Predictive Equations for Alfalfa Quality (PEAQ) is a method to predict the forage quality of standing alfalfa. It’s designed to help answer the question: when do I cut my alfalfa. Being first promoted in the 1990’s, PEAQ is not new; however, it has become a valuable tool worth reviewing. It was developed by Agronomists at the University of Wisconsin - Madison under the direction of Dr. Ken Albrecht. It was validated not only in Wisconsin, but also in numerous other environments from California to New York.

Only two pieces of information are required for the equation to work; the height of the tallest stem in a representative one square foot field area; and the maturity of the most advanced stem in that same area. Compare these numbers with a PEAQ table developed from the researchers regression equations and you have an instant estimate of relative feed value (RFV) at little or no out of pocket expense. Additionally, several seed companies have developed “PEAQ Sticks” that can easily be used to determine plant height and forage quality.

Profits can be greatly influenced by the proper timing of alfalfa harvest. PEAQ helps farmers predict the optimum harvest time for alfalfa. This has proved especially useful for the first cutting of alfalfa. Proper timing of first crop alfalfa sets the stage for the rest of the season, influencing total yield, forage quality and stand persistence.

To learn more about PEAQ and view or print PEAQ tables, find it on the web at: http://www.uwex.edu/ces/crops/peaqdir.htm

Portage County Farm Technology Days

For the first time in over three decades, Wisconsin Farm Technology Days is coming to Portage County August 12-14, 2014! Portage County host farms are Blue Top Farms and Feltz Family Farms located east of Plover’s Crossroad Commons, south of Highway HH. Additional land, being used for field demonstrations, is being made possible through neighboring growers; Myron Soik and Sons, Inc. and Greg Kizewski and Sons, Inc. Plan to join us August 12-14, 2014.

Visit our website http://www.portagecountyfarmtech.com for opportunities to be a part of this exciting event. Opportunities exist for sponsorship, exhibitor space, committee service, and day of the event volunteering. The Portage County Farm Technology Days toy collectible is a 1999 Lenco Self Propelled Airhead Potato Harvester, 1:42 scale diecast replica. This is a one of a kind, limited edition with only 1,000 being produced.

Please partner with us to showcase the unique agriculture of Central Wisconsin. For additional information call 715-344-2556.
Today there is renewed interest in the practice of grazing cattle. Many areas of Wisconsin have hills and valleys which are not conducive to the production of grain crops but are much better suited to the practice of grazing cattle. This renewed interest has been due in large part to the practice of managed intensive grazing. Managed intensive grazing is the practice of dividing a pasture into small parcels called paddock and then moving the cattle from paddock to paddock on a frequent basis, many times this will be daily. It has been shown that managed grazing will provide greater forage production as well as reduced costs for forage harvesting and manure hauling.

On April 26, 2013 there will be a Managed Grazing Seminar at the Marshfield Agricultural Research Station located at 2611 Yellowstone Drive, Marshfield, Wisconsin. The meeting will be from 9 AM to 3:15 PM with registration from 8:30 to 9:00 AM. The meeting is sponsored by the University of Wisconsin Extension and a Grazing Lands Conservation Initiative Grant from the Wisconsin Department of Agriculture, Trade and Consumer Protection. People are asked to pre-register by April 22 by sending a registration fee of $20 per person to UW-Extension, Wood County, 400 Market St. PO Box 8095, Wisconsin Rapids, WI 54495.

Speakers for this seminar will include Dr. Larry Tranel from Iowa State University Extension, Dan Vosberg, grazing dairy producer from South Wayne Wisconsin and Dr. Dennis Cosgrove, Extension Forage Specialist at the University of Wisconsin River Falls.

Larry Tranel has been with ISU Extension since 1999. He was with the University of Wisconsin Extension from 1989-1999. Larry has a Master of Science degree and a Bachelor’s degree in Ag Economics from the University of Wisconsin, Platteville. Larry’s area of expertise includes management intensive grazing; production, nutrition and farm management education in dairy and beef; utilization of forages; and livestock facility planning including remodeled freestall/parlor modernizations. Larry has studied grazing and low cost milking systems in New Zealand, Ireland, Australia, Moldova, Tanzania and Canada.

