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Five Year Issue-Based Review, September 2012: A Comprehensive Study of the Southeast District of University of Nebraska–Lincoln Extension

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University of Nebraska–Lincoln

Southeast Research & Extension District

Food • Fuel • Water • Landscapes • People

Five Year Issue-Based Review

September 2012

A Comprehensive Study of the Southeast District of University of Nebraska–Lincoln Extension

University of Nebraska Lincoln | Extension

IANR

SOUTHEAST RESEARCH & EXTENSION DISTRICT

FIVE-YEAR PROGRAM REVIEW – 2012

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"No other country has focused such attention on the practical (applied) dimension of education by extending and applying the knowledge base of our land-grant universities to the laboratories of real life where people live and work, develop and lead."

-Wayne D. Rasmussen (1989)
Taking the University to the People – Seventy-five Years of Cooperative Extension

The Morrill Act

In 1862, the passage of the Morrill Act, also known as the Land Grant College Act, became the pathway for the industrial classes to gain access to higher education. This Act gave to every state remaining in the union a grant of public land. States were to use the proceeds from the sale of the federal "land-grants" to establish colleges in engineering, agriculture and military science. With the signing of the Morrill Act, President Lincoln laid the framework for a system of higher education institutions that would offer unprecedented access to higher education and dissemination of practical knowledge to states and their citizenry.

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1 Vision For The Future



Vision and Overview

Vision

The Southeast Extension District is a premier provider of research-based information, delivering education '… ***Any time, Any place, Any path, Any pace…'*** to multigenerational clientele. An organization with professionals embedded in Nebraska communities that serve to engage the citizenry with their land-grant institution and help them solve complex problems around the important priorities of Food, Fuel, Water, Landscapes, and People.

Our vision requires innovation and attaining excellence in every area and at every level of the organization—personnel recruitment and development, curriculum development, program partnerships, external funding, student recruitment, teaching strategies and delivery systems. Extension professionals are highly regarded teachers, recognized for their subject matter competence and teaching excellence.

Extension will rapidly migrate to a more robust online teaching environment as we prepare to embrace the educational needs of tomorrows' clientele. Advances in technology and teaching, coupled with strong relationships with people and research-based information will set Extension apart as a trusted leader. We will be the first resource that Nebraskan's turn to help solve their individual, family, business, community and regional challenges.

Southeast Research & Extension Center

IANR

Overview

Growing Demands

The Southeast Research and Extension District includes 66 Extension Educators and 48 Extension Assistant/ Associates who live and work in a twenty-five county area in Southeast Nebraska. The District headquarters is located in the August Christensen Building at the Agricultural Research and Development Center near Mead.

SREC Extension programs serve both urban and rural communities and over 67% of the states population. While some communities along the southern boundary are struggling to grow other communities on the metro fringe are growing between 14% and 22% per year. Acreage living and small farm urban agriculture is also a growing trend around the urban centers.

The District has 73,000 youth in the 4-H Youth Development Program. The program is challenged to serve a growing number of young people. Between 2000 and 2009 the number of children under 5 years of age increased 23.8% in Lancaster County. We see similar growth near Omaha in the communities of Gretna, Elkhorn and Bennington. As communities build more elementary schools there is a great opportunity for additional school enrichment in STEM and Ag/Science Literacy. For example in 2012, in Lancaster county 4,175 students in 167 classrooms participated in embryology, an increase of 500 students in just one year.

Agriculture in the District brings in 3.7 billion dollars or 24% of the states market value of agricultural products. In 2011, SREC counties had 45% of the soybean production and 32% of the states corn production. Over 2 million acres are irrigated which is 25% of the states irrigated acres. Approximately 49% of the domestic wells and 28% of the irrigation wells are in the district.

Challenge to Define Scope

In March 2011, the SREC administrative team of Susan Williams, David Varner and Gary Zoubek met with Dean Dickey and Associate Dean Birnstihl and presented ideas for a focused issue based review for the Southeast District. We recognized that, because SREC is a large Extension unit and our faculty work in all of the current Extension program spires, it would seem confusing to rework current team statewide plans. We proposed a **focused program review** on five principles of excellence and one program area of excellence. We set forward three guiding principles. Our work would:

- Align our program efforts with current university priorities: Food – Fuel- Water – People and with current Extension Spires.
- Develop interdisciplinary approaches to delivering programming in the unique setting of the Southeast District. (Five Principles of Excellence – Next Generation Extension)
- Look forward at future trends and needs related to our program of excellence, Science/Ag Literacy. Where do we want to be? How do we get there? (One Program of Excellence)

At the March 31, 2011 Spring District Conference staff discussed key concepts that would contribute to excellence through 2018 and key concepts that youth should understand in science and agriculture literacy. At the November 10, 2011 Fall District Meeting, teams formed to vision and plan for the two areas. During the fall and winter they contacted stakeholders, studied demographics and developed recommendations. Teams reviewed their draft documents at the March 2012 meeting and planned for the team visit.

Next Generation Extension Goals

Next Generation Extension addresses ways our organization can continue to achieve excellence during the next five years. Interdisciplinary teams discussed issues, interviewed stakeholders and developed white papers on 1) Staying on the Cutting Edge, 2) Measuring Return on Investment, 3) Partnerships, 4) Translational Research and 5) New Delivery Strategies.

The reports detail the importance of each issue to the success of extension. As a result of these discussions we developed the following **unit goals**:

1. Educational programs in all subject matter areas should fit different modalities of learning, build communities of learners/experts and be delivered "Any Time, Any Place, Any Path, Any Pace".
2. An Evaluation Leadership Team will provide meaningful and quality measurement of program impact and market program accomplishments.
3. Internal and external collaborations will grow. Regional thinking and thinking big will become mainstream as partners from both the private and public sector provide support and resources.
4. Educators must collaborate in translational research initiatives to provide high quality, research-based impactful programs. Teams of educators, specialists and community members will work together every step from project goals, to funding and implementation.

Resource Needs to Accomplish Goals

- Professional development, sabbaticals and funding support for growth in:
    a. Teaching strategies, online collaborations and teaching with technology.
    b. Sharing best practices in building and maintaining partnerships, writing grants and evaluating programs.
    c. Research skills such as random sampling, research methods and interpreting results.
- Hire an **Evaluation Specialist** and redirect time of one or two staff members within each spire to gain experience in evaluation or the equivalent of .5 FTE.

Science and Agriculture Literacy

Teams of educators and assistants formed around the topics of livestock, crops, water and nutrition. They developed the key concepts in each area that can be used in classrooms, at educational events or at the future Global Agriculture, Food and Environment Center. The reports detail the importance of each topic to the success of education in science/Ag literacy. As a result of these discussions we have developed the following **unit goals**:

1. Increase the number of youth participating in science, engineering and technology by 5% each year for the next 5 years with the ultimate goal of increasing the number of students enrolled in science majors at UNL.
2. Develop at least one science/Ag literacy curriculum a year for use at festivals, in the classroom and on the web/social media.
3. Identify the metrics for measuring the science knowledge gained and attitudes changed.
4. Provide teacher training in science education and inquiry annually.

