As I write this article, I am getting my thoughts organized for our fall semester course on “Agriculture and the Environment.” We cover a wide range of topics such as agro-ecosystem sustainability (now there’s a mouthful), on-farm nutrient management, agronomic BMPs, environmental regulations and CAFO, on-farm energy use and production, biosecurity, food safety, and animal welfare.

For many of our students in the fall, agriculture is a black box. This is not surprising since less than 2% of Americans are farmers or ranchers, and most of these students come from an urban background. Yet we all need to eat. We are all members of a society for which agricultural issues are increasingly important: food quality, safety, and security; environmental quality and a “working landscape”; animal welfare; farm labor issues. In the popular press, we commonly hear stories about organic versus conventional food production, genetically enhanced foods versus heirloom foods, low-input versus intensive farming, and the list goes on. Are these food choices truly “either/or” if we intend to preserve the planet?

We insist that scientific evidence rules the day. Of course, the day-to-day intersection of science with agricultural policy and societal views can lead to puzzling and unpredictable results. The focus of our course is on the environmental implications of farming, but we hope the students leave with a broad appreciation of farming’s importance to society — regionally, nationally, and globally. As William Miner stated a century ago: “agriculture is the fundamental occupation.”

Here is a sampling of the questions we pose to the students the first day to challenge their thoughts on agriculture and society. I thought you’d enjoy pondering them also — they all bear on the role of agriculture in our society.

• Do we in the US feed ourselves only? Can we (should we) feed the world?
• Some contend that conventional agriculture is not sustainable, but organic agriculture cannot produce enough food — what does the science say? By the way, organic farming could feed Europe and America — is that good enough?
• Jason Clay of the World Wildlife Fund asserts “We cannot abandon modern genetics and technology … any thinking environmentalist would want to see more intensification of agriculture.” Why does a wildlife advocate embrace intensive farming?

See QUESTIONS, Page 9
LOWEST STARCH DIETS CAN STILL MAKE MILK

Given the dismal forage and grain situation for crop year 2012, Heather and I thought it appropriate to include a summary of our low starch research trial that she just presented at ADSA. With corn grain prices predicted to be near record high and in some areas forage yields at critical lows; how best to make milk?

Last year, we conducted a feeding trial comparing a conventional 26% starch diet to low 21% starch diets by using two basic feeding strategies to lower dietary starch:

1. Increase the forage-to-concentrate ratio with highly digestible forage fiber.
2. Replace starch from corn grain with non-forage fiber sources (NFFS) that are high in digestible fiber.

The study was a 3 x 3 Latin square design with 2 1-day periods. Each cow received each diet and thereby served as her own control. The study included 15 peak- to mid-lactation multiparous cows, (6 ruminally cannulated). The dietary treatments were:

- Control diet (CON): 50% forage, 26% starch
- High Forage diet (FOR): 63% forage, 21% starch
- Non-forage fiber diet (NFFS): 50% forage, 21% starch

The NFFS for this trial were: beet pulp, wheat midds and DDGS. Soy hulls is another option for NFFS but was not used in this trial.

Diet formulation and nutrient profiles are presented in Table 1.

The results for intake and milk production are presented in Table 2. Dry matter intake (DMI) was slightly greater on the CON ration. In spite of lower DMI of the FOR and NFFS diets, higher NDF content of these diets resulted in significant differences in intake of aNDF and peNDF. Gut fill may have been approaching a maximum, possibly limiting DMI of these two diets. The 24-hour NDFD of these diets was surprisingly similar, though numerically higher for the CON ration. Intake of aNDF was 1.23, 1.35 and 1.34% of body weight for the CON, FOR, and NFFS diets respectively. Milk production was similar between the CON and NFFS diets at about 112 lbs, but was significantly lower on the high forage ration. Milk fat content differed across diets, but component corrected milk was similar. Milk true protein did not differ between diets. These results indicate that diets with NFFS can maintain similar milk production when substituted for starch in the form of cornmeal. Increasing the level of dietary forage, however, showed a slight decrease in milk yield but similar FCM yield.

A full review of this trial can be obtained by contacting us through our website or by using the QR code (on facing page).

