# Agricultural Newsletter

UW-Madison College of Ag & Life Science University of Wisconsin-Extension

> April-May-June 2011 Volume 17 Issue 2

#### Table of Contents

- 1 Use Accurate Bale Weights and Quality Hay Testing
- **7** Help Your Neighbors
- **7** FSA Deadlines to Remember
- 3 Stress and Safety
- Field Demonstration Sites Needed in Douglas County
- Soil Testing is Important
- 4 Upcoming Ag & Hort Events for the North
- 5 2011 Crop Cost of Production Available Online
- Regional Cow/Calf Meeting Features Organic Beef
- Rising Food Prices Why?
- **7** Greenhousing Dairy Cattle
- 7 This Quarter's Events

# Use Accurate Bale Weights and Quality Testing to Buy and Sell Hay

Otto Wiegand Area Ag Agent Burnett, Sawyer, & Washburn Counties

A recent seminar series on hay in northern Wisconsin revealed a number of interesting observations. The hay series covered pricing, production costs, buying and selling of hay, reducing storage losses, forage quality, harvesting and forage establishment.

Too few of the 150 participants tested their own hay for quality or required tests for purchased hay. Most had little idea of the meaning of relative forage quality (RFQ), NDF fiber, total digestible nutrients (TDN or energy) or other information listed on a forage test report. Even fewer had formal balanced rations or diets for their animals. Also only a couple of the participants knew much about the nutrient composition of forages or differences among their forages. Most hay transactions were done by appearance without knowing quality or weight, especially for large round bales.

Many participants did not realize that the outer four inches of a large round bale, easily lost to weathering, comprises 25% of bale volume. Many were not using hay feeders designed to reduce waste. A number of horse owners felt that they were paying too much for their hay or not getting the nutrient value from the bales they purchased. The majority of participants, not surprisingly, were smaller beef herds and horse owners who purchase modest amounts of dry hay, who did not see the benefits of paying \$15 for a forage analysis. Furthermore, not all hay auctions, which are less common in the northern Wisconsin than 20 years ago, have forage nutrient testing or weighing equipment.

Nonetheless, where there is opportunity for profit, <u>hay sellers</u> have several ways to arrive at a fair sale price. These include cost of hauling, cost of nutrients applied, or cost of nutrients removed, cost of other inputs such as seed, labor, harvest equipment, storage and land. Hay sellers should have a good estimate of their cost of production and marketing. Sellers also need a marketing strategy to ensure profit and reputation that differentiates their hay including forage testing, exact weights, proper storage methods and good business practices. Hay budgets and a hay price calculator are available at the University of Wisconsin Center for Dairy Profitability website.

<u>Hay purchasers</u> should know forage values and what they are paying for. It is difficult to estimate value visually if a 1000-lb. bale offered for sale actually weighs

# Agricultural NEWSLETTER

produced by University of Wisconsin-Extension and UW-Madison College of Ag & Life Sciences

# Representing Burnett, Sawyer, & Washburn Counties:

Kevin Schoessow Area Ag Development Agent 715-635-3506 or 800-528-1914

Richard Otto Wiegand Area Ag Agent 715-635-3506 or 800-528-1914

Phil Holman Spooner Ag Research Station Superintendent 715-635-3735

Yves Berger Spooner Ag Research Station Sheep Researcher 715-635-3735

#### Representing Ashland, Bayfield, and Douglas Counties:

Jason Fischbach Area Agricultural Agent 715-373-6104

Jane Anklam Horticulture & Agriculture Agent 715-395-1363

University of Wisconsin, United States Department of Agriculture and Wisconsin Counties Cooperating. UW-Extension provides equal opportunity in employment and programming. Including Title IX and ADA requirements.

If you have any special needs or require special accommodations, please write to UWEX Area Agricultural Agent, Spooner Ag Research Station, W6646 Highway 70, Spooner, WI 54801 or UWEX Area Agricultural Agent, Ashland Ag Research Station, 68760 State Farm Road, Ashland, WI 54806.