Resource Needs to Accomplish Goals

- Hire **two Extension/Research Specialists in Education** to develop strategies to train secondary and elementary teachers on scientific inquiry and introduce them to the latest research tools in plant and animal science. They would measure best practices of teacher training, secure grant funding for education research, provide opportunity for graduate student training and increase students' interest in science careers.
- Hire **three Extension Educators - Science Education** to teach continuous classes at the Global Ag, Food and Environment science center, take mobile labs to schools for on location programs and deliver virtual tours via distance technology for schools across the nation.
- Provide **two more extension assistants** in each of the three urban counties to teach school enrichment in science.

•Funding to expand the August Christensen building and build the future phases of the Global Ag, Food and Environment Center to allow for year-round educational efforts.

Food, Water, People and Landscapes Goals

Continue current educational efforts that are aligned with extension and IANR.

Increase production efficiency by 25% by 2025. (IANR)

1. Through efforts of the Nebraska On-Farm Research Network, web/social media and educational programs producers will implement sound nutrient management practices, use technologies for variable rate applications, apply understanding of genetics and seed treatments and improve timing and application of herbicides and insecticides to improve efficiency. Working toward an increased efficiency of 10% by 2018.

Increase efficiency of water utilization for Ag by 15% in 2025. (IANR)

2. Through efforts of the Nebraska Ag Water Management Network producers will use irrigation technologies like remote soil water status monitoring, monitor crop water use and crop growth stages and use crop genetic information to increase water use efficiency. Working toward an increased efficiency of water utilization for agriculture by 10% by 2018.
3. Increase water conservation practices and reduce water runoff in urban and peri-urban areas by using low-water plant and grass varieties.

Decrease the median age of rural Nebraska by 2.5% by 2025. (IANR)

4. Involve youth in community projects and entrepreneurship, giving them experiential leadership and business opportunities and increasing the likelihood they will return to the community.
5. Train new community leaders through experiential and research based community leadership programs expanding the pool of entrepreneurial and innovative leaders.
6. Increase the skills of families and caregivers of young children to support learning and school readiness.
7. Improve the nutritional intake and increase exercise in youth and adults.

Resource Needs to Accomplish Goals

- Hire two **Extension/Research Specialists – Cropping Systems** (corn and soybeans). These individuals would help develop partnerships and consult on experimental designs for the Nebraska On-Farm Research Network. Aid in statistical analysis and research inferences delivered in technical and popular publications. Research new methodologies and new partnerships and measure effectiveness of various experimental designs and collaborations to determine the best practices for translational research.

UNL and IANR 2017 Goals

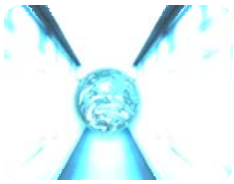
Increase student enrollment.

1. Each year SREC efforts in Student Recruitment will help increase the number of students enrolling at UNL by 100.
2. Provide funding for 2-4 graduate students at either the Kimmel Education and Research Center or the new Global Ag, Food and Environment Center annually.

Increase grant funding.

3. Increase grant funding from an average of $700,000 a year to 1.2 million dollars a year over the next five years.
4. Work with Innovation Campus to develop interactive educational displays and materials for classrooms and on-site STEM programs.

2 Next Generation Extension





New Delivery System
Measuring Return On Investments
Partnerships
Translational Research
Staying On The Cutting Edge

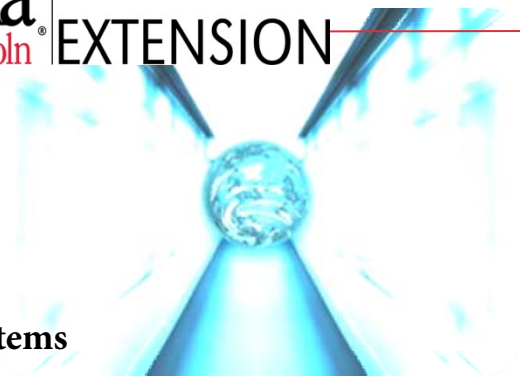
Southeast Research and Extension District delivers research based education to both urban and rural clientele in all program areas: Food, Fuel, Water, Landscape and People. We know that today's audiences and delivery strategies are experiencing exponential change. The challenge we examined was how to continue to provide excellence in programming in such a fast paced environment.

Interdisciplinary teams addressed the challenge of continued excellence and developed a group of white papers under the umbrella of **Next Generation Extension.** The five topics include: New Delivery Strategies, Measuring Return on Investment, Partnerships, Translational Research and Staying on the Cutting Edge.

During their discussions and work, teams addressed the following questions:

- What do the trends tell us?
- What do stakeholders tell us?
- How will our organization look when we achieve excellence in this principle?
- What are the steps to achieve excellence?

Southeast Research & Extension Center



New Delivery Systems

"Any Time, Any Place, Any Path, Any Pace"

Introduction

Technology is changing rapidly, so it is difficult to predict what technology will look like in five years. Pete Cashmore, the founder and CEO of Mashable.com a popular blog about tech news and digital culture, wrote an article in December 2011 for cnn.com regarding, "The Top 10 Tech Trends for 2012". In the article he said, "Predicting what will happen in 2012, therefore, is a shot in the dark: A year is virtually a lifetime in the digital era. And yet we can at least make a guess at what will happen in the early part of next year simply by looking at the trends that are shaping the latter half of this year."

This exponential change in the way people use technology to learn will continue to challenge Extension professionals. One of our stakeholders talked about this challenge:

"Technology Visioning resists any attempt to forecast five years out. When we write down grandiose predictions and look back after five years, it makes us appear shortsighted either because we underestimated technology improvements or overestimated institutions' ability to adapt to innovation."

-Tom Rolfes, Education Information Technology Manager, State of Nebraska

What we do know as Extension professionals is that we can reach new audiences and a variety of learning styles using new technologies. Over the last 300 years, studies have shown that the teacher is the most important factor in learning and that learning is enhanced by the student/teacher relationship. Skilled teachers focus on a variety of teaching strategies to reach a diverse learner. Differentiated instruction and technology are both important tools for digital-age learning. Used together, they can give diverse learners multiple options for taking in and processing information and expressing learning. Technology can support good instruction and offer personalized learning environments where learners can research ideas, create products and communicate globally. (Smith and Throe, 2007).

Extension should not ignore technology use trends and demographic changes that are reshaping the educational landscape and the means by which people expect to receive information or participate in learning opportunities. Instead, Extension should imagine the possibilities of reaching the next generation of people who could benefit from all of what Extension has to offer. (Diem, Hino, Martin, Meisenbach, 2011)

By looking at emerging trends for technology and learning, Extension professionals can remain leaders in educational delivery.

What do trends tell us?

In 2011, a rural Nebraska poll was sent out to Nebraskans who lived in the 84 non-metropolitan counties in the state. There were 2,490 responses from these rural communities; the respondents had an average age of 51 years. From this poll we found out a great deal of information regarding internet and technological uses.

According to the survey, three-quarters of rural Nebraskans use the Internet or email from home. Most rural Nebraskans have used the Internet for research, health information, purchasing a product, watching a video, and social networking. In general, rural Nebraskans have positive opinions about online learning and education.

Most rural Nebraskans agree with the following statements:

- The Internet is a useful way to take formal courses or training programs to further their education or address professional needs.
- Researching health information online can help people better manage their health; online health information can help people decide whether or not to see a doctor.
- The Internet is useful to teach yourself new things or find answers to their questions.

