Questions from my Desk
Richard Halopka, CCA
UW-Extension Clark County Crops & Soils Agent

Why is my corn yellow?

In June, this is a common question. The most common answer, it needs more nitrogen. Now if you asked this question to an agronomist that is worth his or her salt, they would ask you more questions. Nitrogen may be required, but don’t assume nitrogen loss is always the culprit.

First let’s talk environment. Generally when yellow corn talk occurs it is following a prolonged wet period and lower temperatures. Excessive ground water and lower temperatures will stress plants. The stress results in the corn appearing yellow and possibly purple with reduced growth.

Second, when was the corn planted? What is the current stage of growth? What was the previous crop? These are three very important questions to be asked and answered. You must understand that starting at the V-2 stage of growth the radical and seminal roots of the corn plant senesce and the corn plant must develop a new nodal root system. Prior to the initiation of the nodal root system, the seed kernel and seminal roots supply nutrition for the growing plant. The senescence of the lower leaves will provide the nodes to initiate the nodal root system. This process will appear as a yellow lower canopy in the field. This process will continue throughout the corn plant’s life cycle, when stressed for water or nutrients the corn plant will senesce lower leaves and use the nutrients and water to prevent plant death. During the early stages of growth (V2 – V6) the change from a seminal root system to a nodal root system, a corn plant will have less root mass during this time period to uptake nutrients and water including nitrogen. Now besides the environment stress you have decreased root mass to supply nutrients or water to the plant. Early during the growing season, a corn plant can also show signs of sunscald, as wax on the corn leaf is not as protective compared to spring and the previous crop can also cause injury. It may be related to a pesticide applied the previous year.

Third, how much nitrogen has been applied to the field? If nitrogen has been applied to an economical level (based on maximum return to nitrogen, MRTN) and the corn is yellow, it may be advisable to spend $10.00 to determine nitrate available in the field. A pre-side dress nitrate test (PSNT) will provide you with the available nitrate present in the field. A $10.00 payment may be a wise investment compared to spending for more nitrogen. Now, if the PSNT report is low then a nitrogen application may be required.

Fourth, when was an herbicide applied? Pesticides and the carriers used during application can cause injury to a crop. So make sure to ask this question.

Fifth, what tillage practices were used in the field? What are soil types are present in the field? Soil type, organic matter content of the soil and tillage are all factors related to internal water drainage in the field. An agronomist should have some idea of the soil interactions with crop available nitrogen.

So, if the answer is immediately “you need to purchase more nitrogen”, you may want to ask for a second opinion. The questions I provided are general questions every agronomist should ask before making a recommendation. The point is yellow corn in June is not always nitrogen deficiency. As a farmer don’t be afraid to ask questions. If you had planned to side-dress your corn, then move forward and side-dress. If you are concerned that nitrogen is required, a $10.00 investment can provide an answer.

If you have questions related to crop production please call me at 715-743-5121 or email richard.halopka@ces.uwex.edu.

Fireflies are a predator and immature fireflies feed on snails and slugs. The predator uses the slime trail to locate the prey.

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Make sure to listen to WCCN and WAXX for any cancellations

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<td>UW– Arlington Agricultural Research Station</td>
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<td>13 August</td>
<td>Crop &amp; Pest Management Workshop</td>
<td>UW-Arlington Agricultural Research Station</td>
<td>608-262-6491</td>
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<td>19 August</td>
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<td>UW-Arlington Agricultural Research Station</td>
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<td>19 August</td>
<td>Transition Cow Meeting</td>
<td>Jackson County</td>
<td>715-284-4257</td>
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<td>Clean Sweep</td>
<td>Owen 8:30am-10:30pm Neillsville 2:00pm-5:00pm</td>
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<td>Clark/Taylor County</td>
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**Crop Diagnostic Training Center 2015 Workshops**
Register Early Tiered Fees to Register go to http://www.patstore.wisc.edu/ipm/register.aspx Or call 608-262-6491