— Kurt Cotanch
cotanch@wminer.com
— Heather Dann
dann@wminer.com

<table>
<thead>
<tr>
<th>Table 1. Diet formulations and nutrient profiles.</th>
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<tbody>
<tr>
<td>Ingredients, % of ration DM</td>
</tr>
<tr>
<td>Conventional CS</td>
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<tr>
<td>BMR CS</td>
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<tr>
<td>Hay crop silage</td>
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<tr>
<td>Cornmeal</td>
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<tr>
<td>Beet pulp</td>
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<tr>
<td>Wheat midds</td>
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<tr>
<td>DDGS</td>
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<tr>
<td>Grain and mineral</td>
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<tr>
<td>Analyses</td>
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<tr>
<td>DM,  %</td>
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<td>CP,  %</td>
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<tr>
<td>aNDF,  %</td>
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<tr>
<td>peNDF,  %</td>
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<tr>
<td>Starch,  %</td>
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<tr>
<td>aNDFD 24h</td>
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<td>Starch digestibility 7-hour</td>
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<tr>
<td>Values</td>
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<td>CON</td>
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<table>
<thead>
<tr>
<th>Table 2. Intake and milk production responses.</th>
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<tbody>
<tr>
<td>Item</td>
</tr>
<tr>
<td>DMI, lb/d</td>
</tr>
<tr>
<td>aNDF intake, lb/d</td>
</tr>
<tr>
<td>aNDF intake % of BW/d</td>
</tr>
<tr>
<td>peNDF intake, lb/d</td>
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<tr>
<td>Milk, lb/d</td>
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<tr>
<td>3.5% FCM, lb/d</td>
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<tr>
<td>Fat, %</td>
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<tr>
<td>True Protein, %</td>
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<tr>
<td>Milk N efficiency, %</td>
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<tr>
<td>Values</td>
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<td>CON</td>
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ab Least squares means within a row without a common superscript differ (P ≤ 0.05).
xy Least squares means within a row without a common superscript differ (P ≤ 0.10).
STANDARDIZATION OF ON-FARM HEALTH EVENT DATA RECORDING IS NEEDED!

Useful health records are achieved through accurate and consistent recording of important health events. Unfortunately, most health records observed in a recent Washington State University study of 50 dairies using Dairy Comp 305 lacked the accuracy and consistency needed to be useful for evaluating and informing herd-level health management decisions.

Health data recording tends to be user-defined whether it’s recorded through DHIA or on-farm dairy management software. This is in contrast with the milk production and reproduction data that is standardized across the industry. The consistency of user-defined event recordings is a big concern. The study found that a single disease was often recorded using multiple different health event entries within a dairy and across dairies. For example, metritis was recorded as a specific disease event (METR), a generic event (ILL, MISC, HOSP, RED, DIRTY, or UT-INF), and a treatment event (PENN, TREATED, FLUSH, or INFUSE). This inconsistency within a dairy may indicate a focus on individual cow records and not on summarizing data across cows to evaluate health and treatments at the herd level. This is a lost opportunity since most dairies are dedicating the time and effort to record health events. Additional training or set-up time may be required since only 42% of dairies were using the protocols function of Dairy Comp 305.

An abstract presented at the 2012 JAM meeting in July found that maintenance of user-defined data quality is not a one-time effort as it requires continuous auditing and evaluation to ensure quality...at least until the health data entry is standardized in dairy management software. Forty-three dairies were provided with error reports weekly until the percentage of errors dropped below 5% and then were provided with monthly error reports. The first error report averaged 21% with a range of 0 to 81%. The dairies that used a protocol function in Dairy Comp 305 or the Rx-Plus function in DHI-Plus were able to keep the error rate lower for a longer period of time before a relapse occurred.

The Washington State group provided some recommendations for standardizing health data recording in Dairy Comp 305 without requiring much more time or effort by the dairy. Protocols should provide clear disease episode definitions and remark recording conventions. The data that need to be recorded are determined by the questions to be answered by the health records. In other words, how will they be used? Important uses include: individual cow management, compliance with FDA treatment record requirements, and evaluation of health management outcomes.

- Each disease should have single, unique event and all identified disease episodes should be recorded, rather than only those that are treated or meet a specific body temperature or severity criteria.
- For example, MAST, MASTX, and REMAST to indicate clinical episode of mastitis, daily treatment of mastitis, and retreatment of the same episode of mastitis, respectively.
- All event remarks for a given disease should contain the same data, recorded in the same order using the same abbreviations.
- Useful data to include in event remark include: treatments that require a milk or meat withdrawal time, lesion location (e.g. quarter for mastitis, foot or limb for lameness), pen location at onset of problem, severity of disease, and milk culture results for mastitis.