Most rural Nebraskans express positive sentiments about some aspects of online social networks. They believe social networks are a good way to keep up with friends and family, offer support to people who are isolated by geography or disability, and be a source of information and advice. As for cellular phone usage, the survey indicated that over 90 percent of rural Nebraskans have a cell phone and many use it to access the Internet.

This poll has given us a great deal of information that points us in the direction of using more technology as it becomes available to us. Even in the rural areas of Nebraska, many people are already moving to using more technology such as cell phones and the Internet.

What do stakeholders tell us?

Each stakeholder answered the following questions:

- What are the projected trends in technology?

"Education any time, any place, any path, any pace. Virtual learning and blended learning opportunities will continue to expand. Modern learners want just in time learning now, and they could care less where it comes from. That means less "brand" loyalty and more learner-centric services."

-Tom Rolfes, Education I.T. Manager, State of Nebraska

"Mobile computing will continue to grow in terms of how people will work, communicate, and interact with others. Web 2.0, i.e., social media will continue to grow in its importance in terms of engaging clientele. We need to "go to where the people are" to reach clientele and build community."

-Dan Cotton, Director of eXtension

"Cloud computing, social media and mobile applications are the biggest movers."

-Rod Armstrong, Vice President of Strategic Partnerships, AIM Institute

"Smaller, faster, more efficient technology."

-Gregg Robke, Technology Director, ESU 4

- How do we reach new audiences and a variety of learning styles using new technologies?

"There is no silver bullet. The key is to know your audience. Advertise the same event or activity or teach the same skill by using a variety of different modalities, times, places. Keep repeating and eventually you'll reach a critical mass."

-Tom Rolfes, Education Information Technology Manager, State of Nebraska

"Some people find text useful, others want a webinar, video (i.e., YouTube, etc.). Not all audiences are online and many times the application is not best provided in just an online format. For many, they will use it almost exclusively, but others cannot or will not. So, we have to be flexible. Interaction is critical, people want to be able to engage with others so collaborative formats are important, i.e., social media, blogs, forums, etc."

-Dan Cotton, Director of eXtension

- What will help us learn to identify emerging trends in technology and learning?

"Going to national and state conferences and hearing what the companies and teachers are using in the education arena."

-Rick Williams, Technology Trainer, ESU 2

- How do we remain leaders in educational delivery?

"We have to constantly learn, look for new ways to communicate, work, and play."

-Dan Cotton, Director of eXtension

"Practice what we preach. Have the resources to try new delivery methods and be willing to fail. We can learn a lot if things don't work out but many of us are unwilling to take that chance because we don't want to "fail" in front of our audience. Allow your 10% risk takers to try things and see if they work. Let them have the confidence that they won't be "written up" if they are trying something new. Eighty percent are willing to go along with ideas if they work will pick up and try the new method. The 10% on the far end won't try no matter how much evidence they are shown that new presentation methods are working. They will think, 'Chalk still works great.'"

-Rick Williams, Technology Trainer, ESU 2

"We have an advantage in that we deliver quality, unbiased information. People trust us. We just need to keep getting the word out there. A part of every project should be a publicity part ... how will we let people know about it. Also, we constantly need to evaluate and keep learning."

-Alice Henneman, Extension Educator, UNL Extension

"Teach, evaluate, teach, evaluate, and support the delivery by others. Partner with delivery entities for grants."

-Ron Roeber, Dell

What would our organization look like if we achieved excellence in this principle?

Our organization will continue to have a leading role in researched-based education and be the "go-to" people to find information. Teaching and learning is what Extension is very good at.

"Extension must focus on being the best research-based teachers and partner with delivery services that meet the needs of individuals, each with unique needs and backgrounds and expertise levels."

-Ron Roeber, Dell

"Education any time, any place, any path, any pace. We must "pdf" our downloadable Extension circulars, continue to offer face-to-face workshops, continue to offer Webinars, and continue to offer any other mode of delivery that hasn't yet been invented."

-Tom Rolfes, Education I.T. Manager, State of Nebraska

Steps to achieve excellence?

There are numerous steps that we can take to achieve excellence in new delivery systems:

- Develop educational programs that fit education "Any Time, Any Place, Any Path, Any Pace."
- Develop programs that teach using different modalities. (Styles learners use to take in, process and retain information – visual, motor and auditory.)
- Build community using technology. People want to engage others in collaborative formats. They want to engage with experts.
- Continue to provide new equipment such as ipads to educators so they can understand new technology and develop programs.
- Provide training in teaching with technology. Look at what the industry and education is doing in this area to stay current.
- Provide opportunities to take risks with permission to fail — learning to succeed.
- Extension must focus on research based information and partner with experts on delivery systems.

As a research-based organization, we have the expertise to help our clientele, but the challenge is to put that expertise in a form that works for a variety of different people to benefit their lives and communities. We will need to continue to strive to stay aware of technological trends and utilize them in feasible ways to meet our clientele needs.

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Measuring Return On Investment

Introduction

Extension is accountable to many stakeholders (elected officials, University administration, government agencies, producer groups, programming groups, the general public, etc.), and increasingly these stakeholders are concerned with the return on investment (ROI) they receive from Extension funding.

The term ROI originates from the financial sector; it is defined below and expressed as a percentage. However, what is a simple calculation in the financial world presents challenges when applied to the realm of education.

ROI = (Gain from investment - Cost of investment) / Cost of Investment x 100

Extension staff are aware that ROI can be measured as private benefits directly to program participants, but that the general public is not likely to see great value in programs in which they don't participate directly. So in many cases, private benefits gained by program participants must be communicated in terms of the public benefits that programming confers on those who did not participate directly. For example, "Youth participating in 4-H are more likely to enroll in higher education and explore career and entrepreneurship opportunities, resulting in increased wage earners contributing to the economic stability of their communities," highlighting one benefit of funding 4-H programming for the general public.

What do trends tell us?

A. Lag Time- One difficulty in measuring ROI for Extension is our lack of understanding about the expected lag time in knowledge acquisition and behavior change. This difficulty is particularly evident in areas such as 4-H, where documenting ROI or changed behavior can take a long time, since children are not decision makers in their homes.

The equation below accounts for adoption lag time in the "financial value" portion of the equation.

TVDPresent – TVDProject = Value *(Schweighardt, 2010)*

Where:

- *T* = Time required for the process
- *V* = Volume or quantity of units, transactions, people, etc. required
- *D* = Dollars or cost required
- *Present* = Current value
- *Project* = Values a successful project will yield

Fuglie and Heisey (2007) compiled data from several studies looking at ROI for private and public agriculture research efforts, determining whether agriculture research funding still provides an acceptable ROI. *(Table #1)* They recognized the lag in time it takes research to be accomplished and shared through Extension before adoption can occur. Even more time is required for long-term condition changes to take place.