**July 30**
**Diagnostic Troubleshooting Workshop**
Small workshops rotate through field problems with UW Specialists role playing as farmers. Through digging up plants, asking questions and consulting references, participants will make a diagnosis of the problem being observed and a recommendation for correction. Each participant will experience eight separate diagnostic scenarios. Year after year, participants tell us this is one of the most challenging, useful and fun workshops they have ever attended.
CCA CEA 4.0

**August 13**
**Crop & Pest Management Workshop**
This workshop takes a multi-disciplinary and in-depth approach covering agronomic concerns ranging from identification of crop and pest production problems to management options within production systems. Sampling for and interpreting plant nutrient analyses Impact of hybrid Selection, The trait Game II, Dandelion biology and control. CCA and CEU’s 1.0 Crop Management, 1.0 Nutrient Management, 2.0 Pest Management

Clark County sells $401 million in agriculture products per year.
Agriculture provides 47% of all the jobs Clark County employing about 8,500 people.
Impact of Mastitis on Reproductive Performance

On many dairy farms, reproductive failure and the occurrence of mastitis are two of the most common management problems. Risk factors for mastitis and reproductive disorders are similar, and it can be difficult to determine the specific impact of mastitis on reproductive performance. Age of cow, heat stress, occurrence of metabolic diseases, immune suppression in early lactation and high milk yield are all associated with increased risk of mastitis and reduced fertility. However, the direct impact of mastitis on reducing reproductive performance was first noted more than 2 decades ago and since that time researchers have consistently reported that mastitis can significantly reduce reproductive performance. The occurrence of mastitis has been associated with reductions in the occurrence of natural estrus, the ability to conceive after breeding and increased pregnancy loss.

The negative impact of mastitis on reproductive performance appears to be a consequence of the severity of the immune response to intramammary infection by bacteria (IMI). Subclinical mastitis (SM) is defined as an IMI that results in an influx of white blood cells to the udder without disruption of the appearance of milk and is usually detected based on recognition of an increased number of somatic cells in milk. Clinical mastitis (CM) is defined as an IMI that causes enough inflammation to disrupt the milk secretory process and results in the production of visually abnormal milk (with or without abnormalities in the mammary gland or systemic symptoms). The occurrence of both SM and CM has been associated with reduced reproductive performance.

UW-Milk Quality promotes an integrated, team-based approach to best manage udder health and milk quality. Producing high quality milk is not a one-person job. It takes farmers and their local dairy advisors to be able to evaluate, manage and improve milk quality. For more information regarding milk quality, please visit UW-Milk Quality or contact UW-Extension Milk Quality Specialist Pam Ruegg. For more information regarding milking systems, please visit UW Milking Research and Instruction Laboratory or contact UW-Extension Milking Systems Specialist Doug Reinemann.
Agricultural plastics are here to stay. Plastic films are used for silo bags, bunker covers, bale wraps and horticultural mulch. But what is to be done with used plastic? Recycling efforts continue to struggle as recycling markets are driven by price, volume, and quality. To be a serious recycling player, you must guarantee enough volume of predictable quality. Ag plastics are often dirty or contaminated. Collecting enough volume is challenging for agriculture without governmental assistance and/or cooperative endeavors.

Agricultural plastic films cannot be burned. Wisconsin rules are very clear and can be found in the Department of Natural Resources Administrative Code, NR 429. Open burning of plastic films emits high levels of pollutants including particulates, heavy metals, as well as dioxins which deposit and enter the food chain. Burning plastic stinks. Malodorous emissions is detailed in NR 429.03, ‘No person may cause, allow or permit emission into the ambient air of any substance or combination of substances in such quantities that an objectionable odor is determined to result unless preventive measures satisfactory to the department are taken to abate or control such emission.’ NR 429.04 sets forth Open Burning: ‘open burning is prohibited with the following exceptions: (e) Burning of small amounts of dry combustible rubbish (not to include wet combustible rubbish, garbage, oily substances, asphalt, plastic or rubber products) except where prohibited by local ordinance.’

