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12-2008

Extended Visions, November/December 2008

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Nebraska SOYBEAN DAY & MACHINERY EXPO

Friday, Dec. 12

8:30 a.m. - 2:30 p.m.

with a break scheduled at 10:00 a.m. so you can view equipment and visit with exhibitors
Saunders County Fairgrounds - Wahoo, NE

Make plans to attend the Nebraska Soybean Day and Machinery Expo on Friday,

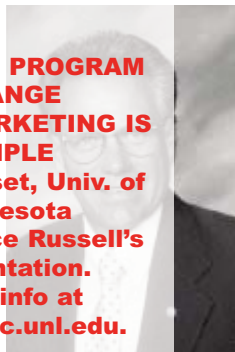
December 12. The event will be held at the Saunders County Fairgrounds in Wahoo.

A full schedule is listed on Page 3.

Moe Russell is the featured speaker this year. His presentation, "Know Your Individual Farm" will focus on goals and knowing strengths. He will also address market projections/forecasts.

Moe is the founder and President of Russell Consulting Group of Panora, Iowa. He provides consulting services to clients in 36 states and Canada specializing in risk management services,

performance, **SOY EXPO PROGRAM** tion systems, and **CHANGE** ness plan. **GRAIN MARKETING IS SIMPLE** by Ed Usset, Univ. of Minnesota will replace Russell's presentation. **More info at** <http://ardc.unl.edu>.



Featured Speaker at the Nebraska Soybean Day and Machinery Expo - Moe Russell

He graduated from Iowa State University in 1971 with a degree in Agricultural Business and received an Executive MBA degree from University of Nebraska at Omaha in 1997.

Moe spent 26 years with Farm Credit Services and served as Division President-Branch Lending, where he was responsible for 82 branch offices in Iowa, Nebraska, South Dakota and Wyoming, serving 45,000 customers with over 4 billion in loans outstanding.

He has international consulting experience in Hungary, Czechoslovakia, the Middle East, and South Africa. Moe is on the faculty of TEPAP at Texas A & M University and is an adjunct faculty member at Buena Vista University where he teaches management and business courses.

Moe is a frequent business speaker on marketing, motivation, planning, and entrepreneurship. Moe has authored over 150 articles and webinar series and writes a monthly column called *Riskwise* for *Corn and Soybean Digest Magazine* which you can find at: www.cornandsoybeandigest.com. □



Mill Provides Feedstuffs for Research Projects

Feedmill article provided by Dick Meyer, UNL Department of Animal Science

Over 6,000 domestic farm animals used for research and teaching reside at the ARDC. The feedmill at the ARDC provides feed for all of those animals, plus livestock at other University locations. The feedmill is operated by UNL's Department of Animal Science.

Supplement rations are mixed for the Beef Feedlot and Cow-Calf Units. Grain mixes and complete feeds are mixed for the Dairy and Swine Units. Some cattle feed is also mixed for the University's Veterinary Science Unit.

The feedmill also mixes and delivers feed to livestock located on UNL's East Campus in Lincoln. This includes feed for beef cattle, sheep, horses, pigs and poultry. Some experimental diets are made for cattle at the Dalbey-Halleck Research Farm near Virginia, Nebraska and at the Gudmundsen Sandhills Laboratory near Whitman.

The feedmill processes about 300 tons of feed per month. Feed made in the mill is mixed in one of two one-ton mixers. All the swine and poultry diets are mixed in one mixer and all beef, FEEDMILL - Cont. on P. 2



The feedmill at the ARDC is operated by UNL's Department of Animal Science.



Save the Date... Eastern Nebraska Meat Goat Workshop

Plans are in the works for the *Eastern Nebraska Meat Goat Workshop* on Saturday, December 13 at the ARDC. Producers and those interested in raising meat goats will want to save the date for this workshop sponsored by UNL Extension. Potential topics include: basic goat management, how to feed your goat, how to

keep your goat healthy, and FAMACHA (parasite management) training. The registration fee is \$25 for the first person from the operation and \$10 for second person from the operation when you pre-register by December 5. Call 402-624-8030 to register or for more information. Watch for updates and details - or visit the website by going to <http://ardc.unl.edu>, click on the "What's New" link and check out the workshop listing. □



We Need YOUR INPUT!!

We are seeking our readers' input in regard to the *Extended Visions* newsletter. The questions are short and simple...