- Routine evaluation of health management outcomes on a herd-level should include 1) disease incidence rate, 2) retreatment rate, 3) recurrence rate, 4) removal rate, and 5) lost quarter rate for mastitis.
- The monthly health event counts frequently generated on-farm are inaccurate because the common recording problems observed in the study.

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*References:

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View Miner Institute's posters from the 2012 JAM conference
www.whminer.org/adsa2012.html

Or use your smart phone's QR code app to scan the code at left; it will direct you to the webpage.
The 2012 State of the Lake Report - Phosphorus

The 2012 Lake Champlain Basin Program (LCBP) ‘State of the Lake Report’ was recently released. I have heard some commentary on the radio regarding agriculture’s contribution to lake phosphorus (P) levels and thought I had better check it out.

In 2001, Miner Institute conducted a project for the LCBP surveying area dairy farms in both VT and NY regarding their thoughts on feeding P as well as analyzing their lactating rations for P. At the time, the 2001 Dairy NRC had just been released, recommending reduced dietary P levels of 0.35-0.38% ration DM as adequate for high producing dairy cows. Many farms and feed industry personnel had already adapted their rations to these levels, some had not. Has this reduction in dietary P made a difference in lake P levels 10 years later?

It is difficult to tell for sure since there are so many variables involved and sources of P going into the lake. However, over the last 10 years, it appears that the rise in lake P levels has been held in check, no longer increasing. Though many areas of the lake are still well above target P levels, indicating that there is still work to be done to start reducing lake P. Weather events such as 2011 spring flooding and Hurricane Irene have not helped, by significantly adding to lake P through both field and streambank soil erosion.

The report indicates that total lake P levels are still excessive. There is, however, evidence of reduced levels of P in some tributaries flowing to the lake. A recent analysis by the Vermont Agency of Natural Resources suggests that P loads from tributaries to most regions of the lake were stable or decreasing from 1991 to 2008.

Our area farms should be applauded for their efforts in reducing P levels on farm, and encouraged to continue efforts to reduce P contributions to Lake Champlain through measures that we know can work:

1. Maintain dairy dietary P levels at 0.35-0.38% of DM.
2. BMP (best management practices) regarding soil and manure management to minimize runoff and erosion.
3. Base fertilizer decisions on soil analysis and responsible nutrient recommendations.

Miner Institute is currently conducting research to monitor tile drainage and how best to minimize nutrient loss from farm fields to waterways.

The full LCBP State of the Lake report can be accessed at: www.lcbp.org

— Kurt Cotanch
cotanch@whminer.com

VT Dairy Industry Association Conference
Quality and Innovation: A Diversity of Flavors and Sizes

Wednesday, September 19, 2012

- Robotic Milking: State of the Technology
  Doug Reinemann, University of Wisconsin
- Vermont Dairy Sustainability: Challenges & Opportunities
  Julie Smith, University of Vermont
- Sustainability: Today and Beyond
  Marie Audet, Blue Spruce Farm, Inc.
- Regulatory Changes for Somatic Cell Count Standards & Antibiotic Testing
  Dan Scruton, Vermont Agency of Ag
- Vermont High Quality Milk Farmer Panel
- Farm to Consumer
  Bob Pierpont, Elanco
- VDIA Annual Business Meeting
- Dairy Industry Reception

Thursday, September 20, 2012

- Developments at UVM College of Ag & Life Sciences
  Dr. Tom Vogelmann, Dean, College of Agriculture
- The Wild World of Global Economics & Issues Impacting the U.S. Dairy Industry
  David Kohl, President of AgriVisions, LLC
- A U.S. Perspective on Sustainable Agriculture Feed & Seed
  Jim Tobin, Vice President Industry Affairs, Monsanto
- Looking Ahead to Profit Opportunities for VT Dairy Farmers
  Mateo Kehler, Owner, The Cellars at Jasper Hill
- It’s Not My Grandfather’s Dairy Farm
  Ransom Conant, Conants’ Riverside Farm
- State Government & Farmers
  David Mears, Commissioner, Vermont DEC