So what is a farmer to do with waste plastic? The WI DNR currently recommends agricultural films be landfilled. Talk with your garbage collection service for how to handle your used plastic films. Minimize the plastic waste you will have to deal with by purchasing the right size silo bag or silage cover for your needs. Remove plastic film frequently, cutting it in smaller, easier-to-handle pieces. Locate silo bags or wrapped bales on concrete, asphalt, or other dry well-drained areas to keep plastic clean, as well as decrease the amount of mud and dirt incorporated into the removed feed. Shake the dirty plastic to remove as much soil and debris as possible, bundle it and store in a dry, secure manner. A hayrack or trailer located under a roof can provide storage and eliminate re-handling. Low-cost containment pens can also be constructed.

Do you have agricultural plastics that you would like to get rid of? If so the Mosinee company, IROW, is doing a pilot program to see if they can get enough plastic to have a recycling program. Details for this trial program include:

1. Collection point: IROW, 1040 Indianhead Drive, Mosinee
2. Would need to call ahead prior to delivery of plastic film (715) 693-7123
3. Looking for HDPE or LDPE (#2 or #4)...this is typically the silage/haylage bags
4. No PP (#5)...this is typically the woven bunker covers
5. Specs for the plastic: Not a lot of debris/soil/manure; cleaned off a bit, if at all possible
6. Timeframe: As soon as possible for this trial run

Note: This is just a trial! The plastics processor wants to see if they can manage the material and process. This is Not a permanent program yet!!

Clark County has greater than 458,000 crop acres, 67,000 dairy cows, with the average farm consisting of 200 acres and 80 dairy cows and 99% of the farms being family owned.
Cut, Bale, SCOUT!

Scouting for Leafhoppers

Weekly Scouting – 20 sweeps at 5 locations in each alfalfa field. Because leafhopper population densities vary from year to year and from field to field, the only way to accurately determine damage potential is by monitoring fields on a weekly schedule.

- Start scouting 5-7 days after first cut.
- Use a standard 15-inch diameter insect sweep net.
- Walk a 'W' shaped pattern in the field and take twenty consecutive sweeps in each of five randomly selected areas.
- Keep a running total of the number of leafhoppers caught.
- Count adults and nymphs.
- Divide the field total by 100.
- Compare the field count to the threshold based on crop height.
- If over the threshold, decide on spraying or cutting.
- Continue to the next field.
- After cutting a field over threshold, scout the regrowth. Start scouting sooner if nymphs were present.

Leafhopper ID

Leafhopper Thresholds

<table>
<thead>
<tr>
<th>Size (inches)</th>
<th>0.2/sweep</th>
<th>0.5/sweep</th>
<th>1.0/sweep</th>
<th>2.0/sweep</th>
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<tbody>
<tr>
<td>3</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>6</td>
<td></td>
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<td>8-11</td>
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<tr>
<td>12+</td>
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Sample of scouting record

Potato leafhoppers: Use 20 net sweeps per set.

<table>
<thead>
<tr>
<th>Set 1</th>
<th>Set 2</th>
<th>Set 3</th>
<th>Set 4</th>
<th>Set 5</th>
<th>Total</th>
<th>AV/Sweep</th>
</tr>
</thead>
<tbody>
<tr>
<td>10</td>
<td>12</td>
<td>8</td>
<td>15</td>
<td>11</td>
<td>56</td>
<td>0.55</td>
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</table>

Alfalfa Height 6 inch

The average is above the threshold of 0.5 for this field

Damage to Alfalfa:
Damage symptoms appear as stunting as well as yellowing of the leaves in a v-shaped pattern starting at the tip of a leaf. As a result of hopper burn, there may be yield loss, quality loss and potentially a reduction in plant vigor and stand. New alfalfa seedings are particularly susceptible to potato leafhopper damage.