800 lbs. That missing 200 lbs. would be worth \$10 if the bale price is \$40. The same relationship may hold true if buying hay that was stored unprotected outside and has lost its outer layer (25%) to weathering.

Buying forage-tested and higher-quality hay is also likely to pay dividends. Hay with a RFQ of 130 having a crude protein content of 15% and TDN of 60% compared to hay with a RFQ of 100 with lower protein at 10% and TDN of 55% would have considerably more feeding value. Five percent less protein in a 1000 lb. bale of hay is about 44 lbs. Making up for the lower protein in the ration with soybean meal (SBM) at 44% CP

would require about 100 lb SBM at a cost of about \$17 (\$340/ton). The 5% less TDN would have a value of about \$6 in the diet based on corn at 80% TDN, requiring about 55 lbs. or a bushel of corn (\$6/bu) to compensate for the lower hay energy. Based on a today's value of SBM and corn and these assumptions, one can afford to pay at least \$23 more for a 1000 lb bale of hay at a 130 RFQ than for a bale at 100 RFQ.

Buying and selling hay with accurate bale weights and nutrient content through forage testing pays dividends to both buyer and seller!

#### Help Your Neighbors

There are many individuals and families in NW Wisconsin who are having a hard time putting enough food on the table in these hard economic times. The Indianhead Community Action Agency food pantries at the "Indianhead Connections Stores & More" in Webster, Spooner, Hayward, Ladysmith, Neillsville, and Medford served 3,864 different families in 2010, and the number is growing steadily.

These families are especially in need of meat. If you or anyone you know can donate meat for these families, it would be greatly appreciated. They can pick up a donated portion of a beef or hog at the processor, or have an animal that you donate processed. They also accept donations of money or other food products. Please call The Agency at 715 403-3844.

#### FSA Deadlines to Remember

March 31, 2011 .. Apply for 9-month loans and LDPs for small grains, wheat and honey

April 15, 2011 ..... CRP general sign-up

May 31, 2011 ..... Apply for 9-month loans and LDPs for corn and soybeans

June 1, 2011 ...... DCP/ACRE Enrollment and landowner leases returned

**July 15, 2011** ..... For NAP producers to certify 2010 crop production

**July 15, 2011** ..... Report 2011 crop acreages on spring seeded crops, forages, small grains, winter wheat and some perennial crops

**July 15, 2011 .....** To report production evidence for ACRE and PTPP 2010 crop acreage

July 29, 2011 ..... 2009 SURE Sign-up

**Continuous** ........ Conservation reserve Program (CRP) sign-up, CREP sign-up, SAFE sign-up & Farm Storage Facility Loans

#### Stress and Safety - Inspect Your Farm for Hazards and Take Corrective Action

Mark Purschwitz - Wisconsin Farm Safety and Health Specialist, University of Wisconsin-Extension, 608-262-1180, mapursch@facstaff.wisc.edu - Adapted by Otto Wiegand

Trying to be careful or to work safely is only a small part of preventing injuries on the farm. Identifying hazards and either removing them or guarding against them is much more effective. As a farm operator, you should conduct an all-farm inspection at least once a year. Ask other family members or employees help with the inspection, since they may see things you overlooked. Your safety, as well as that of your family, employees, and visitors, depends on identifying and controlling hazards.

Machinery - This is the time of year when farmers begin preparing and using machinery for long hours on the field. Review your operator's manual to see what safety equipment was installed on your machine. Check to make sure guards and shields are in place – they are critical to your safety. You should have highly visible lighting and marking on any machines you drive on public roads to protect yourself and other motorists. Your machines must be in good condition, with good tires, brakes and other safety equipment. If you have tractors without rollover protective structures, consider a retrofit. It is good life insurance.

Farmstead - Take a slow and observant walk around the entire farmstead. Examine all buildings and other structures inside and out. Look around the barnyard, the driveway and any other places where you or others, including children or visitors, might be exposed to hazards. Look at the condition and cleanliness of steps, walkways, ladders, and anything else that could cause slips or falls. Good general housekeeping is important and sets the overall tone for a safe and orderly operation.