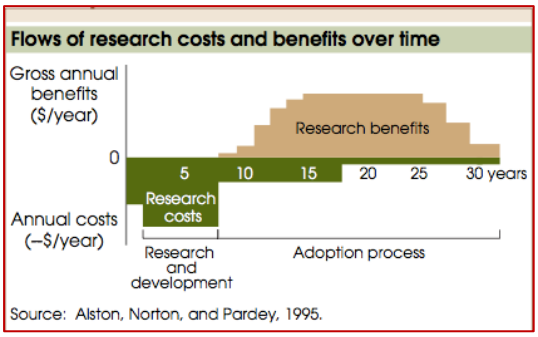

Table 1. Fuglie & Heisey. Economic Returns to Public Agricultural Research

Jennifer Kushner, Program Development and Evaluation Specialist for the University of Wisconsin- Extension (UWE), tells us that to provide public value during the early stages of new program implementation, small changes in knowledge and behavior can be measured and correlated with existing national research. For example, a local program on manure management could be correlated with existing research on the impact of nutrient levels in surface water and, in the long term, their potential effect on water quality in the Gulf of Mexico.

She also recommends that teams collect baseline data on important indicators at the start of new programming efforts to make documenting long term changes easier.

B. Quantifying Impact- Another challenge involves accurately measuring and assigning a dollar figure to programming inputs and impact, when stakeholders usually expect ROI to be represented by a dollar figure that doesn't include the value of knowledge gained or other intangible benefits.

Tangible benefits of Extension education can easily be assigned a dollar figure, such as increased crop yield, reduced production costs, or reduced inputs, i.e. acre-inches of water saved in corn production. Economic benefits can also be measured, such as changes in net income, financial equity, and cost savings. "The challenge is measuring the status quo value and estimating the corresponding initiative values consistently…" (BEI Consulting, 2003).

Intangible, or non-monetary, benefits are much more difficult to measure, such as improved parenting skills, reduced human and environmental exposure to pesticides, entrepreneur innovation, or increased leadership skills in youth. But industry shows us that many seemingly intangible benefits can be measured in tangible ways by analysis and measurement. In order to measure knowledge gained, tools such as pre and post survey instruments, and focus group discussions are recommended, both of which are currently used in Extension.

"By measuring tangible benefits and converting what appear to be intangibles into tangibles, strengthens the ROI calculation. Portrayal of remaining intangible factors in a concise and comparative fashion adds credibility and understanding of the intangibles of the decision maker" (BEI Consulting, 2003).

Texas Cooperative Extension has developed a formalized approach to estimating economic benefits of ROI (McCorkle & Anderson, 2008). In 2004, in response to the Texas Legislature's request to provide economic impacts of Extension programming, an Extension Specialist of Economic Accountability was created and housed within the Agriculture Economics department. Additionally, a methodology has been developed for quantifying and communicating the benefits of Extension programs.

1. Identifying programs for assessment that are economically driven.
2. Prioritize these programs based upon the type of data necessary and availability of this data.
3. Identifying data needs, data availability, and appropriate analytical methods.

From the data generated, an economic impact brief is developed, and used to communicate ROI benefits with elected officials. The programs are reviewed by an editorial review council to critique and discuss the economic impact studies; and identify the strengths and weaknesses of each program and revisions that may be necessary.

C. Marketing and ROI- Finally, looking at industry we see increased investment in marketing campaigns, people dedicated to calculating ROI, and evaluation. UNL Extension hired outside expertise to develop a brand, including a logo, slogan, and other advertising elements, but this team feels we need a full-time effort focused on marketing and evaluation of Extension efforts to create sustained awareness among clientele.

The reason? Let's think of our clientele as potential buyers of Extension's information, programming, and services. If they are aware of us but if they're not always "purchasing" or selecting us as their first stop for information. How visible are we? UNL Extension is essentially a clearinghouse for research-based information. It may also be argued that we do this while producing a product of more value, by being unbiased and research-based.

But this variety of information is hard to market. How can we be all things to all people and market that message? We need to ask ourselves what we want our clientele to be aware of and then take steps to move our clientele from awareness to consideration of our information to ultimately choosing our information and changing their behavior as a result.

In the past, Extension has rolled out marketing campaigns that provided a short-term lift in awareness, but we haven't had a sustained consistent marketing campaign to keep our clientele engaged in obtaining information from us. And how impressive can our return on investment be if people don't select our programs and information?

What stakeholders tell us?

Stakeholders were surveyed to determine the importance they placed on UNL Extension programming and information. Adults and youth from rural and urban areas, who participated in either voluntary or mandatory program from January through March 2012 were polled and their responses are, in part, a reflection of how well we currently measure and report ROI to clientele. (n = 242)

- 81% indicated that in this time of dwindling resources, they still place a high value on programming and information from Extension.
- 89% pay attention to the source of information accessed online.
- 86% specifically look for the research-based information online.
- 58% utilize Extension information because they know they will receive research-based information from experts in their fields, it's easy to access and a good value for the cost.

Among stakeholders familiar with the organization, UNL Extension is viewed as a valuable resource. Stakeholders in the following age groups indicated they view UNL Extension as a moderately or extremely valuable resource.

- 69% - 29 years of age or less
- 74% - 30 to 59 years
- 76% - 60 years and over

However, Extension continues to suffer from a lack of brand recognition.

- 43% indicated that they choose to use Extension resources because we are the best, most relevant source for information.
- 19% indicated that they choose to use our resources because they hear about Extension and know what information and programs are available.

What would our organization look like in five years if we achieved excellence in this principle?

According to staff polled at 2011 SREC Fall Conference, if UNL Extension achieves excellence in measuring and reporting ROI we will reap the following benefits.

Clientele

- Would recognize UNL Extension as the first place to go for information and education.
- By increasing Educators' ability to measure RIO, and communicate the quality and value of UNL programming, increased numbers of clientele will participate in UNL Extension programming and have the knowledge and skills necessary to achieve their goals.
- Be provided programs and information using the best technology for their individual needs.
- Have access to quality program content and delivery which is improved through continuous evaluation.

UNL Extension

- Would translate programming output into permanent funding.
- Have the skill to apply evaluation efforts as new technologies emerge.
- Increased measurement of Educators' ROI, and the communication of their impact, will result in the heightened reputation of Educators' as experts in their fields.

Evaluation efforts

- Are accomplished by all teams, through development of core/standardized evaluation tools that have enough flexibility to be customized to meet each team's specific objectives & goals, and provide the ability to track long-term impact.
- Result in meaningful, high quality data, at all levels of program impact (short, medium and long-term), based on program longevity, audience and program delivery method, in sufficient quantities to tell our story well and create buy-in for our mission/work.

Steps to achieve excellence:

Jennifer Kushner, UWE Program Development and Evaluation Specialist, explained that two years ago UW restructured their evaluation efforts by creating an evaluation leadership & support team, taking a systems approach. The team combines two Evaluation Specialists, leading a team of staff focused on marketing, program design, communication, professional development and grants, along with two Extension staff from each topical program area. The team's goal is to build expertise, through staff professional development and consultation, in program development and evaluation.

- We would like to propose that the Southeast Research & Extension take a similar approach. SREC would play a lead role in developing an Evaluation Leadership Team that could eventually encompass all of UNL Extension, and could even extend to include departments within IANR.
- Step 1: Similarly, we recommend that another staff member realign their position to develop expertise in evaluation and serve as the Evaluation Specialist to enable improved measurement of knowledge gain, practice change and condition change. Ideally a 100% evaluation appointment.