Nutrient and Pest Management Program (NPM)
Integrated Pest Management Program
University of Wisconsin-Extension, UW-Madison
http://npm.wisc.edu

Visit exhibits between tours and during lunch:
Apps for Ag, Nutrient & Pest Management Program, Integrated Pest Management Program, SnapPlus and more!

The Arlington Ag Research Station is located on Hwy. 51, about 5 miles south of Arlington and 15 miles north of Madison. Watch for Field Day signs. GPS coordinates: 43.300467, -89.345534

In the event of rain, presentations will be held inside.

For more information contact the Dept. of Agronomy 608/262-1390 or the Dept. of Soil Science 608/262-0485.

Certified Crop Advisors: 7.5 CEU credits requested
KetoMonitor™: A Research Based Tool to Improve On-farm Ketosis Management

From a metabolic standpoint, the start of lactation is the most challenging period in a dairy cow’s life cycle. Increased energy demands are often met by mobilizing fat reserves. This can result in Hyperketonemia, or ketosis, which is defined by elevated ketone bodies in the blood. Ketosis and subclinical ketosis negatively impact milk production, animal health, and profitability. Research has shown that ketosis affects 40 to 60% of dairy cows, at an average cost of $289 per case. Cows with ketosis produce less milk, are more likely to develop a displaced abomasum, and are more likely to be culled from the herd. Ketosis in fresh cows can be seasonal and impacted by herd management changes.

Recently UW-Madison Department of Dairy Science Professor Heather White shared KetoMonitor™: a research based tool to improve on-farm ketosis management presentation. On January 28th, AgSource introduced KetoMonitor™. KetoMonitor is an economical and convenient tool, developed to predict herd-level ketosis prevalence using monthly DHI test-day milk samples. KetoMonitor was developed by Dr. Heather White, Tawny Chandler and Dr. Gary Oetzel from the University of Wisconsin Dairy Science Department and School of Veterinary Medicine in cooperation with AgSource.

Most ketosis detection involves testing individual fresh cows weekly using a blood sample and a Precision Xtra™ meter. While milk fat to protein ratios have been used to indicate ketosis problems at the herd level, they are only weakly correlated ($r^2=0.22$) to blood beta-hydroxybutyric Acid (BHBA) concentrations on an individual cow basis. The KetoMonitor is unique because it is based on a set of regression models that predict blood BHBA concentration using a DHI milk sample, component data and individual DHI cow data. Onset of ketosis is most common between five and nine days in milk (DIM) and prevalence is greater in cows than in first-calf heifers. Given these differences in ketosis etiology, models were developed to specifically focus on first-calf heifers and cows and on the early fresh period (five to nine DIM). Together, these models can be used to estimate ketosis prevalence in the herd on the day of milk test with high accuracy (91%). Research validates that factors affecting the onset of ketosis also differ among dairy breeds. As a result, a separate KetoMonitor model is currently being developed specifically for Jerseys, with expected completion in May, 2015.

The KetoMonitor report:
- Estimates herd ketosis prevalence on the day of milk test
- Guides management and nutrition decisions
- Alerts you when blood testing protocols should be employed
- Tracks the impact of management changes on transition cow health

Although not designed to be an individual cow test, it also flags cows between five and 11 DIM that are likely to have ketosis.

KetoMonitor provides a multi-tool approach. It can be used to evaluate monthly ketosis prevalence and can identify when blood testing should be done. When prevalence is greater than 7%, research shows the expense of blood testing every fresh cow twice is justified. However, when herd prevalence levels are below 7%, time and money spent on blood testing can be saved. Depending on individual farm constraints, the economics and practicality of blood testing may be slightly different and KetoMonitor can provide a consistent prevalence indicator month to month. The KetoMonitor report tracks levels over a period of twelve months, allowing producers to recognize the impact of seasonal and management changes.