**Electrical wiring -** Inadequate or damaged wiring can cause fires, electrocutions and many other serious problems. Inspect wiring and clean debris from outlets and power boxes.

**Storage areas -** Make sure chemical storage buildings and manure storage facilities have warning signs and doors, fences or other barriers to keep children and unauthorized people out. Push-off ramps for scraping manure into pits should have barriers strong enough to keep the scraping

machine from sliding over the edge. The barrier should be high enough off the ground so you can scrape manure under it into the storage facility.

**Animals -** If you have bulls, post warning signs. Visitors may not expect to encounter bulls, and you could be liable in case of an attack. You should also have human passthorough (two heavy pipes or sturdy posts 14-18" apart that allow a person to run through but prevent a bull from following) as well as strong gates, fences and handling equipment.

Emergency Response - Place fire extinguishers in areas where they could be needed. Post phone numbers for the fire department and emergency medical services near every telephone. Also post verbal directions for finding your farm in case a visitor to the farm needs to make the emergency call for you. Teach everyone on the farm how to use a fire extinguisher and who to call for help if it is needed. At least one person on the farm should be trained in basic first aid. Talk with your local fire fighters and EMTs about your farm and how they can best respond to an emergency.

# Field Demonstration Sites Needed for Soil Fertility Research in Douglas County

Jane Anklam Horticulture & Agriculture Agent Douglas County

Are you aware of "excessively high phosphorous" sites on your cropland as indicated by your soil tests? Have you noticed low K (potassium) levels in your hay fields as reflected in tests over the past years? Both of these nutrients are required for economic plant growth, yet both are less understood as to how they move in, through, and off of our clay fields and into our crop or surface water.

If you have either of the fertility conditions mentioned above, and are interested in participating in a field study with UW-Extension this summer, contact Jane Anklam, Agriculture Educator, Douglas County jane.anklam@ces.uwex.edu, 715-395-1363.

3

### Soil Testing is Important...

...And So is Doing it Correctly

Randy Gilbertson Grazing Planner Northwest WI Graziers Network

Last year while working with a producer on a grazing plan, I was reviewing his soil test reports, and noticed some fairly significant discrepancies from field to field. Organic matter varied more than I would expect with soils being similar, as did pH, while phosphorus and potassium were fairly consistent. While it is certainly possible that due to previous soil management test results could vary, I was suspicious due to the fact that the 5-acre sample areas were subsets of fields that had been larger when cropped in the past.

After commending the producer for having soil tests in the first place, I questioned him on how they were taken. His response was that he had taken them himself, and had collected soil in three random locations in each 5-acre test area. I suggested that we re-test his soils, and pull the recommended number of cores, which would be at least 10 to 15 per 5-acre test plot. We met in August and re-tested all of his fields, pulling 15 or more cores from each area while making an effort to get samples from all slopes and aspects of the field. We also made an effort to avoid animal excrement, or areas that were heavily used by livestock, such as areas where livestock were fed.

When the results came in they were much more consistent, phosphorus and potassium were

about the same as the previous tests, but organic matter and pH were much more consistent. Nutrient management done by the producer in the past was not inappropriate due to his inconsistent sampling, however, it could have been, which would have resulted in wasted money, and the possibility of nutrient run-off leaving the farm.

Soil testing is important, but so is doing it right! If you are going to make the effort to collect the samples, be sure you follow the recommendations provided by the laboratory on the data form. More samples is always better, be sure you get all field conditions represented, and avoid areas that are not typical

for the field. If you plan to utilize alfalfa in your seeding, be sure you test occasionally for micro-nutrients like sulfur and boron.

Knowing where you are at with your soil fertility allows you to make wiser choices on how to spend your money. Sometimes money spent on fertility is a wiser choice than money spent on seed! Typically in this part of Wisconsin, pH is low and potassium is low, so generally pastures will respond well to both lime and potash.

If you have questions on how to soil test, or on what your results mean please feel free to call the University Extension Office in Spooner at 715-635-3506 for assistance.