- Step 2: Identify an existing staff member willing to realign their position to spearhead marketing efforts. This person would develop, and implement an ongoing marketing plan through the Evaluation Leadership Team, utilizing the current brand and logo, which are known and working, to disseminate ROI information to stakeholders. Ideally a 100% marketing appointment.

- Step 3: Identify at least two staff members within each spire to devote a portion of their time as evaluation leaders for staff within their program areas. These could be the existing spire evaluation contacts if they are willing to devote the time, or other team members. We suggest a 50% evaluation appointment.

- Step 4: One or two Specialists and/or Educators within Departments could also be identified to devote a portion of their time to evaluation.

- Step 5: The Marketing and Evaluation specialists create and lead an Evaluation Leadership Team with spires & department evaluation leaders to spearhead ROI efforts, working closely with district directors and Extension Administration. They would begin by participating in professional development to increase their expertise and developing a plan for working with spire teams.

Professional Development Resources

University of Wisconsin Extension Program Development and Evaluation, http://www.uwex.edu/ces/pdande evaluation
American Evaluation Association, http://www.eval.org
The Evaluators Institute, http://tei.gwu.edu
Minnesota Evaluation Studies Institute, http://evaluation.umn.edu
Evaluation Wiki, http://evaluationwiki.org

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Partnerships

"If we are together, nothing is impossible. If we are divided, all will fail."
- Winston S. Churchill

Introduction

Partnerships are the backbone of Extension. They help us identify program needs, provide resources and financial support and help us advocate the importance of our work. Partnerships are not a new concept for Extension and that's a great place from which to assess the next generation of Extension partnerships. Extension can leverage positive experiences with current formal and informal partnerships at almost every level to develop new partnerships for the future.

Partnerships often create synergy, as two or more agents work together to produce a result not obtainable independently by any one agent. Partnerships are arrangements where entities and/or individuals agree to cooperate to advance their interests. Partnership types include but are not limited to Support/Advocacy, Financial, Informal/Formal and Strategic. These can be local, regional, national and in some cases global. Public-private partnerships (PPP) describe a government or private business venture, which is funded and operated through a partnership of government and one or more private companies. Some partnerships are collaborations and are a recursive process where two or more people or organizations work together to realize shared goals. Examples of Extension partnerships include:

Local Partners	**Public Partner**	**Private Partnerships**
City	USDA	Monsanto
County Government	Department of Defense	ConAgra
Local Schools	Fed & State Government	Time Warner
Community Groups	Commodity Boards	Union Pacific
Chamber of Commerce	Non-Profit Foundations	West Corporation
Fair Boards		
4-H Councils		
Natural Resources Districts		

What do trends tell us?

On this 150th anniversary of the Morrill Act it is important to note that partnerships are part of the rich history of the Land Grant system. Cornell was founded in 1865 as our first modern research university as a result of a partnership between an academic, Andrew D. White and an entrepreneur, Ezra Cornell, founder of Western Union. Similar academic and business partnerships formed John Hopkins, University of Chicago and Stanford. The result would be research and innovation that leads to the betterment of society. Teaming the academic with the entrepreneur produces innovative thinking that can provide new approaches and solutions to local and global issues. (Thorp, H. and Goldstein, B. 2010)

Assessing our current situation we have to address and/or acknowledge some challenges.

- Capacity and current workloads are high so new partnerships can't just be "piling on." If they are, we are less likely to be successful.

- Partnerships exist at almost every level of Extension; however in many cases they are very informal and underappreciated. This is not intentional as it most likely stems from a lack of understanding on how and why partnerships can be effective.
- Evaluating current Extension partnerships and forging new partnerships could be improved through appropriate professional development and training.
- All agree that partnerships can and should be a part of every Extension office, program team and staff member's program.
- A strong commitment to existing partners, those that make our Extension world go round, is critical for our ongoing growth and success.

What do stakeholders tell us?

Our stakeholder feedback has been overwhelmingly supportive of Partnerships as a way to expand existing programming and reach new clientele.

> "West's partnership with UNL Extension has proven to open doors for our rural communities that didn't exist before. Being able to tap into this incredible workforce and provide them with employment opportunities has been a win for everyone involved. We value the relationships we have been able to establish, from Omaha to Scottsbluff and everywhere in between."
>
> *- John Staup, West Corporation.*

> "Union Pacific's partnership with UNL Extension on promoting Career Education for Youth has been very good. Helping Nebraska youth better understand employment options and highlighting the variety of job opportunities within Union Pacific has been very well received here. Union Pacific certainly values UNL Extension's connection to Nebraska youth."
>
> *-Pam Lamemrs, Director, HR Recruiting Operations, Union Pacific.*

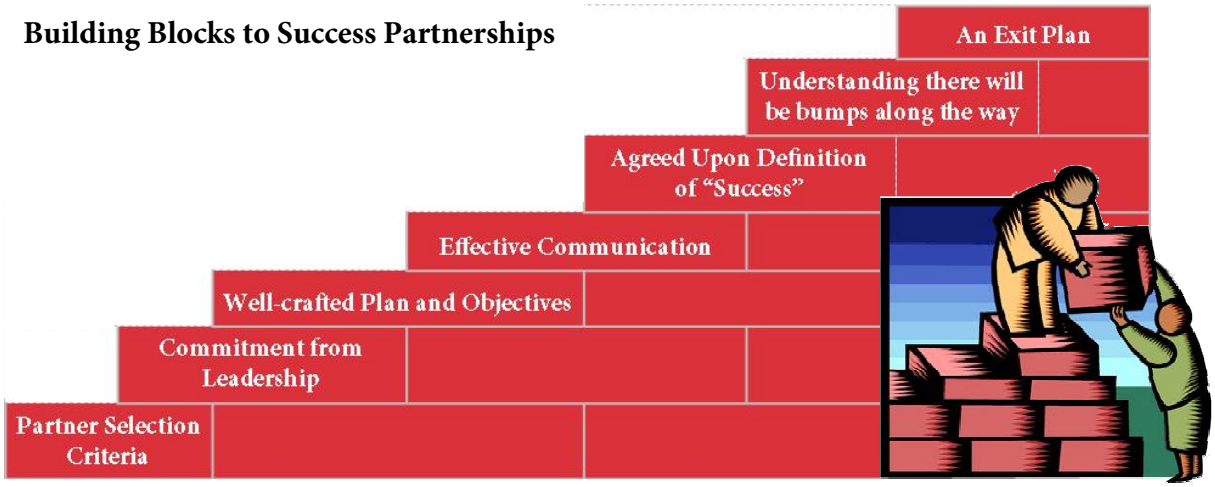
What will our organization look like if we achieve excellence?