1. How do you receive your newsletter - via the *Wahoo Newspaper*, *Market Weekly*, or mailed directly to you with a label addressed to you? Do you receive more than one copy?
2. Do you prefer to receive a hard copy or electronic copy?
3. We would also appreciate any comments you might have on what you would like to see in the newsletter or how to make it better.

You can provide your response online at <http://ardc.unl.edu/newslettersurvey.shtml>, via e-mail to dpittman1@unl.edu, or send them to UNL ARDC, 209 Mussehl Hall, Lincoln, NE 68583-0718. □





Utilizing Cornstalks and Other Crop Residue to Manage Input Costs

by Sara Ellicott, UNL Extension Educator

Significant increases in feed, fuel, fertilizer and other costs of production are posing serious challenges for livestock producers. These input costs are impacting producer's bottom line and influencing management decisions. With fall harvest in full-swing, there are beginning to be a lot of fields of cornstalks around. Consider the following management tip and tools to help you combat rising input costs, while at the same time utilizing your crop residues.

A recent Profit Tip released by UNL Beef Specialist Aaron Stalker, addresses maximizing winter grazing opportunities. The USDA Economic Research Service estimates purchased and harvested feeds make up almost half of the annual cow costs. Because purchased and harvested feeds are such a large proportion of the overall costs making significant reductions in this area will help reduce overall costs. One way to reduce harvested feed costs is to extend the grazing season through the winter.

Input Data (Column A)	Calculated Values (Column B)	Cost per Pound (Column C)
Corn yield: 200 bushels	2,832 lbs DM per acre	\$ 0.0645 per pound of DM
Stalk harvest efficiency (50% Recommended): 50.0%	1,416 Available TDM	\$ 0.0063 per pound of TDM
Total number of animals: 90 head		\$ 0.0035 per pound of DM
Average animal weight: 1,000		
Days on corn stalks: 90 days	270 ALMs needed	
Acres needed: 134 acres	134 Acres needed	\$ 0.0093 per pound of DM
Cost per acre: \$ 40 per acre	\$6.17 per animal per day	\$ 0.0126 per pound of DM
Percent dry matter: 90.0%		\$ 0.0071 per pound of DM
Percent crude protein (on a DM basis): 8.0%		
Percent TDM (on a DM basis): 96.0%		\$ 0.2393 per pound of DM
Cattle transportation distance (yards to corn field): 75 miles		\$ 0.0338 per pound of DM
Transportation cost per loaded mile: \$ 5.90 per mile	\$37.5 Cost per trip	\$ 0.0188 per pound of DM
Animals per load: 35		
How far to reach cattle (miles): 40 miles		

Above is an example (using sample data) of how the Corn Grazing Calculator is utilized. The calculator is a spreadsheet that allows the producer to input data (Column A). Calculated values are determined from that data in Column B. And cost per pound is determined in column C based on the data the user enters.

Allowing the cow to harvest the forage is less expensive than mechanically harvesting and feeding forage. This is especially true with today's high fuel prices. At the University of Nebraska Gudmundsen Sandhills Laboratory near Whitman, March-calving cows graze native winter range from December through February. These cows are fed 0.3 lbs/day of supplemental protein and experience good pregnancy rates and calf growth performance.

In addition to winter range, grazing of cornstalks during the winter has the potential to reduce harvested feed costs. Historically, cornstalks have been an inexpensive feed source and more cornstalks will be produced as a result of greater corn production. University of Nebraska data has shown spring calving cows wintered on cornstalks do not need supplemental protein but this depends on how the cornstalks are managed. A decision support tool has been created to help producers determine appropriate stocking rates, plan acres needed, and calculate costs. This tool is called the "Cornstalk Grazing Calculator", and was created by Matthew Stockton and Roger Wilson at the West Central Research & Extension Center.

There are a number of ways this tool can be used:

- To estimate acres needed, using the number and size of the animals, the length of time in days animals will be grazed on the corn stalks, and the corn yield.
- To estimate the number of animals given their size, number of available acres, number of days you expect to graze, and the corn yield.
- To estimate the number of days to graze, given size and number of animals, available acres, and corn yield per acre.
- To establish cost per animal daily and over the whole grazing period.
- To estimate total cost for all animals.
- To estimate nutrient cost.

This calculator also figures and includes cattle transportation costs as well as care and supervision costs in the totals near the bottom of the spreadsheet. If producers have a cost per head per day target, it may be necessary to adjust the cost per acre. **To download the calculator, visit the website at: beef.unl.edu/learning/cornStalkGrazingCalc.shtml.**

An additional resource that may be beneficial for producers is the Extension Circular titled, Grazing Crop Residues with Beef Cattle. This publication takes a more in-depth approach to utilizing various types of crop residues, including nutrient contents, supplementation, stocking rates, and grazing strategies. It can be very useful if you are trying to utilize crop residue to reduce feed costs.