AgSource members who access their DHI information and reports online via MyAgSource™ will find the KetoMonitor report included at no additional charge. For more information about KetoMonitor contact Erin Berger at eberger@agsource.com, call AgSource customer service at 800-236-4995 or contact Dr. Heather White at hwhite4@wisc.edu or 608.263.7786.
June 2015 Grain and Livestock Market Outlook
Brenda Boetel - Department of Agricultural Economics, University of Wisconsin-River Falls 715-425-3176

Corn
- Corn rated as good or excellent is at 74%, compared to 76% last year.
- Dollar has been down and lower against the dollar index, which has boosted corn and soybean prices. Traders tend to focus on value of the dollar when there is little supply and demand information.
- Export shipments have been lower than needed to meet current USDA forecasts of 1.825 BB.
  - Commitments are also lagging.
- Price has rallied the first week of June and may break the two-month downtrend.
- Market is still oversold.
- RFS for ethanol was cut and will require 3.75 billion fewer gallons of corn-based ethanol, which would be 1.3 billion bushels of corn. The mandate hasn’t been binding recently as US has produced above it.
  - For 2014 to 13.25 billion gallons from 14.4 billion
  - For 2015 to 13.4 billion gallons from 15 billion
  - For 2016 to 14 billion gallons from 16 billion
- December 2015 corn price on June 4, 2015 of $3.80 is down approximately 18% from last year’s June 4 price of $4.6175 and will likely continue downward till harvest.

Soybean
- Rain has been affecting western Midwest and there may be a decrease from the forecasted 87 Million acres projected plantings.
- Export demand for soybeans and meal is strong and continuing. Exports are on track to be 10 million Higher than current USDA forecasts.
- USDA may drop carry by 10 million to 340 million bushels due to strong demand.
- Quarterly stocks report is due June 30 and will give direction for soy prices.
- RFS was bullish for soy oil as proposed levels for biodiesel were increased.
  - For 2014 to 1.63 billion gallons from 1.28 billion
  - For 2015 to 1.7 billion gallons from 1.28 billion
- November 2015 soybean price on June 4, 2015 of $9.1875 is down approximately 23% from last year’s June 4 price of $11.9475 and will likely continue to drop. This week’s increase has been due to weather concerns regarding planting, but even with a small decrease in acreage likely see prices continue to drop long-term.
- November futures prices will likely dip as low as $8.75.
- Market wants beans sooner rather than later as seen in the spread and farmers are light sellers. Tiete-Parana waterway in Brazil, which typically transports 2.5 MMT of soybeans and corn, will reopen in second half of 2015. The reopening will cut transportation costs by approximately 10-15%.

Wheat
- Heavy rains may bring about yield losses.
- Likely see small increase in USDA ending stocks for 2014/2015 and 2015/2016 marketing years.
- New crop began on June 1.
- HRS spring wheat is at 69% good to excellent rating as of May 24.

Poultry
- Avian Influenza continues to impact turkey flocks in Minnesota and Wisconsin, and laying hens in Iowa.
  - Over 43.4 million birds have been affected
  - Expectations are for epidemic to be over by August.
- Chicken production has increased by 7.9% in 2015 over 2014 levels. Poultry stocks were up 21% from 2014.
Continued from Page 7

**Pork**
- Pork production has increased by 6.8% in 2015 over 2014 levels.
- Pork stocks were up 19.8% from 2014.
- Pork exports are up 4% from 2014, but value was down 14% from 2014.
- West coast port congestion is past and the situation is returning to normal.

**Beef**
- Beef production has decreased by 3.7% in 2015 over 2014 levels.
- April beef exports were the largest since December but down 7% from 2014. Value is up 3% from 2014.
- Australia has not seen a decrease in beef production and it is gaining a second tariff advantage in Japan.
- Packer margins have improved with higher wholesale beef prices. Feedlots continue to bid up calf prices higher than the feeder cattle index.
- Beef cutout values remain high although down slightly to a recent $248.48. Tight supplies though and continued strong demand may bring more record prices in June.