Extension is at its core built on a partnership. We have a solid foundation from which to build excellence. Our organization will be successful when:

- Regional thinking and thinking big becomes mainstream. Extension faculty will think in terms of a 5 state area or multi-university approach. Partners from private industry will appreciate this regional approach.
- Internal collaboration is very strong. Nurturing and expanding internal partnerships throughout the entire NU system is essential for our future.
- Extension continues to validate and seek input from stakeholders and clientele.
- Extension leverages new initiatives by seeking new partnerships. We are more opportunistic regarding partnerships. We get more done, reach more people and are effective in our jobs.
- We build consensus around the definition of partnership and what it means to each person or department. Our common ground focuses on how partnerships could work and why some work and some don't.
- Professional development and sharing of best practices including how to identify and solicit partners. A greater understanding of the partnership cycle is core training.
- Leadership will be available when there are challenges in building and getting to know our new partners. We have to expect successes and failures and learn from these experiences.
- New structure and protocol to enhance brainstorming among faculty, with small business owners and with corporate leaders. We can identify what's important to them, among mutual areas of interest, unique challenges and team solutions. Use the "Can we take a Dean of another college to coffee to brainstorm" example. In the future the answer is yes, today the answer is less certain. We can respect existing protocol but also explore new ways of doing business.

Our vision is to set ourselves and our partners up for success. Identifying selection criteria, implementing processes and ultimately having a deeper understanding of what makes a partnership successful will be important. Criteria or components for successful relationships include making the partnership a win/win; aligning resources; fitting with existing Extension priorities or areas of interest; focusing on signature programs or expertise; and effective communication internally as well as with our partners.

Our focus and a key element in our Partnership Building Strategy are to strengthen and nurture existing partnerships. In this regard, a 'Best Practice' model will need to be developed as well as additional professional development on how to build, fosters and nurtures those key relationships.



Our future is not a one-size-fits-all approach as we envision each Educator will develop their own strategies and tactics specific to their unique community, stakeholders and clientele. A priority will be to reinforce existing relationships but also develop the skills and confidence to identify, secure and build new partnerships as well.

Steps to achieve excellence:

We recognize a need for Professional Development in terms of the "how to" as well as criteria for partner selection and nurturing of existing relationships. Our history and experience with Partnerships are important building blocks. Best Practices will be developed and incorporated into our professional development offerings. Some examples of best practices include:

1. Communication – is the communication with current partners effective? Have we asked?
2. Relationship Building – Sharing best practices can be very effective.
3. Foster and revisit existing relations / step back and assess / be leery of complacency – we can't assume existing relationships have no room to improve.
4. Identify mutual benefit – outcomes and rigor around evaluations are very important to both parties.
5. What are the trends that could affect this relationship in the future? Don't reinvent the wheel. Is there an alternative to our current thinking? Good questions to always ask ourselves.
6. Structure a partnership with the "end-in-mind" can help keep initiatives on target and relationships f lourishing. Having more purpose in our partnership planning instead of partnerships just happening.
7. Balancing the needs of both parties and that of our clients and stakeholders will be important.
8. Ensuring we stay true to our roots as a non-biased researcher and public institution.
9. Incorporating partners into Translational Research to reinforce the importance of partnerships, using a holistic approach that ties us closer to industry.
10. Share methodology, strategic thinking and tactical approach with others in Extension to make the System stronger.

Implementing actionable items to help each Educator develop their own strategies and tactics specific to their unique community will be important. Some tangible action steps include:

Identify existing partners – who makes it possible for me to do my job today?
What's good or could be improved? Evaluate / reaffirm the positives with your Partner.
What's ideal? What's needed? Think big.
Strategize on growth areas and how and who can mutually benefit from this initiative or effort.
Look inside. Expanding internal collaboration may be the place to start for newer staff members. Collaboration is essential to further Extension Programming.

Additional efforts required taking Partnerships to the next level.

Communicate importance of Partnerships with our coworkers, county boards and stakeholders.
Incorporate Professional Development in District and State workshops and conferences.
Celebrate successes. Highlight existing partnerships and new relationships.
Marketing Extension and our outcomes is an important aspect of attracting new relationships.
Continue to embrace each community being unique regarding partnerships.
Understand and appreciate protocols and history as it relates to certain partners and initiatives.
Partner confidentiality and trust are absolutes when it comes to relationship building.
New hire orientation as well as engagement of tenured faculty will be important.
Confront non-performing partnerships – Have the courage to identify issues early.

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Translational Research

What a man hears, he may doubt.
What he sees, he may still doubt.
But what a man does himself, he cannot doubt.
– Seaman Knapp

Introduction

Since its very inception, applied research has been an integral part of Extension's educational delivery system. Whether it be through the youth work initiated in Ohio by A. B. Graham or as a result of on-farm demonstrations established by Seaman Knapp, extension educators have long known that engaging clientele in 'hands-on' learning is a powerful way to effect behavior change. And the use of applied research is even more critical today than it has been in years past! In fact, today's approach – coined 'translational research' – takes this educational strategy to a new level with even more powerful implications for impacting behavior change.

Based on groundwork laid by the National Institutes of Health (2005) translational research includes two areas of translation. One is the process of applying discoveries generated during research in the laboratory (basic) to the development of trials and studies in environments associated with extension work. The second area of translation concerns research aimed at enhancing the adoption of best practices in the community of stakeholders and, thereby, developing partnerships for life.

Researchers at Washington State University quickly saw the value of translational research to a wide array of disciplines. In a presentation entitled "Mobilizing Extension as a Partner in Translational Prevention Research," Hill, Becker and Parker (2008) specifically cited the benefits that come from engaging Extension professionals in translational research:

> The emphasis in translational research is on studying processes by which scientific knowledge can best serve the public through collaboration of service providers, researchers, and community partners. Extension faculty, present in most counties in the United States, provide an important bridge between university researchers and community constituents by being able to identify community needs and then to select, translate, and transmit relevant, research-based information to help address those needs. Extension systems also facilitate translational research by brokering relationships so that 1) state and local agencies can collaborate rather than operating as "silos"; 2) campus-based researchers gain access to broad and diverse populations; and 3) community-based educators can inform the practice-to-research feedback loop (Hill, Becker, Parker, 2008).

Simply put, translational research moves beyond basic research to also examine additional elements that are critical to effecting behavior change.

What Trends tell us:

Interest in translational research has increased *across all disciplines* as stakeholders continue to demand high quality programs that produce positive outcomes.

- Input received at a USDA National Institute of Food and Agriculture (2005)-sponsored stakeholders' workshop for Plant and Pest Biology emphasized the importance of multi-disciplinary, long-term research. Participants from the scientific community, federal programs and groups representing growers and producers, expressly indicated an interest in translational research that would "solve real world problems and enhance our economic competitiveness in world markets."
- In 2008 Gregg Garfin, Deputy Director for Science Translation & Outreach at the University of Arizona's Institute of the Environment reported that RFPs were more frequently emphasizing outreach to stakeholder communities, decision support, and science that serves societal needs. Reports from the National Academy of Sciences and Western States Water Council, he said, had emphasized the need for science translation and outreach, in order to address societal concerns with climate extremes, such as drought, the use of climate predictions, and the growing challenges of climate change.
- Following the lead set by the National Institutes of Health, grants awarded by the National Institute of Food and Agriculture in both animal and human research have also increasingly included a translational research component (Wethington and Meador, 2010).