Send meeting registration to: VT Feed Dealers & Manufacturers Assoc., Peter Karnezos
230 Brickyard Rd, Colchester, VT 05446
$100 fee includes Registration, Reception, Luncheon and Membership fee.
Chopping corn at the right moisture level is the most important management factor for making high quality silage. The warm, dry season has caused a range of field conditions and has hastened maturity. Careful monitoring of fields will be important for planning when to harvest. Average monthly temperatures in Chazy have been well above average (3.7 to 11.9 ºF above the 30-yr average). At the end of July almost 2,000 growing degree days (GDD) had accumulated, which is about a month ahead of last year (Fig. 1).

Research by Bill Cox at Cornell showed that a 96-100 day relative maturity hybrid required about 750 GDD from silk/tassel emergence to silage harvest. Using this as a guide, corn that had silked by mid- to late July in NNY could approach ideal silage moisture (65 to 68%) by early September. Earlier planted hybrids could be ready sooner. The actual time until harvest will depend on GDDs in your area, planting date, hybrid, and soil moisture. All else equal, continued heat and dry weather will speed up maturation and dry down.

The bottom line is that you need to monitor fields and check whole plant moisture levels. Local weather data can help gauge your timing with GDD, but the best way to determine where your corn crop is at is to visit the field. Make a note when fields reach the dent stage and start checking whole plant moisture when milk line is ~¼ or less. Remember that kernel milk line is not a reliable predictor of whole plant moisture. This year’s weather may further confound the relationship between kernel milk line and whole plant moisture— it is a good year to start using whole plant moisture as your guide to harvest timing if you are not already doing so.

While sampling individual plants to estimate field moisture status is a good approach, there is room for error. Often there is significant spatial variability in whole plant moisture within a field, especially with changes in topography or soils. Sampling 20 plants from a 10 acre field (at 32,000 plants/ac) means you sampled about 0.006% of the population — room for error, but still better than guessing. The best approach is to chop some guard rows, and if you have a self-propelled machine, chop a swath down the middle of the field to get a more representative sample and then check the moisture level. Taking extra time to fine-tune whole plant moisture will be repaid with the improved quality and milk production potential of your silage.

— Eric Young
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MANAGING DROUGHT-STRICKEN CORN FOR SILAGE

Crop conditions vary considerably across Northern NY, with the Eastern region in considerably better shape thanks to a couple of significant rain events in early July. Some corn fields are in bad enough shape that farmers may be chopping them much earlier than normal. In this case, one thing to pay close attention to is nitrate levels, especially in fields that received a lot of manure and therefore had plenty of nitrogen. Do not green chop these fields unless you first chop enough for a sample and test it to confirm that nitrate levels are acceptable. High nitrate forages can be cow-killers!

A much better alternative to greenchop is ensiling droughty corn, which is what most farmers would be likely to do. The silage fermentation process reduces nitrate levels, but only by 30 to 60%. Make sure the forage is ensiled for at least three weeks, and then take samples of normal-appearing silage for nitrate analysis and review the results before starting to feed it. Cornell University’s Jerry Cherney says that there are nitrate tests available that can be used on-farm, including a fairly new one from the Nitrate Elimination Company. (Phone 1-888-NITRATE or email sales@nitrate.com). A five-pack of nitrate tests from this company costs about $30, and Jerry says that the test can be performed by a non-skilled user in about 30 minutes. Forage nitrate concentrations up to 0.44% (4400 ppm nitrate or 1000 ppm nitrate-N) are reportedly safe to feed as the sole forage source in the diet, and seldom are dairy cattle fed only one source of forage. Non-pregnant cattle can tolerate higher concentrations in forage, up to 0.88% nitrate, but forages exceeding 0.9% nitrate are potentially lethal. If the nitrate concentration for any single forage (fresh or ensiled) is close to the “danger zone,” make sure that you mix it with forages that you know are low in nitrates. Better to be safe than sorry!

The following table is from the University of Illinois.

