

**Demonstrating Successful Farm Management Education Programs**  
Concurrent Session Abstract Summaries – 20 Minute Sessions

**3:00 – 4:00 pm**  
Palisades I & II

**Implementing Grain Marketing Plans using the Grain Marketing Plan App**  
*Jessica Groskopf, Cory Walters, Kate Brooks and Robert Tigner, Nebraska Extension*

Today's farmers manage their operations in a rapidly changing price environment. Although marketing plans are pivotal to an operation's success and profitability, farmers rarely have written marketing plans. With the continued decline in commodity prices, marketing plans are an even more critical part of farm management and ultimately farm survival. To assist producers in developing and implementing grain marketing plans, Nebraska Extension has paired traditional grain marketing workshops with technology: the newly released Grain Marketing Plan smartphone application. The Grain Marketing Plan app effectively simplifies the important connection between a written grain marketing plan and grain market information. The Grain Marketing Plan app is a customizable electronic grain marketing plan with a built in reminder system. Once a farmer has developed a marketing plan, they can input their decisions into their smartphone. When a decision trigger is hit, the farmer will receive a notice encouraging them to take action. The app features a pre-harvest and post-harvest marketing plan and is available for corn, soybean, and winter wheat. In November and December 2015, 135 people attended the grain marketing workshops held across Nebraska. Of the total participants, 52% plan on using the Grain Marketing Plan app once it becomes available in early 2016 for iPhone and iPad. An additional 28% indicated that they would use the Grain Marketing Plan app if it was available for Android devices. During this presentation, we will discuss the effectiveness of integrating smartphone technology with producers grain marketing decisions.

**USDA Yield Estimates: Bomb or Boon?**  
*Elwynn Taylor, Iowa State University*

The USDA crop production report estimating yield for corn and soybean has little apparent respect amid the farm community, but does have a significant impact on commodity futures prices. The US corn yield per acre forecasts as published in August and September are often far afield from the harvested reality. The forecast methods are, however, not without merit in that they do anticipate the likely per acre yields should weather conditions meet the 5-year average for the remainder of the season. Availability of guidance relative to actual weather and likely crop yield can provide the individual producer with sufficient information to anticipate crop yields in excess of the USDA forecast (or yields to the shy side of the outlook). The producer is enabled to anticipate likely commodity futures price based on current weather history both locally and across the production region of the United States and make informed decisions on both the marketing of stored grain and utilization of futures pricing.

**2014 Farm Bill Education Program for Nebraska Producers**  
*Tim Lemmons, University of Nebraska-Lincoln, Al Vyhnalek, Jim Jansen, UNL Extension*

This presentation will describe the educational effort undertaken to instruct Nebraska agricultural producers how to evaluate, sign-up for, and engage the USDA's 2014 Farm Bill. This effort included a four-tier approach to include webinars and online recorded video, face-2-face meetings, one-on-one consultation using prepared software, and print media. The program also included a follow-up research/survey effort to discover the impacts of the educational program, and how producers used the materials provided. We will discuss the resultant data, behavior changes made, and the long-term impact of the decision made. Participants to the session will gain an appreciation for a multi-tier educational approach and experience how our approach positively affected the final program outcome. We will demonstrate how producers in the state chose USDA risk management programs and provide commentary on how these choices might affect future programs and program payments. Finally, the program will address emergent program concerns and the creative solutions Nebraska producers used to help mitigate these issues. In total, this program reached 13,328 Nebraska producers directly, with an estimated 2,764 secondary, and 6,103 tertiary contacts. The program affected a reported 4.1M acres of crop ground with an estimated economic impact of \$128.9M. The post-workshop evaluation demonstrated a substantial improvement in understanding of the farm bill program, improved understanding of the base acre/program yield update, and improved understanding of what programs options would work best for their operations. A six-month survey further demonstrated improved understanding of program analysis and evaluation leading to a successful sign-up and enrollment.

3:00 - 4:00 p.m.  
Palisades III

**Cutting Costs without Cutting Profits**  
***Eugene Matzat, Purdue Extension***

With the predicted tight profit margins for Midwestern crop farmers going into 2016 after record farm incomes from recent years, Purdue Extension developed and delivered farm financial management workshops during the fall/winter of 2015/2016 to encourage farmers to take a closer look at their financial positions, particularly working capital. A long term cash rent tool was demonstrated and shared, ag lenders were invited to present their expectations for farmer financial ratios at operating loan renewals, and emphasis was put on ways to cut production costs in order to “push the pencil harder” to find profit margins in 2016. This presentation will share opportunities at which farmers have to look for and realize savings in both variable and fixed costs for mainly crop production, sharing research-based options from North Central Extension specialists. The focus will be on seed, fertilizer, pesticides and energy variable costs and machinery, labor and land fixed costs.

**Financial Challenges for Beginning Farmers During This Agriculture Down Cycle**  
***Ron Dvergsten, Minnesota Farm Business Management***

The presentation will point out some of the financial challenges that beginning farmers (10 years or less) will face going forward during a downtrend in agriculture. In looking at 2014 FinBin data from Minnesota farms, several key financial measures showed some obvious areas in which the beginning farms are at a significant competitive disadvantage compared to the well-established farms that are being identified by having been in business (20 plus years). The data reinforces some obvious points that we generally know are challenges for new businesses to start and expand in a capital intensive industry like farming. Working capital to gross income, total net worth, higher debt to asset ratio, and size of operation stand out as the most obvious. The presentation will also include updated information that was gathered this spring from the 2015 production year here in Minnesota.