Dan and Ruth Vosberg purchased their 158 acre farm in southwestern Wisconsin in 1991. They started milking 18 cows with the current low input management philosophy. They have expanded their operation to the point where they are currently milking around 200 cows. They started out using seasonal milk production with all cows calving in the spring. As their operation grew they have now modified their system to a spring and a fall calving program. The Vosberg’s original feeding plan was “low input” pasture supplemented with a minimal amount of grain. They have now changed their feeding to include a higher amount of grains, corn silage and by-products such as cottonseed and distillers.

Dennis Cosgrove specializes in forage establishment methods, stand evaluation techniques, no-till and reduced tillage forage production, pasture improvement methods, grazing management and species selection. He has also been involved the evaluation of pasture intake by grazing animals and three years of beef grass finishing trials. UW-River Falls is the only campus to utilize rotational grazing as a primary source of feed for livestock in summer.

The drought last summer has resulted in many producers now being short of forage. Many pastures were overgrazed last summer which will result in slower growth this spring.

Grazing is one way of reducing overall input costs and maximizing net return.
For a long time now we have discussed standards for heifers entering the herd. The goals have been rather modest. Let’s review briefly:
- They should calve by 2 years of age
- They should produce at least 85% of mature cows.
- As a group they should be genetically superior to the milking herd.
- They should gain 1.75 pounds per day and way at least 1,150 pounds after losing up to 250 pounds at calving.
- They should be free of mastitis, be immunologically sound and have sound lungs and feet.

Even without sexed semen and allowing for modest mortality most producers find that they have excess capacity to produce herd replacements. Some use these heifers to expand the herd; others want them on hand “just in case.” Keeping these surplus heifers has an economic cost. Currently you can buy replacements for less than it costs to raise them. There are biosecurity advantages for keeping your own heifers, genetic opportunities as well. Raising your own may be a good idea; raising more than you need is more questionable.

Cull heifers that have experienced chronic or debilitating disease, heifers that have not grown well, consider genomic testing your heifers to identify the best to retain. Review your uniformity of your heifers. In conversation with Patrick Hoffman, UW-Extension Specialist in dairy replacement systems Pat indicates that while many of us are not meeting the minimum standards there is even more to accomplish. If heat detection, fertility or growth rates are variable we may begin breeding heifers rather young to get an acceptable age at first calving. It is better to increase the uniformity, having a smaller distribution around the target performance of age at calving, calving weight or frame score in our heifers. Narrowing up this window will reduce rearing costs and produce a better group of herd replacements. Possibly our over retention of heifers is crowding our facilities, limiting our management abilities, creating excess competition that results in poorer heifer performance. This poorer performance creates a negative feedback suggesting the need for even more heifers.

If we raise fewer heifers, we may produce a better average heifer due to selection and not overtaxing management and facilities. The money we save in reduced labor might allow for foot trimming in heifers, an improved vaccination program or pay for genomic tests. Often we really can do better with less. We can produce a more uniform, higher quality animal at less total cost.

Limit Feeding Heifers
By Matt Lippert, CWAS Dairy Specialist

The UW (much of the work done right at the Marshfield Agricultural Research Station) has completed ground breaking work on heifer rearing. One set of trials that is especially relevant in the aftermath of the 2012 drought are those that show that limit feeding of heifers can be used successfully. Heifers, if fed like steers, are physiologically capable of gaining 3 pounds per day or more. Research was conducted to see if heifers could be fed diets that provided adequate energy and protein for gains of
1.8 pounds per day in a more concentrated form—1.8 is all that is needed to get a 1,250 pound heifer by two years of age. They found the limit fed heifers perform well, and they generate much less manure requiring much less labor to keep the lots clean. The most important guideline is that these heifers must all have access to the feed at the same time. If not, dominant animals will get too heavy and others will not gain adequately. Limit feeding provides another set of feedstuff options when ration choices are scarce as they are this year. Limit feeding requires more management, diets need to be formulated more carefully, and it bears repeating that access to feed is essential.

Phosphorus supplementation in heifers has also been researched extensively at Marshfield. Most conventional diets are adequate in phosphorus without supplementation. Skeletal growth, first lactation production, fertility, bone density and bone phosphorus content have all been evaluated to make this recommendation. Reducing phosphorus supplementation in the replacement herd has environmental benefits in addition to helping manage the cost of raising replacements.