With rising input costs affecting your profitability, this tip may be one way to help manage the impact of these costs on your operation. **For further information and additional Profit Tips, visit <http://beef.unl.edu>.** □

FEEDMILL - Cont. from P. 1

dairy, horse and sheep diets are mixed in another mixer. This is done to eliminate the contamination of feeds with different feed additives or ingredients.

The increased use of corn in the manufacturing of ethanol has created a need to find usages for both wet and dry distillers grains produced by ethanol plants. A great deal of the nutrient research done at the various Animal Science units is with distillers grains in numerous rations.

The beef feedlot uses mostly wet distillers grains in the cattle research diets. Wet distillers grains are brought

in by semi trucks and unloaded on the flat concrete areas. The grains are then loaded onto feed trucks



The feedmill has dried distillers grains in 50 lb. sacks, so that it can be fed as a meal in a supplement.

with skid loaders, as needed.

At the feedmill, only dried distillers grains can be handled. The truckloads of distillers grains unloaded at the mill are used in poultry, swine, dairy and beef cattle diets. The main focus of distillers grains research in livestock diets is finding the most cost effective ration to produce optimum rate of gain, such as 15% to 20% distillers grains for swine and 10% to 15% dried distillers grains (DDGS) for poultry. Some swine rations as high as 40% distillers grains have still shown good rate of gains. While some poultry diets with as much as 30% dried distillers grains in the total diet still had favorable results.¹

In finishing steer diets, research is showing 20%-30% DDGS to provide optimal results, while some rations as high as 40-50% have provided favorable results. Another example of how the feedmill works with distillers grains is in studies with newly weaned grower type calf diets, where the feedmill pelleted 100% dried distillers grains. The pellets were fed as a supplement to the calves. While wet distillers grains used at the feedlot at the 40% to 50% level seem to be most optimum because of the high moisture factor.²

In other studies, the feedmill is responsible for bagging dried distillers grains in 50 lb. sacks, so that it can be fed as a meal in a supplement.

FEEDMILL - Cont. on P. 3



About the People

Dick Meyer is the manager of the feedmill. Dick oversees the daily routine of scheduling all the different feed rations made at the mill. He is also responsible for

making a large amount of the feed rations. He has worked for UNL's Department of Animal Science for 37 years. Dick lives on a farm east of Greenwood.

Chuck Rezac has worked at the feedmill as an Ag Research Technician for 29 years and lives with his wife, Verna in Wahoo. Chuck helps in the daily operation of the mill in mixing feed rations. He is also responsible for delivering mixed feed to the Animal Science units at the ARDC and to the Animal Science building in Lincoln. Chuck is responsible for picking up different feed ingredients, such as sacked salt, urea, and antibiotics at International Nutrition and at Baltzels in Omaha.



Chuck Rezac and Dick Meyer

When mixed feed is sent to the campus in Lincoln, bulk soybean meal or soybean hulls are also picked up at ADM and brought back to the feedmill. □

FEEDMILL - Cont. from P. 3

Handling dry distillers grains can be somewhat of a problem since the grains tend to hang up in bins. A heavy mallet becomes a necessity to hit on the sides of bins to get the meal moving. The wider the openings and width of pipes in a mill the better the distillers will flow. Eight inch diameter pipes have worked much better than six inch pipes at the feedmill at the ARDC.

There are also variances in the distillers product from different ethanol plants. Distillers grains from one plant may be more granular and flow relatively easily, while the product from another plant will be fine and chalky in nature and want to hang up in the unloading pits and bins constantly.

You can learn more about livestock nutrition research by visiting UNL's Department of Animal Science's website at <http://animalscience.unl.edu>. Click on the "research" or "extension" links to learn more about ruminant and non-ruminant projects. □

¹ Poultry research data source - Sheila Scheideler, UNL Poultry Nutrition Professor & Animals Science Interim Department Head and swine research data source - Duane Reese, UNL Associate Professor and Extension Swine Specialist
² Beef research data source - Terry Klopfenstein, UNL Ruminant Nutrition Professor



Chuck Rezac (above) and Dick Meyer (below) oversee the daily operations at the feedmill.