**Economic Depreciation Change: Evidence From Periods of Net Farm Income Change**  
***Barry Ward and Dan Shinkle, The Ohio State University***

Deterioration in profit margins for major Midwestern field crops over the last three years has created a changing environment with respect to farm machinery and equipment investment. The strong returns for Midwestern field crops from 2006 to 2012 together with favorable tax incentives (bonus depreciation and Section 179 expensing) led to strong demand for new and used farm machinery and equipment over this period. The subsequent period (2013 to present) of lower crop prices and profit margins has led to relatively weaker demand for farm machinery and equipment over this period. This weaker demand has led to softer markets for used equipment and trade-ins. These lower prices for farm machinery and equipment trade-ins has created a higher rate of implied economic depreciation for this machinery and equipment compared to the previous high profit period.

An analysis of farm machinery and equipment sales data from the online used farm equipment sales platform, Machinery Pete, allows us to examine the change in resale prices of used farm equipment over the period of profit margin change from 2000 through 2015. Change in resale price per unit and price per-hour-of-use of select makes/models over this time series implies a change in economic depreciation. Farm machinery and equipment were found to have a lower resale value per unit and per-hour-of-use and therefore higher implied economic depreciation in the period of lower profit margins from 2013 through 2015.

3:00 – 4:00 pm  
Cascade

### **Beef Management Resources**

***Damona Doye and David Lalman, Oklahoma State University***

Oklahoma State University's (OSU) Beef Manual is a compendium of the latest research-based information for beef cattle producers, educators, veterinarians and others in the industry. The new edition contains 45 chapters addressing beef nutrition, breeding, herd health, forage, environment and economics. The new edition contains 45 chapters addressing beef nutrition, breeding, herd health, forage, environment and economics. Basic animal production topics—nutrition, breeding, genetics and herd health—are covered in depth. In addition, the manual includes information on economics, marketing and risk management, leasing arrangements, livestock insurance, forage production, grazing management, drought management, beef quality assurance, waste management and biosecurity. A chapter on fire plus additional chapters on beef cattle breeding, including one on genomics, are new to this volume. The manual can be ordered online at <http://agecon.okstate.edu/cattleman/order.asp> for \$25 plus shipping.

Participants in the OSU Master Cattleman Program use the manual as their educational curriculum ([agecon.okstate.edu/cattleman](http://agecon.okstate.edu/cattleman)). Agricultural economists and animal science specialists collaborate to provide other programs such as the Oklahoma Beef Quality Network, providing value-added marketing opportunities. A website, [beefextension.com](http://beefextension.com), catalogs both fact sheets and spreadsheet tools such as RanchCalc and budgets. Benchmark data sources, livestock leasing publications and forthcoming journal articles on the feasibility of beginning a cow-calf operation and proven strategies to increase returns to cow-calf producers will also be highlighted.

### **Corn Silage, Feeding Management, and Cash Flow Effects**

***Heather Weeks and Virginia Ishler, Penn State Extension***

Feeding and cropping management practices are critical to a profitable dairy business. In a 2015 cash flow plans summary, dairy farm breakeven milk price ranged from \$12.23/cwt to \$38.72/cwt (n=107). An indicator of a successful dairy farm is achieving profitable milk production with quality forages within an economical feed cost. Between 2013 and 2015, 60 farms were sampled four times over two years for corn silage, fecal starch, and milk urea nitrogen (MUN), and surveyed about best management practices. 48 farms were analyzed using data envelopment analysis (DEA) to assess corn silage quality and management effects on farm profitability. Farms that adjusted corn silage harvest particle size produced an average of  $82.8 \pm 9$  pounds of milk per cow per day compared to  $73.8 \pm 8$  pounds on farms that do not adjust for particle size ( $t=1.94$ ,  $p<0.05$ ). Farms that tested corn silage dry matters daily/weekly averaged  $78.4 \pm 9$  lbs milk/cow/day compared to  $74.8 \pm 9$  lbs milk/cow/day on farms that monitor monthly or "as needed" ( $t=2.59$ ,  $p<0.01$ ). Corn silage hybrids and storage structures were recorded at sampling. Farms that fed the same hybrid from the same structure from Fall 2014 to Spring 2015 showed a 6.7% increase in 7-hour starch digestibility compared to 0.2% increase on farms that fed a blend of hybrids in the same structure or 2.7% increase on farms that changed the hybrid, structure or both ( $F=4.09$ ,  $p<0.05$ ). Farms also reported their past three years' actual income and expense data that are currently being analyzed.

### **The Cost of Raising Dairy Replacements - 2015**

***Mark Hagedorn, University of Wisconsin Extension***

The purpose of this fact sheet was to update previous dairy replacement cost estimates with recent feed cost data. The estimates help dairy producers and agri-business professionals better understand costs involved in raising dairy replacements and provide benchmarks for comparison. The factsheet data was prepared by conducting surveys of 36 dairy farms and custom heifer raisers in 2013 (conducted by 13 WI County Extension Agents), calculating and analyzing cost centers based on operation type and heifer weight, then summarizing the areas that highly affect production costs. This entry was prepared by Matt Akins and Mark Hagedorn and released in August 2015. Distribution occurred at regional heifer raising meetings, Wisconsin Farm Technology Days, and World Dairy Expo with over 2100 fact sheets distributed. The data has been featured in 3 articles in the Agri-View and Hoard's Dairyman which collectively reach over 80,000 subscribers in the US. In addition, the factsheet was posted on the UW Extension Dairy Team and Dairy Heifer websites with 50 page views since January 2016. The fact sheet can be viewed at <http://eauclair.euwex.edu/files/2013/10/2015-Cost-of-Raising-Replacements-Factsheet-Updated-12-10-15.pdf>