**Nutrient Management for Farmers—Why?**

*By Nav Ghimire, Green Lake County*

Many dairy farmers in Wisconsin are getting rid of their animals and shifting to corn grain production. The ethanol plants are closing because of lack of economy in production and there is no longer government’s subsidy. The Hog industry which used to be one of the larger industries in Wisconsin is declining and moving to Iowa. Therefore, number of end users for corn grain in Wisconsin is decreasing. Most dairy farmers used to store grain in their silos. Their shift in production system from dairy to corn grain requires knowledge of grain quality. Balancing nutrients also plays an important role in developing quality grains. On the other hand, take note that the United States including Wisconsin is competing in international corn and soybean markets with South America and Brazil. With this scenario, even though corn production went down in 2012 due to drought, the temporary increase in price does not look very encouraging for 2013 and beyond. Since energy price is going up, the fertilizer cost would go up too. Many nitrogen fertilizers such as urea are imported to United States from abroad and shipping costs are also increasing.

It is the nature of the price structure for a commodity that it remains close to the production cost. In addition, in Wisconsin, some fields owned by farmers have either sloping land or land with rolling hills that results in soil erosion losing the top layer of the soil in which all life is tied up. With this top soil loss every year, it is difficult to meet our obligation for leaving future generations with a fertile soil and production practices that will be able to produce food for 7 billion people.

Following this line of reasoning— that as cost of production for corn is increasing and farmers have to compete in a global market —, developing a good nutrient management plan to reduce production cost is essential. Another line of reasoning highlighting the importance of a good nutrient management plan is the fact that farmers in Wisconsin and in the United States as a whole are faced with increasing regulatory pressures because of agricultural contributions to non-point source pollution. In addition, general public tolerance for many current farming practices has declined. People are concerned about manure odors, manure application rates, manure transportation, manure spills, dust, and noise produced on many farming operations which is often termed as—the rural urban interface. The Nutrient Management Farmer Education Program is an educational process designed to create an awareness of these concerns and offer producers assistance for improving nutrient management practices on their operations.
How you, or the individual taking soil samples for you, fills out the Soil Submission Sheet that is sent with your soil samples to the soil testing laboratory will greatly affect the recommendations you receive. Here are some steps you can take to optimize the recommendations you receive.

The submission form allows you to list four crops and yield goals for those crops under a heading titled 4-Year Crop Rotation. To optimize information you receive, list four different crops that you might raise in this area. For example, your plans may be to raise alfalfa for three years so that is the only crop you list. In this case, you will receive a fertility recommendation for only one crop, alfalfa. Instead, if you listed four crops, alfalfa, corn for silage, soybeans and wheat, you will receive fertility recommendations for four crops, giving you more fertility information if your plans change.

In this same area you can establish yield goals for those crops you list. These yield goals should be based on average yields actually obtained over the last five years and not on unrealistic wishful thinking. Higher yield goals equate to higher recommendations of P and K fertilizers. Increasing the yield goal for alfalfa by one ton per acre will increase the cost of the P and K fertilizer recommendations by $35 to $40 per acre if soil test levels are at the optimum range.

Revisions to UW-Extension publication A2809 “Nutrient application guidelines for field, vegetable and fruit crops in Wisconsin” have been made in the last 6 months. One of the major changes is that the number of soil groups has been reduced from six primary groups to three groups. The three current groups are sandy (S), loamy (L) and organic (O). These divisions are made based on a soil’s taxonomic classification using soil properties of texture and organic matter. In general, soils in the O group are from the taxonomic soil order of histosols (peats and mucks), soils in the S group have sand or loamy sand textures and soils in the L group are all the other soils that are not group O or group S. These changes make it very important to identify the soil series of every soil sample submitted so that the nutrient recommendations made are the best possible. Soil samples submitted with no soil identification will receive one of three generic default recommendations based upon a texture determination made by the soil testing laboratory. For example, the default nitrogen recommendation for corn on a sample with no soil series identified, but determined to be “loamy” by the soil testing laboratory, will be that for a soil with a medium yield potential. Appropriate nitrogen recommendations for high yield potential soils of the loamy group can only be made if the soil series information is provided with the soil sample.