Calendar of Events

November

7	Husker Nutrition Conference	8:15-3:45
7	Behlen Observatory Public Viewing Night	7:30-10:00 pm
12	Unit Managers Meeting	
12	4-H Council Meeting	7:00-8:30 pm
17	Saunders County Extension Board	7:00-10:00 pm
19	Livestock Advisory Meeting	7:00-9:00 pm

December

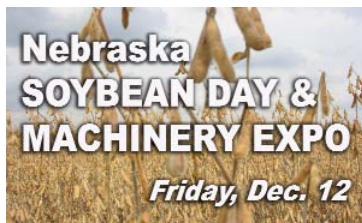
10	Onsite Wastewater Training	8:00-5:00
10	Unit Managers Meeting	
10	Nebraska Sustainable Ag Society	10:00-3:00
11	Onsite Wastewater Training	8:00-5:00
13	Eastern Nebraska Goat Conference	8:00-5:00
18	Grain Marketing Breakfast Program	7:00-12:00

Mark Your Calendar

for the following events at the ARDC..

- December 18 - **Grain Marketing Breakfast**
- January 31 - **Master Gardener Training Begins**
- February 10 - **No-Till Conference**

Watch for more details! □

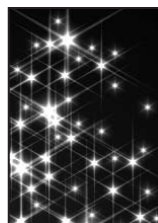


Topics and Speakers...

This year's Soy Expo will provide timely topics and presentations that soybean producers won't want to miss. The agenda is packed with ideas to consider for 2009...take a look for yourself!

Join us on Dec. 12 in the heated pavilion at the Saunders County Fairgrounds - Wahoo, NE

8:30 a.m.	View Commercial Exhibits
9:00	On-Farm Soybean Production Research Results From Area Growers <i>Keith Glewen, UNL Extension Educator</i>
	Early Soybean Planting Dates. An Economic Analysis <i>Paul Jasa, UNL Extension Engineer</i>
10:00	Break - View Commercial Exhibits
	Making Dollars & Decisions With The New Farm Bill <i>Brad Lubben, UNL Ag Economist</i>
	Nebraska Soybean Checkoff Update and Association Information <i>Soybean Board and Soybean Association</i>
	Foliar Soybean Disease Management! Do You Need It? <i>Loren Giesler, UNL Plant Pathologist</i>
12 Noon	Lunch
	Prospering Through Volatile Times <i>Moe Russell, President, Russell Consulting Group - Panora, Iowa</i>
	Soybean Aphids! When Did It Pay To Spray? <i>Thomas Hunt, UNL Extension Entomologist</i>
2:30	Adjourn



Look to the Sky.... Observatory Offers Public Viewing Night - Nov. 7

Behlen Observatory is a research facility located at the ARDC that is operated by the UNL Department of Physics and Astronomy. It houses a 30-

inch Cassegrain Reflector which is primarily used for variable star research.

A public viewing night will be held on Friday, November 7. A 30-inch telescope will be available for public viewing. Typically, slide show talks, physics demonstrations, and the opportunity to look through smaller telescopes are offered.

The observatory is located about 0.8 miles past the ARDC August N. Christenson Research and Education Building. Turn left and go one mile north to Avenue H. Turn right on Avenue H and continue east 2 miles until you reach 8th Street. Turn left on 8th Street and follow it north 0.6 miles to the observatory which will be seen off to the left.

For more information about the Behlen Observatory and public viewing nights, learn more on the web, at: <http://astro.unl.edu/observatory/>. □

Reverse Trade Mission

Governor Heineman hosted the state's first reverse trade mission tour this fall. More than 125 guests from eight nations visited Nebraska. The event was devised to encourage international companies to explore opportunities for investment in Nebraska. Nearly 40 people from the group, accompanied by representatives from the State Department of Agriculture, made a stop at the ARDC. □



The Nebraska steaks on the grill garnered attention and pictures from the group.

2008 Summer Field Days Results....

"I will keep current research information as the basis for management decisions."