3:00 – 4:00 pm  
Falls

**A Representative Farm Approach to Analyzing Farmer Adaptation to Climate Change, Peter Zimmel, University of Missouri – FAPRI, George Knapek & Marc Raulston, Texas A&M University**

Farmer adaptation to climate change is a hot topic throughout multiple agricultural disciplines. Farmers are essentially in a near-constant state of adaptation to ever-changing conditions, whether they be market or environmentally driven. Advanced climate modeling techniques were used to assess the inter-annual variability of yields in the Midwestern U.S. in a baseline scenario and to quantify the impact of one particular adaptation, an earlier planting date, on expected changes in mean yields and yield variability. Subsequently, FAPRI estimated price impacts of these changes in yields and yield variability on the January 2015 FAPRI Stochastic Baseline. The natural progression is to analyze the financial impacts of adaptation on producers at the farm level. Farmers were interviewed initially and asked about their views on climate change, what changes they have already made to their operations due to changes in weather, and what climate variables they would utilize in making decisions going forward. This study includes climate scientist findings, sector level data, farm level data, and a whole farm simulation model to determine the economic impacts on farmer adaptation to climate change in major production regions of the Midwestern U.S. The presentation will highlight the modeling data and the interaction with the farmers and their views on climate change.

**Conveying The Science of Energy Production and An Associated Risk Management Assessment in Non-Legacy Regions, Thomas Murphy, Penn State Extension**

With increasing amounts of energy being produced in non-legacy rural areas of the U.S., often on or under agricultural land, there are large numbers of landowners facing decisions concerning the placement of related equipment and the implications from a land use standpoint, along with associated financial, environmental, and social issues connected to the development. Wrapped around those landowners, are additional layers of stakeholders that are impacted in a more indirect fashion by decisions made by their neighbors. And in a larger context, the broader societal ramifications of this energy production impacts us all in some manner. Since most all energy production is not done in a vacuum, meaning it moves "offsite", traveling from place of production to ultimate utilization, the country as a whole has a vested interest in this evolving energy conversation, even more so with a heightened awareness of climate based concerns now and in the future.

This presentation will focus on multi-faceted methods utilized to educate rural landowners, with an ongoing emphasis on the ag community, pertaining to land leases, pipeline right of ways, financial planning related to energy royalties, and overall risk management related to their agricultural operation. While rural shale gas production will be used as a case study, current expansion of renewables, with similar opportunities and concerns, will give Extension participants new ideas for how to work with their clientele.

**University of Minnesota Income Tax Short Course End-of-Event and Follow-up Evaluative Impacts Report**

***C. Robert Holcomb, University of Minnesota Extension***

The University of Minnesota has been providing continuing education for tax practitioners for 73 years. The University of Minnesota is a member of the Land Grant University Tax Education Foundation, a nonprofit organization that conducts tax education programs for tax professionals at workshops, institutes, seminars, and forums attended by over 29,000 tax professionals in more than 25 states. The Income Tax Short Course is offered through the University of Minnesota College of Continuing Education and partners with University of Minnesota Extension with regards to staff functioning in a leadership role. The Income Tax Short Course is a two-day professional workshop offering a total of 16 continuing professional education hours for tax preparers. The course is offered at 11 different locations state-wide with an annual attendance of more than 1,300 participants. Attendees consist of: tax return preparers, Certified Public Accountants, Enrolled Agents, attorneys, and insurance personnel. Evaluation of this program effort is accomplished in two phases. The first phase consists of an end-of-meeting evaluation intended to collect initial feedback for the course and is focused on determining program outcomes. The second phase consists of a follow-up evaluation performed six months following the last workshop. Phase two focus is to determine program impacts based upon how participants utilized and acted upon their new knowledge, whether or not they developed and implemented key informational aspects of the program, and what the resulting impact of those actions were.

4:00 – 5:00 pm  
Palisades I & II

**Adoption and Utilization of Precision Agricultural Technology Impacts on Whole-farm Performance**

*Terry Griffin, Kevin Herbel and Gregg Ibendahl, Kansas State University*

The majority of studies evaluating the agronomic and economic benefits of precision agricultural technologies focused on single fields, in the case of variable rate applications, or utilized whole-farm profitability calculators, in the case of automated guidance. This study utilizes a panel of observational data rather than experimental data to evaluate how farms actually performed after technology adoption. Farms in the Kansas Farm Management Association (KFMA) were queried regarding their utilization of ten precision agricultural technologies; then individual farms were tagged with the respective level of technology such that analyses can be conducted for 1) with and without and 2) before and after adoption. Because it may take several years for farm managers to efficiently utilize technology and be able to adjust their operations accordingly, the whole-farm agronomic and economic impact of precision agriculture technology may lag a few years after adoption. Preliminary results suggest that adoption of GPS guidance has greater whole-farm impacts than the summation of field-level benefits but only for specific farm sizes where it was expected that the decision maker was actively operating farm equipment. This study provides insights into the true farm management impact of precision agriculture.

