silage that shows signs of spoilage. Look for any abnormalities that indicate potential problems, such as yeast or mold. Check the whole-plant moisture, kernel processing and particle length, and note any physical specifications that may differ from the crop being fed.

Transition into the new crop silage in 14 days, blending 25 percent new crop with 75 percent old crop at first. Then gradually adjust the percentages. This will allow time for the rumen to adjust and for you to fine-tune your ration if needed.

*Adopted from: Dairy Herd Management, August 2011, J. Anderson, Mycogen Seeds*

### What to Do With This Plastic?

While plastic materials do a great job to help preserve your forage products, they can be a challenge to deal with after use. Burning is not an option, and fewer landfills accept plastics, so proper disposal can become a management headache quickly.

To help, the University of Wisconsin has developed a step-by-step resource that explains how to best manage these materials for recycling.

Plastic films are used extensively for silo bags, bunker covers, bale wraps and horticultural mulch. Managing large, dirty plastic sheets is a major headache and cost for Wisconsin farmers. Until recently, the only disposal option for most farmers was landfilling. These plastic films, once largely unusable resources, now can be recycled into other plastic products.

Some communities are exploring ways to create local collection and/or baling sites, commonly located at landfills and solid waste transfer stations. In a few cases, plastic processors offer on-farm pickup services to facilitate easier recycling. Some processors or counties may require plastic to be managed in certain ways and delivered at certain times of the year. Here are some practices farmers can use to manage used plastic films efficiently. The general goal of such practices is to keep plastic as clean and dry as possible to maximize recycling opportunities.

- Minimize plastic waste. Reduce waste by purchasing the right size silo bag or silage cover for your needs.
- Minimize plastic contamination. Locating silo bags on concrete or asphalt pads keeps bags clean, allowing the entire bag, top to bottom, to be recycled easily. A gravel base is less expensive, but grit and debris can adhere to the plastic. Soil bases lead to the greatest contamination of plastic. If bags must be placed on soil, use higher-elevation sites with good drainage. Avoid removing silage when soils are wet. If the plastic is dirty, let it dry and then shake it with a bucket loader to remove soil and make it more suitable for recycling.
- Remove the plastic film from silos frequently. Removing less than three days' accumulation of top silage film at a time maximizes silage protection and keeps the size of plastic sheets small enough to be handled easily.
- Cut the plastic to keep it manageable. For silo bags on soil, separate the top plastic from the bottom plastic by cutting the plastic from the top down to 4 inches above ground. Slice the bottom plastic at 10- or 15-foot intervals for greater manageability.
- Keep stored plastic dry and secure it to minimize blowing. Shake dirty plastic to remove soil and debris. Then bundle it by rolling it or tying it with a strip of sheet plastic or plastic baler twine. (Do not use nonplastic twine.) Or place unbundled plastic loose in a storage area. While placing plastic on the ground is common, it requires extra labor later to load the pile for hauling. A hayrack or trailer can provide convenient storage and eliminate rehandling. If the pile is stored outside, cover it with a weighted top sheet to keep it dry and protect it from blowing. A number of low-cost plastic containment pens can be constructed using plastic fencing, hog or beef panels, or pallet bins.
- Transport the plastic to a collection center. Use a large metal trash bin, roll-off box, farm truck or wagon to haul the plastic to the recycling collection center. Secure the plastic to prevent blowing. Large vehicles with densely packed plastic provide the most efficient transportation.

*Source: University of Wisconsin; publication A3875, Recycling Silo Bags, and Other Agricultural Plastic Films; 2009*

## ■ RECORDS

### DNA Monitors Herd Performance

Dairy producers who use Dairy Herd Information (DHI) services have a new tool available to monitor dairy herd performance. The DHI-402 Herd Evaluator report, developed by Dairy Records Management Services, focuses on key indicators of a herd's future profitability.

The Herd Evaluator report highlights trends for five categories of management information: milk yield, milk quality, turnover/death loss, reproduction and herd inventory. Data are summarized in two formats: tables and graphs. For each category, 12-month trends for several key indicators are graphed. The data tables for each category include additional parameters related to the key indicators. Here are the categories:

- **Milk Yield** – Monitoring milk production allows producers to determine if performance goals are being met. Test-day averages for milk yield, fat percent and protein percent are graphed to show trends in daily production during the past year. Yearly changes in related parameters, including peak milk production, 150-day milk and days in milk, also are reported.
- **Milk Quality** – Somatic cell counts reflect milk quality and udder health of the herd. A graph of test-day herd somatic cell counts illustrates the trends in milk quality and udder health. Infection rates for the current test date can be compared with udder health in the herd 12 months ago. The incidences of new, chronic and fresh-cow infections are listed.
- **Turnover/Death Loss** – Dairy producers strive to control the herd turnover rate and death loss to avoid purchasing replacement heifers. This section shows trends in the percent of cows that left the herd during the last 12 months (all reasons and death only). Early lactation culling and overall culling by lactation number also are summarized.
- **Reproduction** – Maintaining sufficient pregnancies throughout the year is an important goal for dairy herds. Average pregnancy and conception rates are graphed for each test date during the last year. The data table in this section provides information about several other reproduction management parameters (for example, heat detection rate, days to first service, calving interval, age at first breeding for heifers). Heifer information will be available in this section if heifer breedings and pregnancies are reported.
- **Herd Inventory** – The graph in this section shows trends in herd inventory for heifers and cows. The number of heifers in the herd indicates whether an adequate number of replacement animals will be available in the future. The number of milking cows, dry cows, cows to calve and heifers to calve are projected for the next six months.

Routine monitoring of herd performance trends is critical. Ask your DHI technician for details about how to obtain the DHI-402 Herd Evaluator report so you can evaluate key areas of performance.

*Source: Adopted from K. Lee, Michigan State University Extension*

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## ■ MISCELLANEOUS

### **Social Media: What to Avoid**

With computers, the Internet and now our smartphones, the information age has hit a new (and faster) pace in communication. What used to take 24 hours now takes 20 minutes. Social media (Facebook, Twitter, etc.) is leading the way, especially for consumers.

Consumers are paying attention to what's happening in the world of social media. If you don't believe it, information from Google shows that in 2008, consumers searched more for information about Proposition 2 than they did the Los Angeles Lakers.

The following are tips on what to avoid when using social media:

- Jargon
- Blame
- Acronyms
- Straying from your area of expertise
- Speculation
- Negative messages
- Guarantees

Negative messages just don't work. And, if someone else has a negative blog post or video, respond with a positive blog post or video. Play in the medium they're playing in with positive messages.

*Source: Dairy Herd Management, August 2011, J. Lynse, AdFarm*