# Agriculture and Horticulture Upcoming Events For the North

Jane Anklam Horticulture & Agriculture Agent Douglas County

**Pruning and Grafting Workshop, April 13, Douglas County.** Robert Tomesh, recently retired Horticulture Specialist and Coordinator for Master Gardener Education, will demonstrate proper pruning for fruit trees and raspberries. Cost of the program will be \$10.00/person. Call Jane Anklam, Douglas County Agriculture and Horticulture Educator jane.anklam@ces.uwex.edu, 715-395-1363, to register and learn of time and location (to be held in the Superior area).

**Neighborhood Tree Tour, June 4, Wessman Arena, Superior.** Join the Lake Superior Master Gardeners on a neighborhood walking tour to learn proper (and not so proper) care, pruning, and landscaping use of our home landscaping trees. Tree and pest identification will be covered as well. The tour will be held in conjunction with the City of Superior's tree planting and storm water education event. The event will be held between 9:00 am and 1:00 pm. The tree tour is open to the public. Contact same as above.

Locally Grown Food Initiative, third Wednesday of the month, 6:30 pm Solon Springs Community Center. Are you a grower who is trying to understand the locally grown food market? Are you a new gardener who wants to have a bumper crop for the freezer this fall? Are you a consumer that really wants to have a choice of local food for your diet? Consider attending the Locally Grown Food Initiative as we explore how our region fits into the concept of local food growing and distribution. Contact same as above.

### 2011 Crop Cost of Production Calculator for Wisconsin Available Online

Kevin Schoessow Area Ag Development Agent Burnett, Sawyer, & Washburn Counties

The costs for growing alfalfa, corn, soybeans and wheat in Wisconsin are predicted to be more in 2011 than in 2010. Fertilizer prices will be higher in 2011. There has been volatility in the price this fall. Seed prices are expected to be slightly higher, but pesticides should be relatively stable, according to Ken Barnett, University of Wisconsin-Extension educator. When deciding how much of an input to apply, producers can maximize their investment in that input by considering its marginal rate of return.

The 2011 Crop Budget Cost of Production Calculator for Wisconsin can help producers in making their cropping decisions in the upcoming year. It allows producers to construct enterprise budgets for corn after corn, corn after soybeans, corn silage after alfalfa, corn silage after corn, soybeans, wheat, seeding alfalfa and established alfalfa for hay and haylage.

The Cost of Production Calculator can be downloaded from the Center for Dairy Profitability web site at http://cdp.wisc.edu/.

Look in the Budgets and Other Resources heading and then go to the Crop Enterprise Budgets and Economics section. Or contact: Ken Barnett, 715-355-4561, ken.barnett@ces.uwex.edu.

# Regional Cow-Calf Meeting Features Organic Beef

Grantsburg, Thursday, April 28, 5:00-8:30 PM

Otto Wiegand Area Ag Agent Burnett, Sawyer, & Washburn Counties

Be sure to attend this year's spring beef cow-calf meeting on Thursday, April 28 in Grantsburg sponsored by the UW-Extension Livestock Team. The meeting will be held at the Beaver Creek Cattle Ranch owned by Doug and Kathy Anderson, 12402 State Hwy 48 in Burnett County. The farm is located near Trade Lake three miles east of State Hwy 87, north of the Polk County line and south of Grantsburg, and across the road from Bass Lake Lumber. Or take Hwy 35 to Frederic and then west on Hwy 48 for about 10 miles. Watch for the signs.

The Andersons rotationally graze an organic herd of 30 Scottish Highlanders including 20 cows. They raise 40 hogs and outsource organic poultry. The Andersons own 180 acres and rent another 345 acres, all certified through OCIA. Crops include 225 acres of hay, and various acreages of feed grade soybeans, buckwheat and blue corn for domestic and export markets. They bought the farm in 1996. Doug is one of the leading marketers of local organic meat to restaurants in Wisconsin. He holds a BA and MA in criminal psychology and retired as an associate warden after a 30-year career in law enforcement at San Quentin Prison in California.