**Small Unmanned Aerial Systems on the Farm: Preparing for the Legal Issues**

*Peggy Kirk Hall, The Ohio State University and Rusty Rumley, National Agricultural Law Center*

The Association for Unmanned Vehicle Systems International predicts that 80% of the commercial market for drones will eventually be for agricultural uses. Drones or Small Unmanned Aerial Systems (sUAS) weighing less than 55 pounds have data gathering capabilities that offer beneficial agricultural applications. Farmers, ranchers and crop consultants plan to use sUAS technology for crop scouting, precision agriculture systems, irrigation monitoring and property and livestock surveillance. This new technology brings new and complex legal issues to agricultural operators, such as governmental regulation, private property rights and civil liability. The Federal Aviation Administration (FAA) has proposed a regulation to govern the use of sUAS in commercial settings that will become final in 2016 and many states are enacting laws to address emerging private property and civil liability concerns. Extension plays a key role in preparing the agricultural community for the legal issues that accompany sUAS technology. This poster will aid Extension's educational efforts by summarizing the FAA regulation for commercial sUAS operators, surveying state laws on sUAS operation and analyzing legal developments at the intersection of sUAS, private property rights and civil liability.

4:00 – 5:00 pm  
Palisades III

**Ag CEOs Lender Conference**

***Jack Davis and Shannon Sand, South Dakota State University***

The Ag CEO's Lender Conference is a one day workshop for agricultural lenders in South Dakota. Topics included land value and rent trends, grain production costs, financial trends for South Dakota farms, general economic outlook, commodity outlooks, farm bill, beef cattle issues and other economic concerns. The conference has been held two years at multiple locations with ag lenders attending representing \$10+ billion in ag assets. Sponsorship of \$7,500 for the program was provided by Monsanto, SD Wheat Commission, and SD Wheat Growers cooperative.

The DDN video network was used to deliver presentations from campus professors to the SD Regional Extension centers.

Plans are being made for year 3 to be held fall of 2016.

**Benchmarking Large Midwest Crop Farms**

***Dale Nordquist, Center for Farm Financial Management, University of Minnesota***

Current low commodity prices and high rental rates have created a real imbalance in the financial returns for Midwest crop producers. This problem can be more severe for operations that grew rapidly during the boom years of 2008-2012. If things go wrong for a large crop producer today, they can snowball in a hurry. And yet, a large group of these producers, based on our benchmarking databases, have remained profitable. In this session we will discuss the financial results for these producers and look at the characteristics of producers who have remained profitable vs. those who have struggled financially in recent years.

**Minimizing sleepers: making farm business analysis and benchmarking education fun for farmers...or at least less painful!**

***Dianne Shoemaker, The Ohio State University***

Numbers, numbers, and more numbers. Farm business analysis and benchmarking programs along with their associated summaries generate lots and lots of numbers. How do we present and work with these numbers with our clientele? You may be sitting around the table with a farm family and reviewing their first farm business analysis. You may be teaching a room full of farmers, industry personnel, undergraduate or professional students. No matter which scenario you teach in, we must present professionally and accurately, and help students understand these numbers and their implications. How we present and explain these numbers can make the difference between new or renewed interested in farm business management, or frustration and boredom. In this session, the speaker will share successful teaching methods and tools that have been developed around the farm family's table and in the classroom. Participants are encouraged to share tools and strategies they have successfully used as part of the discussion.

4:00 – 5:00 pm  
Cascade

**Dairy Sort Analysis and Benchmarks - Conventional Dairy**

***Nate Converse, Central Lakes College FBM and Tom Anderson, Riverland College FBM***

The Minnesota Farm Business Management Database includes data from almost 400 dairy farms and provides the opportunity to dig deeper into the data using special markers on farms with different practices. In this session, we will focus on the economics of Conventional dairy production by providing a look at how various production practices impact the profitability of dairy farms and discussing dairy benchmarks as well as key performance indicators. With declining margins in the dairy sector, it is increasingly important that producers understand how day-to-day management decisions influence their cost of production.

**Dairy Sort Analysis and Robotic Benchmarks**

***Tom Anderson, Riverland College FBM and Nathan Converse, Central Lakes College FBM***

The dairy industry is an economic engine with great impact for many rural communities all across the country. In this segment, we will utilize the dairy data base and enhance the data by looking at benchmark numbers and a variety of tools used to determine whether robotic dairying is potentially a good decision for a dairy farm. A new set of benchmarks need to be reviewed and discussed with dairy operators who wish to embark on the high technology of robotic dairying.

**Profitability of Northeast Organic Dairy Farms**

***Robert Parsons and Qingbin Wang, University of Vermont***

Financial risk management has driven the longest on-going economic study of organic dairy farms in the US. Since 2005, 11 years of financial analysis has provided organic dairy farmers, farmers, service providers, lenders, and policy makers the comparable farm profitability of organic dairy farms in the northeast.

For 2014, organic dairy farms posted an average ROA of 1.9%, averaged 57.7 cows, producing 12,765 lbs. of milk, and sold 749, 955 lbs. at \$35.09/cwt. The farms averaged net revenue of \$47,603 before any charge for unpaid owner labor. The largest expenses were purchased feed (34.2%), repairs and supplies (13.3%), labor (11.7%), and depreciation (11.2%).

The data were examined by 3 profit groups with ROA of 5.39%, 1.69%, and -1.95%, respectively. The High Profit group averaged more cows per farm (69.0), more milk per cow (15,115 lbs.) as compared to the Middle Profit and Low Profit groups. The Low Profit group averaged only 57.3 cows producing 11,203 lbs. of milk per cow.

Comparable size conventional dairy farms produced similar ROA in 2014 while producing more milk per cow but at a lower milk price. However, the organic dairy farmers have avoided the volatility of milk prices with consistent contract prices. Overall organic dairy has provided a lifeline for many smaller dairy farms to remain in business. However, the long term viability of the industry is challenged by an aging operator population and concerns over who will take over these farms with nearly 30% unable to provide a minimum \$37,000 for family living.