Just because your corn is drought-stricken with the leaves rolled, don’t assume that the whole plant has dried down. Stalks retain moisture much later than the leaves, and some droughty-looking fields may still be well below 30% DM. Time harvest based on a dry

<table>
<thead>
<tr>
<th>NO₃-N (ppm)</th>
<th>NO₃-N (%)</th>
<th>NO₃ (ppm)</th>
<th>NO₃ (%)</th>
<th>Feeding recommendations</th>
</tr>
</thead>
<tbody>
<tr>
<td>&lt;1,000</td>
<td>&lt;0.1</td>
<td>&lt;4,400</td>
<td>0.44</td>
<td>Not toxic.</td>
</tr>
<tr>
<td>1,000-2,000</td>
<td>0.1-0.2</td>
<td>4,400-8,800</td>
<td>0.44-0.88</td>
<td>Limit feed to 50% or less of ration dry matter.</td>
</tr>
<tr>
<td>2,000-4,000</td>
<td>0.2-0.4</td>
<td>8,800-17,600</td>
<td>0.88-1.76</td>
<td>Limit feed to 25% or less of ration dry matter. Don’t feed to pregnant cattle.</td>
</tr>
<tr>
<td>&gt;4,000</td>
<td>0.4</td>
<td>&gt;17,600</td>
<td>&gt;1.7</td>
<td>Don’t feed—potentially toxic.</td>
</tr>
</tbody>
</table>

Use caution in feeding drought-stricken corn, which even after ensiling may contain lethal concentrations of nitrates. Inexpensive tests are available for farmers to test their crops on-site. Test, don’t guess!

— E.T.

Come visit the Heart’s Delight Farm Heritage Exhibit!

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Visit www.whminer.org to learn more
Recently we compared our milk production (lbs. of milk shipped) and milk receipts (payments to-date) with the same time period (Jan-June) in 2011. We have shipped 528,000 lbs more milk in 2012, but received $42,000 less in milk income! Cow numbers are comparable between this year and last but our milk price has been $2.76/hundredweight less this year compared to 2011.

We’ve read about and seen pictures of the tremendous drought across the U.S. and even close to home in western New York. It has made us thankful for the little rain we have received this summer! Our corn crop is looking good so far, tall plants with ears starting to develop. There is some variation in maturity due to delayed planting while we harvested 1st cutting. Hopefully this won’t cause problems at corn harvest with the varying moisture and starch content. We also were fortunate to escape armyworm damage. After some precipitation in the last week or so, we are getting ready to start third cutting. While this year we expect to have plenty of feed, it’s a good reminder to manage forage inventory for the years that flooding, drought, hail, or wind damage or eliminate crops. And we will feel the effects of the drought this year too - in the price of cornmeal and grain.

Our cows have weathered the summer heat very well so far – holding 90+ lbs. of milk consistently (with the exception of several days in July). But summer isn’t over yet and the beginning of August has been pretty hot (temps in the high 80s and 90s) with high humidity. We are not sure why the cows have held production so well compared to previous summers – cooler nights, shorter periods of heat and humidity, steady winds? Possibly our high side walls are allowing the natural winds along with fans to keep constant airflow in our barn. The heat and humidity seem to have come with some steady and strong breezes. Our research staff has been conducting a heat stress/over-crowding study in our main barn through the summer, which had involved characterizing the barn environment (temperature, humidity, thermal radiation, etc.) and the cows’ production and behavioral responses to different cooling methods that are in place in our barn. That is the abbreviated explanation of a big project! The study will continue through September and hopefully answer some questions about managing cows through the summer in the Northeast. While milk production has been steady, reproductive efficiency has taken a hit – too many cows coming up open at our weekly pregnancy checks.

— Anna Pape
pape@whminer.com
**SILK TO SILAGE IN 6-7 WEEKS**

This topic has become an annual inclusion in the August issue of the *Farm Report*, but it’s important to know where your corn crop is in its development so you can plan accordingly. In the Northeast and North Central states, with normal weather conditions corn takes six to seven weeks to progress from silking to the silage harvest stage. (This may not be the case if the crop is suffering from drought or there’s unusually warm or cool weather during the following weeks.) So if your corn is silked by mid-August, in most years you should be chopping by late September. The relative maturity (RM) of the corn hybrid has little to do with how long it takes the plant to progress from silk to silage. With very high grain prices you’ll want to maximize grain content in your corn silage, so if you’re using a silage processor delay chopping until the crop approaches 35% DM. You may need to adjust this according to how long it takes you to chop corn, and the range of maturity between fields.