- Field Day Participant Comment

- * **Total acres managed or influenced by participants:**
 - Crop Management Diagnostic Clinics - 3,737,725
 - Soybean Management Field Days - 528,934
 - Solution Days - 359,590
 - Irrigation and Energy Conservation Field Day - 518,793
- * **Estimated value of the knowledge gained and/or anticipated practice changes on a per acre basis:**
 - Crop Management Diagnostic Clinics - \$8.27
 - Soybean Management Field Days - \$13.00
 - Solution Days - \$11.86
 - Irrigation and Energy Conservation Field Day - \$14.05
- * **Estimated total value of the program:**
 - Crop Management Diagnostic Clinics - \$30,917,463
 - Soybean Management Field Days - \$6,787,653
 - Solution Days - \$4,266,336
 - Irrigation and Energy Conservation Field Day - \$7,289,042



**The Clover Corner
What's Going On With 4-H...**

Some might think that once the fair is over, there isn't much going on with 4-H. *Not so!* Here are a few important dates coming up on the 4-H calendar. ☐

Market Beef weigh dates:	Jan. 24 & Mar. 21 at the Wahoo Sale Barn
Leaders Banquet	Jan. 28 at the Extension office at the ARDC
4-H Council Meeting	Mar. 3 " " " "
4-H Project Fair	Mar. 23 " " " "
4-H Speech Contest	Mar. 30 " " " "

Saunders County Exhibitors Win Top Honors at Ak-sar-ben

Saunders County exhibitors did well at the Ak-sar-ben Stock Show in Omaha this September. The following exhibitors took away top honors...

*Holly Fujan of Prague (shown below) - Overall

Champion Market Swine

- * Samantha Swanson - Champion Hampshire Breeding Gilt
- * Nathan Filipi - Reserve Champion Division II Market Hog



- * Tyler Marotz - Champion Junior Holstein Heifer
- * Eden Moore - Reserve Champion Saler Breeding Heifer
- * Abby Nelson - Champion Feeder Calf Showman
- * Josh Nelson - Champion Breeding Beef Showman ☐

Ag Learning at the Festival

Over 650 fourth-graders converged upon the ARDC once again this fall for the annual Ag Awareness Festival. This is a always a great opportunity for youth to learn about where food and so many other byproducts come from. The majority of the students were from urban areas and the festival was a very unique experience for many of them. To date, over 10,000 children have attended the festival sponsored by the Ag Awareness Coalition. The fall festival is held at the ARDC and a spring session is held in Lincoln. ☐



UNL Extension Educators, Karna Dam (right) and Sara Ellicott (below) engaged the students in the

beef production session by enlisting "audience participation".



M.E.A.D.
Making Education in Agriculture Different

UNL Representative helps Mead Students Discover Career Possibilities

by Kori Jensen, Mead High School

What do you want to be when you grow up? This is a question many high school

students face. Jill Brown of University of Nebraska-Lincoln Career Services visited the Mead Students in September to help them with this decision. She explained that each of today's high school student will have an average of 12-16 careers in their lifetime and the students knew that 1 in 4 careers in Nebraska are agricultural. This gives students a great chance of finding themselves in several agricultural careers in their lives.

"I learned if I decide to go into the medical field, getting a degree in agriculture may help me get there."

- Mead High School Student Comment

Jill passed out BINGO cards and the students filled them in with each of the 28 majors the College of Agricultural Science and Natural Resources (CASNR) has to offer. Next, Jill told about career opportunities, internships, and field trips and the students guessed which major led down each path. BINGO gave the students a way to earn prizes while learning about college.

Jamie Larsen said, "Jill opened up my interest in the Fisheries and Wildlife



UNL's Jill Brown led the Mead students with CASNR BINGO, a game that helped them learn about ag majors at UNL and possible career paths.

major because of the travel opportunities to places such as Africa."

Students were surprised to learn that the forensic science major was in CASNR, but as Jill talked about the importance of insects, soils, plants, and weather in these cases, they realized agriculture's role in solving crimes.

Jenna Schutt said, "I learned if I decide to go into the medical field, getting a degree in agriculture may help me get there."

The Mead students had fun playing the CASNR BINGO game and learned about college and career opportunities. This experience opened students' eyes to the opportunities that lie before them.

Michele Garcia said, "She made me think more about an agricultural career and take a second look at some careers I hadn't considered". ☐



Campbell Soup Company has partnered with the National FFA Organization in a campaign called "Help Grow Your Soup." Simply go online at

HelpGrowYourSoup.com and click on a red barn symbol. Campbell Soup will donate a dollar to the National FFA to help with their programming. The company has committed to contribute up to \$250,000. ☐

Nebraska Cattlemen Visit the ARDC



The Nebraska Cattlemen recently held a board meeting at the ARDC. An optional tour of the beef feedlot and cow/calf unit followed for those interested in learning about some of the current research projects being conducted at UNL. Matt Spangler, Beef Genetics Extension Specialist, conducted the tour. Larry Smith of Ashland, current president of the organization, is shown with other Nebraska Cattlemen and Spangler in the tour photo on the left. ☐