4:00 – 5:00 pm  
Falls

**Annie's Project Long Term**

***Mary Sobba and Karisha Devlin, University of Missouri Extension***

Missouri began offering Annie's Project classes in the fall of 2004. Since then, ninety classes have been offered throughout the state with over one thousand participants. Most of the participants were women farmers and landowners. The participants were from a variety of farming operations including full time farming, small niche operations, off-farm jobs and landowners. The ages ranged from sixteen to eighty-two. All classes used the national evaluation tools at the end of class to gather short-term learning and class participation. There has been a need to determine long term impact. The emphasis statewide and in many other states is to show programs are making a difference long term. The Missouri Annie's Project state coordinators worked together and with the suggestions and advice of state specialists designed an evaluation tool to send to past participants. The evaluation was distributed via U.S. mail. The evaluation was sent to three participants of each class, for a total of two hundred seventy. This evaluation is in process and will be complete approximately May 1st. A few of the items in the survey include: actions taken, changes in farm role, curriculum importance, networks formed and changes in confidence and leadership. Comments and stories were encouraged. The presentation will include the steps taken to create and distribute a long term impact evaluation. Also, the presentation will include the analyzed results and additional ways the state coordinators plan to use the data and results.

**Helping Farmers Develop a Farm Business Succession Plan**

***John Baker, International Farm Transition Network***

There has been a great deal of discussion concerning the aging farm population and the pending transfer of wealth from the older generation to the next generation. Many farm owner/operators desire to transfer the farm family business to the next generation. The legal means of transferring the land and other assets to the next generation are well known and used. Many owners have an estate plan but do not have a plan for transfer money, management and assets during their lifetimes. Succession planning is not only the transfer of assets, but also the transfer of labor, skills and decision-making. It requires financial analysis to ensure the business can support the goals of all the members and requires planning and communication skills. Many farm businesses are realizing the importance of creating a succession plan and the value of a skilled facilitator to lead the process of clarifying their goals and ideas, exploring options, and coordinating communication. A facilitated process can lead to better informed business planning and estate planning decisions. The IFTN has developed a seminar to train professional service providers on "how" to work with farm families to develop farm family business succession plans. To date over 125 individuals for 10 states have attended the training been certified as Succession Coordinators. The breakout will focus not only on the subject matter but also on the strategies employed by NDSU to recruit professionals to attend the seminar.

**Design Your Succession Plan**

***Willie Huot and Crystal Schaunaman, NDSU Extension Service***

Succession planning is one of the most critical needs facing farm and ranch families as they attempt to transfer their business to a successive generation; either family or non-family. Data reveals that about 77% of all farm assets are currently owned by those age 70 years or older. Further, in ND an estimated 50% of all agricultural lands are now operated under some type of lease agreement between an owner and operator. Based upon recent surveys, it is also estimated that less than 50% of ND farms and ranches have a current succession plan in place. NDSU Extension has developed and piloted an educational program titled "Design Your Succession Plan" that helps farm and ranch families get started on developing a succession plan for their business. The curriculum consists of five modules titled "Starting Your Succession Plan", "Determining What You Want", "The Next Generation and Your Legacy", "Family Meetings and Conversations", and "Choosing and Working With Professionals". The Curriculum is very interactive. The materials consist of a presenter's binder, participant's binder and a participant's workbook. During the fall/winter of 2015/2016, the course was offered at 20 locations throughout ND. Total attendance was just under 200 participants. Initial evaluation, compiled using qualtrics, reveal a 51% increase in understanding the value mentoring a successor and a 70% increase in identifying professionals to work with in developing a plan. 80% of the participants indicated they are very likely to work on their plan during the next six months.



1:00 – 2:00 pm  
Palisades I & II

**Helping Landlords Find the Right Tenant**  
***Damona Doye and Brent Ladd, Oklahoma State University***

Finding the right tenant is an important step when leasing land. This presentation will describe a process to help effectively screen potential tenants. Aspects of the process include:

- Understanding the land's potential and constraints.
- Clarifying what land owners hope to achieve with their land, identifying goals the owner has for the land, and setting goals for the lease.
- Determining the required skills, qualifications, and attributes sought in potential tenants.
- Advertising in the screening process.
- Searching for possible legal issues involving tenants and their previous landlords.
- Conducting interviews with potential tenants and pertinent questions to assist land owners in evaluating potential tenants.
- Contacting references provided by potential tenants.

An OSU fact sheet on this topic is available at [osufacts.okstate.edu](http://osufacts.okstate.edu). Additional leasing resources are available from [Aglease.org](http://aglease.org) (<http://aglease101.org>) including lease forms, worksheets to calculate costs and contributions needed for lease agreements, and more general publications.

**Missouri Farm Leasing Curriculum**  
***Brent Carpenter, Darla Campbell, Karisha Devlin, Joe Koenen, Jessica Gordon, Mary Sobba, and Wesley Tucker, University of Missouri Extension***

University of Missouri Extension will launch a new comprehensive curriculum on farm leases in 2016. Six hours of content comprising ten units have been developed, including: Missouri farm leasing law, contract provisions, fixed and flexible cash leases, crop and livestock share leases, building leases, equipment leases, and hunting leases. The curriculum is designed to be delivered by regional extension specialists to farm audiences. It includes an instructor manual, a slide deck for each unit, a participant take-home manual, and supplemental reference materials. The curriculum has grown out of an innovative approach initiated by the MU agriculture and natural resources extension program to address a critical need of strengthening program content and delivery in several high-demand subject matter areas. The process brought together six experienced field specialists from across the state to develop subject matter content over many months. The key to success has been to identify a non-extension team leader/advisor to herd cats and bring professional skills in learning concepts and curriculum development. The appointment of a post doc fellow from the MU Department of Ag Education and Leadership has leveraged dispersed subject matter expertise into a coherent, consistent product that will be especially valuable for early career specialists. Portions of the curriculum have been field tested and the final product is being vetted by internal and external reviewers. This presentation will discuss lessons learned in the curriculum development process and demonstrate specific components of the content.