There are several resources for identifying the soil series for each soil sample. There are print copies of soil surveys available for each county and there are soil surveys available on the internet. These websites allow you to create maps and find names of soils:

http://websoilsurvey.nrcs.usda.gov/app/HomePage.htm
http://www.manureadvisorysystem.wi.gov/app/applicationmaps

You can also find assistance at your local National Resource Conservation Service (NRCS office), Farm Service Agency (FSA office), Land and Water Conservation office or UW-Extension office. No matter which route you use to obtain soils information, you will need the appropriate Township, Range and Section numbers (for example: T16N-R6E, Section 21). If you would like to talk about any of these ideas, please call me at 608-339-4237.
Landowners and anyone interested in wildlife, nature and forest management are invited to attend the Marquette County Demonstration Forest Field Day to be held Saturday, May 11 from 9-noon on property owned by Byron and Mary Hill, located in Harrisville, near Westfield. The event is free and open to the public.

The 220-acre property has something for nearly everyone. Diverse management practices have created havens for several species of wildlife while providing timber production. The property features extensive red pine management, forest to pasture to forest conversion, history on forest crop law to managed forest law, a tamarack swamp, a lowland swamp, vernal pools, a wildlife pond and more.

The property serves as a Demonstration Forest for the Golden Sands Resource Conservation and Development Council. Other collaborators for this event include the Wisconsin DNR, Wisconsin Woodland Owner’s Association and Marquette County Land & Water Conservation Department.

The property is located at W5202 County Road J in Harrisville (4 miles East of Westfield). For more information contact Golden Sands RC&D Council at info@goldensandsrdc.org or 715-343-6215.

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May/June Dairy Breakfasts

**May**

25 Adams County Dairy Breakfast  
Adams-Friendship Middle School, 420 North Main Street, Adams, 6:30-11 AM

**June**

1 Juneau County June Dairy Breakfast  
More info: http://juneau.uwex.edu

7 Marshfield Dairyfest—Breakfast is June 7, Dairyfest runs June 7 and 8th  
Central Wisconsin State Fairgrounds, Expo Building, 513 E. 17th Street, Marshfield 54449

15 Portage County June Dairy Day  
Altmann Enterprises Dairy LLC, 4559 Brown Thrush Rd., Junction City 54443
8-12 Noon. Donation: $6 (adults), $2 (Children 6-10 years), Children 5 and under free

16 Marshfield FFA Alumni June Dairy Breakfast  
Bill & Carol and Dan Griesbach, D2001 Griesbach Rd., Stratford  
7 AM-12 PM, $6.00 for ages 12 and up, $3.00 ages 11 and under; Free for preschool and under

21 Wisconsin Rapids Berry-Dairy Breakfast  
Lincoln High School, 1801 16th Street South, Wisconsin Rapids 54494, 6-10:30 AM

22 Auburndale FFA Alumni Dairy Breakfast

22 Pittsville FFA Dairy Breakfast  
Joe & Marci and Dan & Lori Ortner Farm, 7-11 AM

30 Waushara County Dairy Breakfast, Fairgrounds
If you are interested in receiving the CWAS newsletter by e-mail rather than US mail, please contact your local Extension office (see contact information on the back of the newsletter) and provide us your e-mail address. **By converting to electronic distribution, you not only will be reducing the use of paper and protecting the environment but you will be assisting your office by reducing their mail cost.** Newsletters may come faster and some graphics or photos may be in color not available in the mail version.

Please call, mail or email this information to your county Extension office (see back of newsletter for contact information)

**YES—I would like the CWAS Newsletter emailed to me.**

Name: ____________________________________________

Email Address: _____________________________________

Mailing Address (this is needed to remove your address from the mailing list)

Street _____________________________________________

City ___________________________ State _______ Zip Code __________

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**Calendar of Events**

**April**

26 Managed Grazing Seminar, Marshfield Agricultural Research Station, 2611 Yellowstone Drive, Marshfield Wisconsin. 9 AM to 3:15 PM with registration from 8:30 to 9:00 AM. **Pre-registration required** by April 22, $20 per person to UW-Extension, Wood County, 400 Market St., PO Box 8095, Wisconsin Rapids, WI 54495.

**May**

11 Marquette County Demonstration Forest Field Day on the property of Byron and Mary Hill, located in Harrisville, near Westfield. 9-Noon. Free and open to the public.
An EEO/Affirmative Action employer, University of Wisconsin-Extension provides equal opportunities in employment and programming, including Title IX and ADA requirements.

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Return Service Requested