**Is it worth cooling your dry cows?**
Karen Luchterhand, Ph.D.

We know that it is important to cool our lactating dairy cows. Heat stressed lactating dairy cows have decreased feed intake and a 10-20% milk production loss along with increased disease incidence and impaired reproductive performance (Kadzere et al., 2002; West, 2003). Dairy cattle are considered heat stressed when the temperature-humidity index (THI) exceeds 72.

Temperature Humidity Index (THI) is a measure that has been used since the early 1990s. It accounts for the combined effects of environmental temperature and relative humidity, and is a useful and easy way to assess the risk of heat stress.

- When the THI exceeds 72, cows are likely to begin experiencing heat stress.
- When the THI exceeds 78, milk production is seriously affected.
- When the THI rises above 82, very significant losses in milk production are likely, cows show signs of severe stress and may ultimately die.

Compared to lactating cows, dry cows generate less metabolic heat and have a higher upper critical temperature. Impacts of heat stress may be less noticeable on dry cows due to not having daily milk yield or other ways to measure decreased performance. However it is still important to provide heat abatement to your dry cows. When dry cows were provided relief from heat stress those cows had heavier calves at calving and improved colostrum quality. Heat stressed dry cows had impaired mammary growth (Tao and Dahl, 2013) and produced 16 lbs./d less milk up to 42 days in milk in the subsequent lactation even when cooling was provided post-calving (do Amaral et al. 2009). Calves from heat stressed dry cows have compromised passive immunity and impaired immune function, therefore a greater risk of getting sick, than from cooled cows (Tao and Dahl, 2013).

**Respiration Rate**

Respiration rate can provide a quick measurement of heat stress in cattle. Respiration rate can be determined by observing the in and out motion of the ribs for 1 min, preferably at a distance, with the animal standing. Normal respiration rates of cows are between 18 and 30 breaths/min. The respiration rate is subject to body size, age, exercise, excitement, environmental temperature and the degree of fullness of the digestive tract. Fat show animals may have a respiration rate twice that of a thinner animal. Note that injury or disease may cause changes in the respiration rate.

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Cooling Cows
Here are some practical strategies dairy producers can use to help minimize heat stress on their cows:

**Shade**
Shade reduces heat stress by decreasing exposure to solar radiation. Ideally free stall dairy barns should be oriented east to west to provide maximum shade under the roof. Barn roofs should be white colored galvanized metal or aluminum to provide maximum reflection of solar radiation. During times of extreme heat stress (high temperatures, high humidity) nighttime temperatures do not provide adequate relief from heat stress. During such times, if possible, allow cows access to pasture at night. Cows are able to dissipate more heat via radiation to a night sky than to a free stall barn. If shade is offered in a pasture environment, be sure to manage it properly to avoid creating a mud hole.

**Ventilation**
Proper ventilation is critical to maximize convective heat loss from cows. A good ventilation system should provide one complete air exchange per minute. This is usually accomplished using fans. Each fan should provide airflow of at least 11,000 cfm. Fans of this size will move air effectively for about 10 diameters. Therefore, a 30 inch fan is effective to about 30 feet, a 40 inch fan to about 40 feet. Fans should be mounted at an angle to blow over the backs of the cows as they lay in the free stalls. It is also important to take advantage of natural ventilation in free stall barns. To provide maximum natural ventilation sidewalls should be open and open ridge vents are optimal (minimum of one foot wide, plus two additional inches per ten feet of building width). Ridge caps are usually not a problem if they are at least one foot above the ridge opening. Overshot ridge openings should be avoided because they greatly limit fee air flow. Attention should also be paid to eave height. For buildings up to 40 feet wide, a 12 foot eave height is adequate. For buildings over 40 feet wide provide at least 14 feet.

**Drinking water**
Heat stress greatly increases water intake in cows. For example, increasing air temperature from 86 degrees F to 95 F increases water intake in lactating dairy cows by over 50 percent (about 21 gal/day to about 32 gal/day). Therefore, it is critical to offer plenty of fresh clean drinking water. Water trough management in times of heat stress should be more intense and more frequent to insure water is clean and free of algae. Ideally cows should not have to walk more than 50 feet to get water and not have to walk through, or stand in, direct sunlight to drink. As a rule of thumb, provide two inches of linear water trough space per cow.