The program begins at 5:00 PM with a farm tour followed by a beef supper and program at 6:00 at the farm. Speakers will include Amy Radunz, the State Extension Beef Specialist from UW-Madison, Brenda Boetel, Extension Ag Economist from UW-River Falls, Keith Vandervelde, Ag Agent from Marquette County, and a USDA/APHIS Wildlife Biologist from Rhinelander. Topics will include: (1) Livestock Industry Outlook, (2) Should Calving Dates Be Moved to May, (3) Raising vs. Buying Replacements, (4) Vaccination and Worming Protocols, and (5) The Latest Information on Wolves and Other Predators.

The cost of the program is \$10 for the meal. Please register in advance by Monday, April 25. For registration or questions, contact Otto Wiegand or Kevin Schoessow at UWEX-Spooner, 800-528-1914 or 715-635-3506.

You may also want to check out UW-Extension's <a href="www.coolbean.info">www.coolbean.info</a> site for the latest updates on soybeans, small grains or corn. View 2010 variety trial results, read about market news, watch crop diagnostic video clips or use the links to connect to other agronomy related sites.



### Rising Food Prices - Why?

Tim Jergenson Agricultural Agent Barron County

Wholesale food prices rose by 3.9 percent in February 2011. That is the sharpest increase in more than 36 years. Meat and dairy prices rose, as did fresh vegetable prices. Fresh vegetable prices jumped nearly 50 percent in February. The United States Department of Agriculture (USDA) predicts that "food costs are likely to keep climbing for most of this year." USDA is predicting increases in the price index for 2011 of 3.5% to 4.5% for pork, 2.5% to 3.5% for beef, 2.5% to 3.5% for eggs and 4.5% to 5.5% for dairy.

The sharp increase in food prices has lead to some heated debates and finger pointing in both consumer and producer circles. Why are food prices increasing so rapidly? Let's look at some of the factors that affect rising food prices.

#### Blame the Weatherman-

- Cold weather accounted for most of the recent increase in the cost of fruits and vegetables, forcing stores and restaurants
  to pay more for green peppers, lettuce and other vegetables. Harsh winter freezes in Florida, Texas and other Southern
  states damaged many crops leading some fast food restaurants to put tomatoes on burgers only when requested by the
  customer.
- Crop prices began to increase last summer after droughts slammed harvests in Russia and several other countries. This lead to increased corn, wheat and soybeans prices forcing the farmers to spend more on feeding beef, hogs, and dairy cattle.
- Sharp growth in world economic powers like India and China has increased the demand for food.
- Increased costs of transportation, packaging and processing have driven up the cost of food after it leaves the farm. These costs make up a larger portion of food prices in the United States than other countries around the world.
- Corn and oilseeds being used for fuel production has some impact on the supply of grains and thus impacts the price of meat, milk and poultry. Food vs. fuel has become a point of contention in many circles. It should be noted that oil prices have twice the impact on food prices as does the price of corn. A \$1 per gallon increase in gasoline will increase retail food prices by 0.6 to 0.9 percent (as measured by CPI). The equivalent increase in price of a bushel of corn would increase retail food prices by 0.3 percent.\*

Another factor often overlooked in the debate over rising food prices is the farmer's share of the food dollar. Farmers receive only 20 cents of every food dollar that consumers spend on food at home and away from home. According to the USDA, off farm costs including marketing, processing, wholesaling, distribution and retailing account for 80 cents of every food dollar spent the United States.

The following table summarizes the farmer's share of the retail price of some common food items:

#### Farmer's Share of Retail Food Dollar \*\*

Food Item	Bacon 1 lb.	Bread 1 lb.	Fresh Carrots 3 lbs.	Cereal 18 oz. box	Milk 1 gal. fat free	Cheddar Cheese 1 lb.
Retail \$	\$4.99	\$3.49	\$2.63	\$3.99	\$4.39	\$4.69
Farmer \$	\$0.63	\$0.18	\$1.15	\$0.08	\$1.50	\$1.12

<sup>\*</sup> John Urbanchuk, LECG, LLC

6

<sup>\*\*</sup> USDA, NASS, "Agricultural Prices," 2011

### Greenhousing Dairy Cattle

David Kammel UW-Extension Engineer

Greenhouses aren't just for plants any more! Now you can find calves, heifers, dry cows, milk cows, sheep, hogs, and chickens under them, too. With a goal of cutting capital costs for facilities, some farmers are turning to greenhouse suppliers to provide housing for their livestock. More and more farmers are trying this novel idea in their operations.