**Evaluation Report of Iowa Farm Leasing Meetings**  
***Alejandro Plastina, Ann Johanns and Ryan Drollette, Iowa State University***

Over half of the cropland in Iowa is under a lease arrangement, and an estimated \$3.6 billion exchanged hands under those agreements in 2015. A needs assessment based on 1,091 (46.5% of all attendees) end of meeting evaluations for the 2014 Iowa State University Extension and Outreach (ISUEO) Leasing Meetings ranked "Land values/cash rent/managing rental arrangement/communication" as the top challenge in 2015, and second in the next 5-10 years. Furthermore, a list of seven topics were identified as the top priorities among respondents. Following the ISUEO ANR Program Planning Cycle, the 2015 ISUEO Leasing Meetings were designed to address the topics rated highest by participants. A common set of materials was created (group PowerPoint, leasing book, videos/webinars, website updates, case study) for program delivery by multiple individuals across the state. During July and August 2015, the team of ISUEO Farm Management Field Specialists conducted 72 Leasing Meetings for 1,845 people. Each Specialist gathered contact information from the attendees to implement a 6 month post meeting evaluation. The post meeting evaluation was administered as follows: in January 2016, 420 attendees were invited to participate in the electronic version via e-mail; from those, 129 people responded after two email requests were sent. A hard-copy version was mailed in early February was sent to 678 individuals, including non-respondents of the online evaluation and participants who provided only a mailing address. We are currently analyzing the responses and look forward to sharing our conclusions at a concurrent session of the NFBM Conference.

1:00 – 2:00 pm  
Palisades III

**Accepting Debit/Credit Cards: Is It Right For You**  
***Kenessa Reynolds-Allie, Rutgers University***

Recently, there has been substantial growth in direct-to-consumer marketing. Consumers are participating in more on-farm, farm stand and farmers market purchases, as their demand for fresher, healthier, locally grown food increases. One of the limitations consumers encounter when purchasing directly from farms, especially smaller farms, is the “cash-only” payment policy. Research has shown that consumers are looking for the convenience of paying with debit or credit cards, and their purchase amount is positively correlated with these payment options. However, while accepting card payments would be beneficial, and convenient to consumers, farmers are hesitant to accept these forms of payments, as they believe it would be burdensome, costly, and are unsure of the impact on their profit. This paper seeks to educate farmers on consumer preferences for card versus cash payments, and the requirements and costs associated with providing this service, to meet the needs of their customers. Farmers can use the information provided to make a marketing decision that could have a positive impact on their sales and profit. The ultimate goal is to ensure farmers are taking advantage of any farm marketing opportunities that arise. Given that this is a universal issue and concern for farmers across the U.S., extension specialist can use this information provided to help farmers decide whether it is viable for them to accept card payments.

**Long-Term Health Care Planning: A Subset of Farm Transition Programming**  
***Gary Hachfeld, University of Minnesota Extension***

Farm transition programming has been a valuable addition to Extension programming efforts. An often overlooked subset of farm transition programming is a discussion regarding long-term health care planning. Research supports the need for long-term health care planning. The probability of having some sort of long-term health care issue in one’s lifetime is high, including people under the age of 65. Long-term care health care costs are increasing at an alarming rate. These costs can cripple a farm business financially and impede transition to the next generation.

Two University of Minnesota Extension programs focus on the issue of long-term health care planning. “Farm Transition & Estate Planning: Create Your Farm Legacy” is an interactive workshop targeted at farm and ranch families. One key educational point of the workshop is long-term health care planning. Multiple year program outcomes measured over a ten year period showed participant behavioral change and increased knowledge around this key educational point. Cumulative program impacts showed participants acted on their new knowledge and the financial impact of those actions totaled \$492.4 million dollars.

A second program, “Long-Term Health Care Planning: Preserving Your Farm or Small Business” focuses entirely on long-term health care planning and is used as a follow-up to the farm transition program. Multiple year outcomes show participants have exhibited behavioral change and had increased knowledge around this key educational point. Cumulative program impacts showed participants acted on their new knowledge and the financial impact of those actions totaled \$36.2 million dollars.

**Affluenza and How Does It Affect My Farmers/Ranchers**  
***Lance Brower, James Valley Career and Technology Center***

Affluenza has been in the news lately. What is it? Do my farmers or ranchers have it? Society has changed a lot since the 1950’s. For example the average household size in 1959 was 3.65. Today the average household size is 2.61. In the 1950’s the average home was 958 square feet and there was no such thing as a self-storage unit. Today the average home is 2300 square feet and there are over 58,000 self-storage rental facilities in the nation providing 2.35 billion square feet of storage. Do your farmers/ranchers have to have the newest and best equipment when it is not needed? Do they own a new tracked combine to do their 500 acres? This presentation will answer these questions and give ideas on how to cure the Affluenza and keep them in business longer (for the next generation).

1:00 – 2:00 pm  
Falls

**FarmAnswers.org - A Resource for Beginning Farmers**

***Curtis Mahnken, Center for Farm Financial Management, University of Minnesota***

Much concern has been raised surrounding the aging population of U.S. farmers, however, there is growing enthusiasm among people wanting to connect with the land. From explorers to seasoned producers, this new generation of farmers has a broad range of interest and experience in agriculture. This spectrum creates a need for one location that producers of all knowledge levels can find resources to help them get started, tools to help them succeed and a way to connect to other farmers.