**Supplemental cooling**
Sprinklers can either lower air temperatures directly or provide “artificial sweat” by soaking the cow’s skin. Sprinkling with wetting to the skin is also much more effective when combined with fans.

**Feeding routine**
Heat stress decreases feed intake. Dry cows that decrease their feed intake may be at risk for metabolic disorders. Therefore, consider slowly shifting your feeding schedule to the cooler portions of the day (i.e., early morning). Also, increase the frequency of pushing up and removing spoiled feed to promote higher dry matter intake. In times of severe heat stress reformulate the ration to increase its energy density without increasing the heat of fermentation. This is usually accomplished by adding rumen inert fat. Adding increased bypass protein is also an important consideration due to the decline in dry matter intake and rumen heat production. The ration potassium level should also be adjusted upward since potassium loss is high due to increased sweating. When considering any ration change it is absolutely essential to consult a qualified dairy nutritionist. Summer is well on its way. Let’s not forget about cooling our dry cows. If you have questions about cooling strategies please contact Clark County UW-Extension at 715-743-5121.

SUMMARY OF SERVICES & INCENTIVES
FOR AGRICULTURE FACILITIES

Effective through December 31, 2015
Last updated January 1, 2015

EFFICIENCY INCENTIVES SUMMARY
The Focus on Energy Business Programs offer both custom and prescriptive incentives for efficiency projects. These incentives are designed to motivate customers to upgrade equipment, or implement energy efficiency projects that they would not have done otherwise. The following custom and prescriptive incentives are available through the Agriculture, Schools and Government Program.

- Focus on Energy only offers incentives for customers of qualifying electric and natural gas providers. Other heat sources (such as propane, wood heat and fuel oil) do not qualify for gas measures.
- Customers of a participating electric utility, but not a participating natural gas utility, will be eligible for electric savings technology incentives only.
- Customers of a participating natural gas utility, but not a participating electric utility, will be eligible for natural gas savings technology incentives only.
- Customers who have both a participating electric and a participating gas utility will qualify for all technology incentives.

**HOW TO APPLY:**

STEP 1 Work with your Energy Advisor or Trade Ally to determine the upgrades that are best for your facility. Your Energy Advisor or Trade Ally will identify if the project qualifies for a Custom Incentive requiring preapproval or a Prescriptive Incentive. Please note - Prescriptive Incentives over $10,000 can request preapproval to guarantee incentive availability. To find a Trade Ally, visit focusonenergy.com/tradeally. To find your Energy Advisor visit focusonenergy.com/agsgEA.

STEP 2 If preapproval is required - work with your Energy Advisor to obtain preapproval prior to purchasing equipment.

STEP 3 Complete your energy efficient upgrade.

STEP 4 Submit your completed paperwork by December 31, 2015 to your Energy Advisor or to AgSGapps@focusonenergy.com

**2015 BONUS INCENTIVES NO EXTRA PAPERWORK**

Custom incentives
$0.04/kWh + $0.02/kWh bonus
$125/peak kW
$0.40/Therm + $0.40/Therm bonus

Prescriptive incentives
Additional 10% bonus

Bonuses are added automatically with no extra paperwork required. To view all of the Focus on Energy offering details, visit www.focusonenergy.com. To speak with AgSG representative

**FIND CATALOGS & APPLICATIONS:** Find all catalogs and applications by visiting www.focusonenergy.com/applications.
Farm Pasture, Crop Walk and Soil Health Demos
Thursday, July 23, 2015
12:00 - 3:00 p.m.
Richard & Kay Halopka
N726 Robin Dr. Stetsonville, WI 54480
Directions; Hwy 13 North of Dorchester 3 miles to Elm Ave East 2 mi to Robin N on Robin 3/4 mile to farm
Watch for Field Signs to Farm
The demo’s will be led by UW-Extension, Land Conservation, or NRCS staff from multiple counties.
Lunch is Not provided
Richard & Kay are converting from a conventional crop system to a no-till system. They will discuss their experiences and methods they have incorporated on their farm. Including no-till row crops and no-till interseeding in rotational pastures.