In response to this emerging trend, several major institutions have established programs specifically targeted to conducting translational research and, where formal programs do not exist, researchers are calling on their counterparts in Extension to assist in this work:

- Dr. Francis (Monte) Rouquette, directs basic and translational research at the Texas Agricultural Research and Extension Center to investigate the nutritive parameters and defoliation regimens of warm-season perennial grasses and cool-season annual grasses and legumes.
- In August of 2011, Cornell University opened the Bronfenbrenner Center for Translational Research (BCTR) to address pressing human needs by linking social and behavioral scientists with community practitioners and policy experts. The 4-H program, formerly overseen by Cornell Cooperative Extension, was moved to the BCTR to provide new opportunities for teaching and research and help to improve 4-H programs.
- Penn State's Community Engagement Program clearly identifies Cooperative Extension as an integral partner in the work of its Clinical and Translational Research Institute.
- Researchers at the University of Florida rely on Cooperative Extension to deliver the interventions required for their research on pediatric obesity and the Cooperative Lifestyle Intervention Program (CLIP), a translational research project which examined aspects of weight loss in older adults, partnered with Cooperative Extension in North Carolina.

Anticipating this growing area of research, numerous schools have established master's degree programs to prepare professionals to engage in translational research.

What Stakeholders tell us?

A survey of stakeholders from industry and agriculture in the Southeast District revealed that representatives from both sectors agree -- an investment in translational research will benefit

Nebraska. Forty stakeholders, representing a diversity of subject matter interests were sent an electronic questionnaire and asked to respond to three questions. Twenty-two provided a response.

- "I think engaging communities in applied research will be very useful. Having a community approach to applied research will help to address issues important to that particular community. I think this would be a great way for communities to benefit from the experience of extension educators to address issues specifically impacting their area. I have heard many times that research is helpful in helping farmers make decisions, but they question whether research done at research facilities actually is applicable to their operation. With the development of on farm applied research farmers will be able to test the results on their operation to get a result that shows direct impact to their operation."

– Mat Habrock, Nebraska Corn Growers Association

- "Yes, I believe Extension, as it looks to the future, should partner with "communities" across Nebraska in applied research. …as we look down the road Extension, to be more useful and relevant, should work closely in youth and leadership development, such as in agriculture and 4-H. It also should work with consumer groups or local communities regarding schools and nutrition and respond to consumers in the areas of water, soil and climate. There are "communities," or regional groups of farmers (irrigators), like the Nebraska Water Balance Alliance, that are formulating their own views and trying to assemble data on water use. Extension needs to work with these groups, too, so the latter has valid data. Applied research on farms and ranches has shown to be valuable in the part of Nebraska where it occurs…. Farmers always ask: 'Yes, but how does UNL research work on *my* farm?' These efforts need to be broadened into more areas of the state and include crop consultants and agribusiness. Feeding a growing world population will require that Nebraska farmers have the most useful information they can get."

– Don McCabe, Editor, Nebraska Farmer Magazine

- "…I do feel that the applied research programs have a big benefit to the sustainability of our communities. Because of the variability across our state, it is important to have the applied research programs as close to your operation as possible…maybe using two or three counties as an applied research unit…"

-- Victor Bohuslavsky, Executive Director, Nebraska Soybean Board

- I like this idea as things can be done on your own land and conditions which makes it more relevant to your area and land conditions and practices. Plus, your data can be determined to be sound and statistically valid."

– Ron Bowman, Farmer

- "I fully support conducting applied research with farmers and businessmen.… Farmers probably put more credit to what their neighbors do, than what an outsider might suggest."

-- John W McNamara, Agronomist, Wiles Brothers Fertilizer

What would our organization look like in five years if we achieved excellence in this principle?

According to Dr. Elaine Wethington (Evidence-Based Living, 2010), Associate Director for the Bronfenbrenner Center for Translational Research at Cornell University, Extension is especially well-suited to conducting translational research because of its rich history of community engagement. "County Cooperative Extension offices have many collaborative relationships in their counties. This makes Cooperative Extension an ideal contributor for implementing programs,"

In Nebraska, both Extension Specialists and field staff also express enthusiasm for partnering on translational research projects because they envision higher quality programs that would be recognized for producing exponentially more powerful impact:

- "If we were excellent in translational research, no one would ever question the value of extension. ...we would become known as *THE* place with the answers. We would be known in our communities and counties because we would be working with that many more people one-on-one."

  – Jennifer Rees, Extension Educator

- "If we achieve excellence in this principle we will be providing cutting edge programming that truly impacts the lives of individuals and that impact would also be noticeable in the community. We would also have to be aware of the fact that we cannot be complacent with what we are providing for programming as the field is evolving all the time."

  – Audra Losey, Extension Educator

- "They (clientele) would have more respect for us because we would have more data to provide them and guide them in their decision-making. Industry would partner with us more, thus increasing more mutual respect among clientele and stakeholders."

  -- Brandy VanDe Walle, Extension Educator

- "My clientele would welcome the approach of utilizing translational research as part of Extension outreach. It would greatly enhance their buy-in to behavior change and adoption of our recommendations. We'd achieve a greater adoption rate of BMP's and move closer to a sustainable landscape."

  – John Fech, Extension Educator

- "Within the next five years, translational research has the potential to help the organization come closer to increasing the number of children who have access to quality environments because it maximizes opportunities to (a) build strategic and key partnerships among professionals that allow for the effective implementation of resources, programming and tools resulting from the research initiative; (b) enhance the knowledge and scholarship within the field of early childhood education; and (c) ensure that strategies to support young children's holistic growth and development are innovative, current and specific to the unique needs of children and families in the Southeast District."

  -- Tonia Durden, Extension Specialist

- "If all disciplines associated with Extension were engaged in translational research, our organization would have a closer working relationship with clientele, a more open line of communication and, over time, each of us would have a higher level of creditability with the public."

  – Keith Glewen, Extension Educator

- "The organization would be 1) well connected with the clientele that we serve; 2) targeted applied research will be partially directed using clientele input; 3) the use of researched/proven management strategies by clientele will be increased; and 4) the University-clientele relationship will grow and be strengthened."

  – Rick Rasby, Extension Specialist

- The science is there but what we do not know is how to obtain behavior change in specific populations. The behavioral research will help educators deliver education that impacts behavior change…not just knowledge increase. Right now we do lots of programs and have success with knowledge gain. The research does show that knowledge gain does not translate into behavior change. If we know more about behavior change, we may be able to have fewer programs but targeted programs that help participants with making behavior change."

- "By bringing the research and the science to our 4-H members and developing the concept of research for them, we are linking our kids with the University of Nebraska. If kids are excited about research and science at a younger age, their chances of going into that field at UNL would be greater. So, we're no longer waiting until they are juniors and seniors to recruit them. We are reaching out to them at a younger age…."

-- Gail Brand, Extension Educator

Steps to achieve excellence:

Both because of its tremendous diversity and its close proximity to Innovation Campus, UNL Extension in the Southeast District is uniquely well-positioned to engage in translational research projects. Indeed, translational research has already been or is currently underway in a variety of disciplines including agronomy, entomology, food safety and childhood obesity. However, if UNL Extension is to remain competitive in providing high quality, cutting edge, research-based, impactful programs to Nebraskans, it *must* establish a cadre of well-trained professionals who value being engaged in collaborative research initiatives. Every extension professional should have the opportunity to lend their expertise to and document their engagement in a translational research project.