University of Wisconsin research found that corn harvested at 30% DM had 3.1 bushels of corn grain per ton of silage, while that harvested at 35% DM had 3.6 bushels per ton. Assuming a yield of 18 tons/acre, that’s an extra 9 bushels or 500 pounds of corn grain per acre. Multiply this by the price of corn meal, and then multiply this figure by your acres of corn for silage. Pretty significant, eh? If corn dries at a rate of 0.5% per day, the 1½ weeks you wait for the corn to move from 30% to 35% dry matter should be time very well rewarded. However, don’t go overboard on maturity: I get nervous as whole plant moisture approaches 40%, in part because this forage may be hard to pack.

— E.T.
The 2012 growing season in NY has been hot and dry on average and rainfall amounts have varied depending on your location. While much of NY has seen abnormally dry conditions, the Champlain Valley was lucky and received needed rainfall in July and August. The timely rains coupled with timely spring planting have made for an excellent looking corn crop on many farms in the area. Pictured is an ear of corn from a leafy corn silage hybrid showing excellent grain fill.

QUESTIONS, Continued From Page 1

• Florence Wambugu, research scientist in Nairobi - “You people in the developed world are certainly free to debate the merits of genetically modified foods, but can we please eat first?” How do you respond?

• What is “sustainability” as applied to agriculture? Is it environmental stewardship versus farm economic viability – either/or? Is it farm productivity versus food safety – either/or? Is it quality of life for farmers versus quality of life for society – either/or?

• Do you believe that low-yield or high-yield farming is a greater threat to wildlife habitat? The science-based answer may surprise you.

• Half of the world’s population lives in urban areas – how will they be fed?

• Must we become vegetarians to save the planet? Do livestock eat our food?

• What do we owe animals that are raised for food? Rights versus well-being.

• Which beverage has the smallest carbon footprint based on nutrient content – bottled water, soft drink, beer, red wine, orange juice, soy drink, or milk? The answer is not beer or bottled water.

• What are the consequences of a cheap food policy – is it the right direction?

— Rick Grant
grant@whminer.com

HARVESTING SOYBEANS FOR SILAGE

The dry weather has resulted in some farmers considering harvesting their soybeans for silage. Some things to think about as you ponder alternatives: First, if your soybean crop will yield at least 30 bushels per acre — half to two-thirds of a decent crop — you probably would be better harvesting them for grain. As I type this, soybeans are currently over $16 (Chicago Board of Trade price) so a 30-bushel crop would gross about $500. There is no way this crop would be worth $500 per acre if harvested for silage. Silage is an option only if grain yields are very low because of very pod set or bean formation due to drought.

If you do chop them, what will you get? Much of the value of soybean silage isn’t in the beans but in the forage, so you’d need to harvest before the leaves start to turn yellow and drop from the plant. We have some local experience with soybean silage, much of it back in the early 1990s. Silage made from Group I soybeans — the maturity typically grown in Northern NY — yielded about three tons/A, crude protein was OK at about 18%, and % NDF acceptable but not terrific — mid 40s. Windrowing and wilting is essential since soybean forage “on the stem” is typically less than 30% DM. Use of a silage inoculant is recommended. Soybean silage isn’t highly palatable, but if incorporated in a TMR or offered with other forages it should be able to be fed in moderation. However, I sure wouldn’t want to feed it as the primary forage for fresh or high group cows.

— E.T.
BACK IN TIME

My great-great grandfather James D. Larock was born in 1840 in DeKalb, N.Y. and raised on the family dairy farm. While in his teens he went to Ontario looking for work, noting that “I had but a York shilling in my pocket.” (A York shilling was worth about 12 cents.) He was hired out as a blacksmith’s helper and later as a wagon shop helper. He stayed for just over three years, earning a total of $170, and commented that he “saved a lot.” He returned home and worked on an area farm for two years. In the fall of 1862 James enlisted in the 142nd infantry and fought in some of the bloodiest battles of the Civil War, including Petersburg, Chapin’s Farm, and West Point (Georgia), one of the last significant battles of the war. The war ended in April 1865, James mustered out three months later and his father bought him a dairy farm, to be paid for over time.