Even under a greenhouse, there still needs to be good design for space use and animal comfort. Greenhouses for young calves can provide a much nicer environment for the operator, but that environment must also be beneficial to the calves. Free stall barns with outside feeding and bedded packs for dry cows are also being designed using greenhouses.

When comparing cost of greenhouse frames to post frames for housing, make sure you are comparing the same type of system and are including all the costs. The shell of a greenhouse may seem pretty cheap, but that's not the total cost for housing. Additional site preparation, concrete, plumbing, and electrical work should also be considered in the price.

For example, you can't compare the cost of plastic and steel materials for a greenhouse with costs for a constructed free stall barn-you are comparing apples and oranges.

There are many ways to reduce capital cost for facilities, and greenhouses might be one of them. Just be a good consumer and shop around before making a decision to buy.

#### This Quarter's Events

**Contacts:** UW-Extension Ag Agents Otto Wiegand or Kevin Schoessow, Spooner Station, 715-635-3506, Jane Anklam, Douglas Co, 715-395-1363, or Jason Fischbach, Ashland & Bayfield Counties, 715-682-8393 for more information, brochures or how to register.

April 5, Tues – Protecting the St. Croix Annual Conference, UW-River Falls – University Center, contact John Haack 715-635-7406

April 7, Thurs, 6:30-8:30 PM – Northern Counties Beef Producers Summit, Ashland – contact Jason Fischbach 715-373-6104

April 13-15, Weds-Fri – Anaerobic Digester Operator Training Program, Fond du Lac – contact Paul Dyk 920-929-3171

April 23, Sat, 1-5 - Earth Day, Shell Lake - Community Center, Contact Mary Ellen Ryall 715-468-2097

April 28, Thurs, 5-8:30 PM – Regional Cow-Calf Seminar, Grantsburg/Trade Lake – Beaver Creek Ranch owned by Doug Anderson, organic beef and crop farm, see article

June 11, Sat AM – Washburn County Dairy Breakfast, Spooner – Fairgrounds June 18, Sat AM – Burnett County Dairy Breakfast – (not confirmed)

June 20, 21, 23, Mon, Tues & Thurs – Spooner, Washburn County, Tractor Safety Training – Spooner Ag Research Station – for youth 12-17, contact Lorraine, Otto or Kevin at UWEX-Spooner, 715-635-3506 (not confirmed)

June 25, Sat AM – Sawyer County Dairy Breakfast, Hayward – Fairgrounds

**June 28, Tues, 1-3 - Domestic Deer Pasture Walk -** Clam River Whitetails, 5234 Kent Lake Rd, Frederic, just north of Cty B near Coomer, owned by Jarrod & Kerrie Washburn, watch for mailing or newspaper press releases

July 7-9, Weds-Sat – Central Burnett County Fair – Webster

**July 12-14, Tues-Thurs – Farm Technology Days**, Marshfield, Marathon Co, WI

For more information and a cost analysis comparing several layouts for post frames and greenhouse frames, contact the

Biological Systems Engineering Department at 608-262-3310, or at email Dave at: dwkammel@facstaff.wisc.edu.

7



UWEX Area Agricultural Agents Burnett, Sawyer, & Washburn Counties Spooner Agricultural Research Station W6646 Highway 70 Spooner, WI 54801

Return Service Requested

PRST SORT STD US POSTAGE PAID PERMIT NO. 44 SPOONER, WI 54801



New techniques for buying and selling hay

**Inspect your farm for safety** hazards

Attend one of the upcoming educational programs offered this spring

Kevin Schoessow UWEX Area Agricultural Agent