Topics and demos include:
- A close up look at 1st year no-till row crops
- Row crops planted no-till into out - wintered corn stalks and crediting the manure application.
- Spring 2015 interseeded pasture on an out - wintered pasture
- Using a penetrometer, what does it tell us?
- Measuring residue, how is it done?
- Measuring pasture yield how is it done?
- Do’s and don’ts of managed grazing.
- Winter feed, what volume is required for beef or dairy? How to measure quality of your feed?
- How to calculate manure application
- Rain Simulator

Soybeans
Tuesday, July 28, 2015
12:30 - 3:00 p.m.

Art Jr. & Art Petke III
Triple A Farms
Bin site located north of Longwood on Hwy 73
Watch for UWEX Field Signs
Lunch is Not provided

Topics presented :
Richard Halopka, Clark County, Crops & Soils Agent
- Managing soybeans in 30” rows
Bryan Jensen, Integrated Pest Management Coordinator
- Scouting/IPM of soybeans from July thru harvest
Jaimie Willbur, Graduate Research Assistant
- “Soybean White Mold Management”

Q & A, open mike for producers to ask questions on any crop & their chance to stump the chump

No Fee
Please register by July 27
Call Clark County UW Extension at 715-743-5121
Rain or Shine event

An EEO/AA employer, University of Wisconsin-Extension provides equal opportunities in employment and programming, including Title IX and ADA.
Persons with disabilities who require alternative means for communication of program information (Braille, large print, audiotape, etc.) should contact the [program coordinator] or [office giving program].
Requests for reasonable accommodations for disabilities or limitations should be made prior to the date of the program or activity for which it is needed.
Please do so as early as possible prior to the program or activity so that proper arrangements can be made. Requests are kept confidential.
Clark County Quick Pest Update

A short summary from the DATCP Pest Bulletin Weather conditions, June has been wetter than normal and has provided excellent conditions for slugs. Plus, there have been reports of Armyworm in Clark County. It is important to scout the fields as soon as you notice an injury. Don’t assume it is what the neighbor has. Identify the cause of injury many injury symptoms look similar.

Economical threshold to begin control of Armyworm is when 50% of the plants have been infected with one ¼ inch larvae. Once the larvae are 1 ½ inches control is not required as they basically have completed feeding and will pupate. There are a number of insecticides that will control Armyworm. Good news, with 50% defoliation at V7, corn may only have a 2% yield loss. Slugs rasp on the leaves of corn and soybean, causing plant injury and plant death if feeding injury is severe.

As mentioned, identify the pest. Scouting for slugs must occur in the early evening, as they are in soil cracks or under residue during the day and they converge on the crop in the evening. Slugs, if exposed to a half hour of sunlight will perish. There is not an economical threshold for slugs. A slug is a Mollusk, insecticides will not control them. You would use Molluscide or slug baits. Slug baits are fairly expensive and may not be economical. Evaluate the damage in the field; determine cost for control, and value of the crop before deciding to apply a control. Application can be a challenge as normal application is 10 to 40 pounds of bait per acre.

Moving forward, currently no soybean aphids have been found in the county. Potato leafhopper counts are low, but continue scouting after cutting of alfalfa. Corn rootworm beetles may be emerging in a couple of weeks and farmers should continue scouting for root feeding damage in the field.

As of July 10, I am leaving my role as a Dairy and Livestock Agent with Clark County UW-Extension to take on an role as Ruminant Sales Manager. Thank you for the opportunity to work in this position for the past year. I’ve greatly enjoyed meeting and working with local producers in the county. My colleague Richard Halopka will field any of your dairy and livestock questions. Thank you for your support.

Karen Luchterhand