James Larock maintained a daily journal, writing in a corner of his dairy barn and not missing a day from one year to the next. The barn here at Oak Point, built in 1893, is still in fine shape and we use it daily, though we haven’t had cows in it since the early 1950s. However, on a humid day in a back corner of the barn you can still “smell cow.” I have several of the Larock journals, dating from 1902, and they provide some insights into daily life on a dairy farm over 100 years ago, including the day James saw his first automobile. “Saw my first automobile today.” (That’s it? No big deal, I guess.) The family’s social life, occurring primarily on Sundays, consisted of visiting or receiving visitors, both family and friends. The Larocks (James and Eliza had 9 children including 6 sons) had acquired a piece of land, the “Ford Lot,” and it must have been a very stony field, because for most of one summer the following note appeared in his journal every few days: “Picked stones in the Ford Lot.”

Larock helped to build the local cheese plant, which wasn’t as big a deal as it might seem since 100 years ago there wasn’t any refrigeration capability and so a lot of milk was driven by horse and wagon to modest-sized cheese plants. This is the final entry in the most recent journal I have, from 1904: "Spring, summer, autumn and winter come out to pass away and return again in God’s own time. I hope as they pass along, making centuries, the people of this world may grow wiser and better and war, cruel war may cease to exist. When five hundred years from this evening passes away I hope that the people who dwell upon the earth may be more peaceable and war, cruel war may be known no more. I hope that those who live in the old neighborhood in that day may be good and happy people.”

Ten years after he wrote these words the world was once again at war, this time World War I, AKA “The Great War” and “The war to end all wars.” James Larock passed away in 1919.

— Ev Thomas
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Ev will be using a new email address for Farm Report reader contacts. The person responsible for this email account is Ev’s son Jim, who operates a website development business, and on the rare occasions there is a problem Jim is quite responsive to the various threats and imprecations from his father. So if you want to contact Ev via email, please use ethomas@oakpointny.com.

Visit us online at www.whminer.org
ADOPTION OF GENETICALLY MODIFIED CROPS

The US Department of Agriculture (USDA) recently released its report of 2012 plantings of genetically modified (GM) corn and soybeans. As you can see in the table, corn hybrids with insect resistance traits alone have decreased since 2000, replaced by stacked traits that combine (as a minimum) insect resistance and herbicide tolerance. But the most significant figure is that almost 90% of U.S. corn acreage is planted to hybrids with one or more GM traits.

<table>
<thead>
<tr>
<th>Year</th>
<th>Insect resist.</th>
<th>Herb. tolerant</th>
<th>Stacked</th>
<th>All GM traits</th>
<th>Herb. tolerant</th>
</tr>
</thead>
<tbody>
<tr>
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</table>

There hasn’t been nearly as much recent change in the planting of GM soybean varieties. In the first place there aren’t any insect-resistant soybean varieties, but more importantly, the adoption of herbicide-tolerant soybean varieties (primarily glyphosate) was so fast that there simply aren’t that many non-GM acres of soybeans planted any more. The figure of 93% is pretty close to market saturation. Don’t expect dramatic changes in the next few years, with the biggest likely change an increase in the acreage of corn hybrids stacked with two or more genetic traits. With the parched summer much of the U.S. is suffering through, there will probably be a lot more interest in hybrids with the drought-tolerance trait.

— E.T.

NORTHERN NEW YORK DAIRY MANAGEMENT SURVEY

A collaborative effort between Miner Institute and Cornell Cooperative Extension of Northern New York

We are looking for your participation! Your farm may receive a call looking for your help in conducting an on-farm survey to help us categorize dairy farms and current management practices across Northern New York. The results of this survey will be used to develop programs of interest and demonstrate needs of our area farmers as well as to identify areas of research which would directly apply to current on-farm management strategies. The focus of the survey is primarily calf management, but also includes some information about lactating herd management. Participating farms will be entered into a drawing to win one of three $100 gift cards, with a winning entry drawn in the fall. Surveys will continue through October.

If you are interested in participating please contact one of the following:

Kimberley Morrill, PhD
Dairy Specialist, Cornell Cooperative Extension
Cell: (603) 568-1404 or (518)-564-0498
Office: (315) 379-9192 ext. 233
Email: kmm434@cornell.edu

Heather Gauthier
Research Technician, Miner Institute
Cell: (518) 726-6944
Office: (518) 846-7121 ext. 153
Email: gauthier@whminer.com
Closing Comment

One of the best contraceptives for senior citizens may be nudity.

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518.846.8445 Fax