FarmAnswers.org, the official USDA-NIFA beginning farmer and rancher clearinghouse (BFRDP), fills that need by providing curated information and programs, and connecting beginning farmers and ranchers around the country. This presentation will discuss how you can use FarmAnswers.org in your beginning farmer outreach program.

**Do agricultural producers view the cost of financing their production activities and capital costs, in the same way as they view other input costs?**

***Robert Preston and Todd Muehler, Northern State University***

This study examines whether agricultural producers view the cost of financing their production activities and capital costs for assets, such as land and machinery, in the same way as they view other input costs for such things as seed, chemicals, fuel, feed, product marketing, etc. Historically, sources of financing have consisted of internally generated funds, external funding from capital investment or borrowed funds from financial institutions and other sources. Traditionally, banks and other local financial institutions have been the primary source of external funding. However, with the increase in competitive funding options available to today's agricultural producers through "non-traditional" sources such as government sponsored entities and internet based sources of financing, traditions may have changed. In order to ascertain the answer to the underlying question, this study will examine Phase III data in USDA Agricultural Resource Management Surveys from 1996 to 2014. The results of this study is expected to provide both users and providers of farm financing with information to assess their current level of access to production and capital financing, and inform both users and providers of potential for opportunities for modifications, which can improve the current level of access to credit for agricultural producers.

**Expectations and Expert Opinion Surveys: Empirical Tests Using a Panel of Iowa Land Value Survey Responses**

***Wendong Zhang, Iowa State University and Todd Kuethe, University of Illinois***

A number of institutions, such as Federal Reserve Banks, Land Grant Universities, professional societies, and the USDA, conduct periodic surveys to gauge current and expected farmland market conditions. However, little is known about the process by which the varied market participants form opinions. In particular, few studies have investigated how respondents weigh past and current information or the degree to which respondents are backward-looking or forward-looking.

Using a panel of 400 respondents of the annual Iowa Land Value Survey between 2005 and 2015, we provide the first empirical tests of the degree to which various market participants, including farm managers, rural appraisers, and agricultural lenders, are consistent with adaptive or rational expectations. Specifically, we examine whether agricultural professional respondents adjust their land value estimates based on their historical track record - the differences between their responses and the published estimates, or they just give estimates based on sales records in current periods.

The analysis will provide important insights on the efficiency of farm real estate markets. In addition, this could examine whether and how the expectation formations process vary by different groups of respondents.

2:00 – 3:00 pm  
Palisades I & II

**Using FairRent to Arrive at a "Fairer" Land Rental Arrangement**

***Dale Nordquist, Center for Farm Financial Management. University of Minnesota***

FairRent is a web application to help producers and landlords evaluate alternative land rental arrangements. It is free to use and has several features that were not available in the desktop version that CFFM distributed for over 20 years. In addition to traditional cash and share lease arrangement, FairRent includes the option to evaluate seven different flex lease arrangements as described on the North Central Farm Management Extension Committee's AgLease101.org website. It also evaluates how crop insurance impacts downside risk for the producer. This session will provide a quick overview of FairRent with a look at example results for several flex lease alternatives.

**Crop Budget Analyzer Spreadsheet**

***Ken Williams, University of Wisconsin Extension***

With the increased change in market prices and the cost of crop inputs there was a need expressed by producers for a way to compare the cost of production and the potential income for various crops they produce. Many spreadsheets that are available through University Extension are extremely detailed and complicated for those with limited computer experience. According to the 2008 Wisconsin Agricultural Statistics Service 69 percent of farms in 2007 had computer access while only 38 percent of farms used a computer for farm business. In response to this need I developed an Excel workbook with individual spreadsheets for corn, soybeans, wheat, seeding alfalfa and established alfalfa. Each worksheet is short enough to fit on a standard 8½ x 11 page of paper. This workbook of spreadsheets has been posted on the Center for Dairy Profitability website as well as the Waushara County UW website. This spreadsheet has been widely used by Agriculture Agents, bankers, farm cooperatives, newspaper personnel and land conservation personnel from Wisconsin and as far away as Perham, MN; Indiana and the University of Arkansas.

**Flexible Cash Lease Provisions: Profit and Protection**

***Tim Lemmons and Jim Jansen, University of Nebraska***

The topic of this session is an exploration into the risk management and revenue potential of cash rent based flexible lease provisions. Specifically, flexible leasing arrangements are those designed to improve the income potential of cash rental agreements for landowners during years where farm performance is better than expected, and decrease the rental payments due from tenants during years where farm performance is less than expected. The performance of the farm is subject to any number of possible variables and correlates. Examples include yield, cash price at a given point in time, cash price seasonal average, basis at a given point of time, basis movements on a seasonal average, futures prices, adjusted cash, farm revenue, county/state yield, income or revenue averages, national prices, etc. Other correlates might include the price of oil or other fossil fuels, fertilizers, cattle, hogs, gold, securities, bond prices, etc. This session will demonstrate how flex leases are being used by producers in Nebraska, different approaches and rationales behind selection, and discussion on the past and emergent challenges to implementation. Participants will gain appreciation for the power behind these tools, as well as the flexibility in their implementation for profit and risk protection. The educational program used in Nebraska to demonstrate the technical aspects of flex leasing has been widely used and accepted by clientele. Over the past four years, it has been presented to over 5,000 workshop participants with encouraging and positive results.

2:00 – 3:00 pm  
Palisades III

**Finding Revenue in your Berry Business**

***Daniel Welch, Dyson School of Applied Economics and Management, Cornell University***

In 2013, Cornell launched a new effort to analyze the financial condition of berry farms in the state through a Berry Farm Business Summary. Led by faculty and staff from the Department of Horticulture, and the Dyson School of Applied Economics and Management, a team of extension educators worked with eight berry farmers across the state to complete farm business summaries. In addition to the business summary, an enterprise budget was developed based on input costs and labor costs that were broken down by tasks in typical berry production system for New York. Members of the New York State Berry Growers Association then verified the assumptions in the enterprise budgets. Each budget includes cost of production expenses for the pre-plant year, establishment year, and an early production year. Not surprisingly, labor was the most costly component of production expenses, as illustrated by the production year where labor for wholesale or retail berries was 80% of the total expenses. Using information from the business summary, this is also an area that showed differences between the 2 relatively larger farms and the other six farms in the completed analysis. On the 6 farms the average worker could cover 3.44 acres, and when the two other farms are added the average worker handled 4.48 acres. Using data from the 2012 NYS Berry Pricing Survey, and the expenses from the enterprise budget, a breakeven analysis was developed based on different yield and price assumptions. Growers need additional information and education to improve profitability.

**Cost Segregation Depreciation for Poultry Houses**

***Robert Page and Kevin Burkett, Alabama Cooperative Extension System***

With costs nearing \$500,000 for today's mega poultry houses, a farmer entering into the poultry business often takes on over a million dollars in debt and loan payments for 15-20 years. Using cost segregation depreciation allows the farmer to break down poultry house depreciation into its components, allowing much more flexibility in tax planning and resulting cash flow. This presentation will review three typical examples of depreciation and impacts on the farmers tax return and ability to repay debt.

**Vermont Maple: Establishing a Benchmark to Enhance Management Decisions**

***Mark Cannella, University of Vermont Extension***

The maple industry will need to double production in ten years to keep up with demand. Vermont has experienced dramatic advances in technology, expansion of business scale and recent market volatility that influences enterprises. Very limited economic and financial data is available to producers and industry professionals. The VT Maple Benchmark began as a pilot project in 2013 to provide cost of production education to managers and promote public information to broader audiences. This new project is growing from 10 initial participants to 30 participants by 2017.

This presentation will focus on the successes and challenges associated with establishing a new cost of production program. An interactive discussion will introduce both decisions that have been made and looming questions that will impact the evolution of this project. Listen as we get into the finer points of financial standards and the feasibility of collecting accurate financial records. Consider the opportunities and challenges of collecting information from a small group of producers. Provide feedback on the different methods of delivering complex financial data ranging from direct consultation to infographic business dashboards. Attendees can expect to learn from the experiences of this new program, contribute new ideas and apply this information to their own programs.

2:00 – 3:00 pm  
Falls

**Financial Performance of Your Business**  
***Charles Brown, ISU Extension & Outreach***

This presentation focuses on asset management and financial efficiency. Helping producers understand the gross dollars of revenue generated per dollar of asset value and how efficiently they convert those dollars into profit helps them to better understand their business. The relationship of asset turnover ratio and financial efficiency is key in answering questions of their operation such as: Which assets should a beginning farmer purchase? How many dollars of revenue does a producer need to cover living expenses? Are interest costs taking too much of my profits? How much debt will this asset support? This presentation applies to all types of farming operations and especially those operations that are trying to start up or expand.

**Solutions for Success: Using Farm Financial Case Studies**  
***Steven Johnson and Alejandro Plastina, Iowa State University Extension***

Presenting current farm financial issues in large group settings can prove challenging. Current constraints such as working capital, liquidity, cash flow management and various crop risk management marketing strategies still need to be addressed. In the winter of 2015-16 more than 5,000 farmers attended 35 different meetings in 4 western Corn Belt states where three different case studies were featured.

Farm Credit Services of America's senior credit team provided the farm financial backgrounds and solutions while Iowa State University Extension specialists compiled the analysis and provided the training. These case studies were the highlight of a 90-minute "Solutions for Success" message. An end-of-meeting survey results were compiled to reflect the impact of these case studies and related topics regarding farm finances, crop risk management and marketing.

**Teaching Financial Risk Management Utilizing Western Kentucky Case Study Grain Farms**, ***Tyler Mark, Todd Davis and Jonathan Shepherd, University of Kentucky***

A low-cost/low-debt and a high-cost/high-debt case farm are developed from Kentucky Farm Business Management (KFBM) record data to teach the effect of cost structure and leverage on working capital and profitability. These farms simulate the return over production costs, cash rent, accrued interest, annual principal payments and family living expense over a five-year period. The farms illustrate the liquidity problem facing many of our grain farms across the country and stimulates conversation regarding management alternatives to improve liquidity and solvency.

The low-cost / low-debt farm is assumed to have a current ratio of 1.35 with 50% of debt structured in long-term debt. The high-cost/high-debt farm has a current ratio of 0.80 with 50% of debt structured as current debt. These assumptions are based on the 2014 summary of 225 grain farms participating in the KFBM program.

The farms are assumed to have the same production and sales price to remove production and marketing skills from the cost-structure and leverage discussion. Farm-level yields, production costs, rental rates, family living, and debt payments are from the KFBM data. Grain prices are based on USDA forecasts. When teaching this case study, farmers are encouraged to change the price, yield and cost assumptions to reinforce their understanding that record yields / record prices can not eliminate the liquidity problems.

The case farms provide an environment for farmers to discuss financial problems without revealing any personal information. Management suggestions are incorporated into the simulation to demonstrate the effectiveness on improving liquidity and reducing debt.