A poll of 37 faculty was conducted by e-mail requesting feedback regarding translational research consideration needs to be addressed to help achieve excellence in this principle. Twenty-one faculty, representing a diversity of subject matter interest, responded to three questions:

- Funding. Resources *must* be devoted to this effort at every step of the process. In addition to implementing projects, financial support will also be required for staff training (including both in-service programs and support to train via conferences, sabbaticals, etc.) and to provide support at the local level so programming remains strong while field staff are engaged in research projects.
- Training. Extension educators have expressed a need for training that will better equip them with the skills required to keep abreast of cutting edge technologies. At the very least this should include training in 1) research skills such as random sampling, control versus test groups, unbiased approaches, etc; 2) research methods including focus groups, effective survey development, etc; 3) interpreting results (qualitative and quantitative); and 4) utilizing the results in program development.

Networking to foster interdisciplinary, collaborative relationships that lead to effective translational research teams. Staff members have indicated that translational research will work best when teams are assembled which include specialists, field staff and collaboration from community partners. These teams should work together at every step of the effort – from the initial identification of the project – establishing goals and objectives and writing grants – to implementing the plan and evaluating the outcomes. Every extension professional should have the opportunity to lend their expertise to and document their engagement in a translational research project.

Rewards/Incentives. It is apparent that organizations focused on excelling in translational research create cultures that value and reward this type of approach. Organizational strategies and structures should provide incentives and rewards for teams that collaborate and demonstrate impact. According to the Institute for Translational Research (Pozen and Kline, 2011), organizations which engage in this type of work "require a flexible framework for performance assessment that tracks their progress, incentivizes fruitful activities, and aligns individuals throughout the organization." They suggest a framework that assesses performance along seven primary dimensions—funding, talent, creation, validation, dissemination, external uptake, and collaboration.

Emerging trends suggest that there is not only an *opportunity* but a *need* to engage even more Southeast District Extension faculty in translational research. Given the resources required to support the effort, the faculty and staff of the Southeast District stand ready and able to assist UNL Extension in achieving excellence in this principle.

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Staying On The Cutting Edge

Introduction

How can Extension faculty stay on the *Cutting Edge* with new ideas, new techniques and new technologies as we move into the future? Jim Collins, author of Good to Great, identified two key issues for greatness in non-profits that are relevant to Extension's continued success.

- The number one resource for a great social sector organization is having the right people willing to commit himself or herself to the mission.
- A great social sector organization is one that delivers superior performance and makes a distinctive impact over a long period of time.

What trends tell us.

Extension in the future will focus on teaching as well as translating research into current, reliable and credible information. Thanks to ever changing advances in technology and social media, Extension reaches worldwide. Educators are willing to take risks and venture to the edge to find new ways, being proactive rather than reactive. Our programming and research will be taught face to face and published through 24/7 on-line venues.

As our generations age, it is important to recognize the different needs and expectations for program delivery and utilize this information to provide our researched-based knowledge in the best way possible to reach our varied audiences. The two generations that will dominate the population base are millennium and baby boomers. However, futurists have identified emerging topics that run across all generations, communication, technology, worldwide food sustainability, education and fuel.

Educators need to keep pace with the fast moving technological advances as well as innovative ways to teach audiences from millennial to baby boomers. Looking back, Extension program delivery shows the many changes we have adapted to throughout our history. In the early 1900's, Extension taught from the back of a pickup or in a city park. Now, in the 21st century Extension is teaching via computers, mobile laptops and operating from mobile offices. Extension program delivery has changed to meet the times. The only constant is change, and because of that, Extension will need to continue evolving through professional development opportunities.

In his most recent book, *Built to Last*, Collins point out that the future will remain unpredictable and the world unstable for the rest of our lives. He identified three factors that distinguish great organizations, those that prevail against extreme odds:

- They observe what works, figure out why it worked and build upon proven foundations.
- They scale innovation to blend creativity with discipline.
- They figure out when to go fast and when not to.

What stakeholders tell us.

A wide variety of stakeholders were asked for input on what our participants expect in program delivery from the University of Nebraska-Lincoln Extension. We need to progressively transition what has been the traditional structured delivery of research-based education to a new model. The challenge will be keeping the delivery strategies that work and progressively driving toward the needs that are on the horizon. We need to make this transition seamlessly, maintaining current customers and beginning to meet the needs of future customers.

Our stakeholders believe that research and education will be innovative and progressive. They also state that we need to continue to have collaborative partnerships with other state Extension systems, the new UNL Innovation Campus, and other partners, both private and non-profit. University of Nebraska-Lincoln Extension educators need to continue to strive for global brand recognition of UNL Extension through publications, UNL based web sites, app development for smart phones and other up-and-coming technological pieces with adequate financial support to achieve these goals for trainings and resources.

UNL-Extension research based teaching programs will continue to be offered in an interactive way with a savvy tone – appropriate for audiences from babies to baby boomers. Be accessible 24/7 through as many venues as possible and appropriate. The innovation that has kept UNL Extension at the top will continue to add and define significance to our *Cutting Edge* approach. UNL Extension has been and will be the leading educational, non-biased and research based resource in Nebraska, the United States, and worldwide.

Steps to achieve excellence

Build the capacity of the number one resource of SREC – Extension Educators. Extension educators need to be on the *Cutting Edge* and need adequate financial resources for education and training in the following:

- Subject knowledge and research in their focus area to adequately reach audiences using relevant and current resources.
- Teaching strategies to meet different learning styles and different generations. Educators need to be on the "cutting edge" using the most effective teaching techniques and delivery methods.
- Skills to keep pace with the fast moving advances in technologies, keeping pace with what producers and consumers use in business and personal life.
- Maintain excellent skills in analysis of information and research and the ability to translate that information to practical use.
- Continued opportunities to share delivery and teaching strategies cross disciplines. Market programming across disciplines.
- Seamless transactions for customers utilizing Extension. Ability to purchase curriculum, t-shirts, Extension Circulars and enroll in classes at any hour of the day using the web and electronic payment. Ability to walk in to any Extension office and use a electronic payment to purchase materials or sign up for classes.
- Skills in on-line teaching and serving as a contributor to eXtension thus expanding to a regional and global audience.
- Skills in brand recognition, publications development, web sites, app development for smart phones and other up-and-coming technological pieces with adequate financial support to achieve these goals.

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3 Agriculture and Science Literacy




Livestock

Crops

Water

Nutrition

Southeast Research and Extension District has adopted a signature program in Ag, Food and Environmental Science Literacy. Teams have been formed to include livestock, crops, water and nutrition. Early childhood educators divided up to join each team to add age appropriate early learning ideas to each group. Groups were asked to visit with stakeholders and look at current issues do following:

- Identify key educational and research concepts for youth and adults.
- Identify potential educational deliverables, displays, exhibits, programs and curricula that would teach these concepts in-school, out of school and the Global Center for Ag, Food and Environment.
- Identify potential partnerships and collaborative opportunities.

Goals:

- Elementary and secondary students who participate in science discovery programs will become excited about science resulting in an increased number of students that participate in science careers.
- Urbanized populations who experience research and educational programs in food production, a safe and nutritious food supply and agro-environmental systems will make informed consumer food choices and informed policy decisions on environmental and agricultural issues.

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IANR

Science Education should involve active learning and take advantage of children's curiosity by increasing their understanding of the world through problem solving. Very few students are exposed to science curricula that allow them to explore the world in the way that working scientists do (Alberts, 2005). Basic knowledge and understanding of the natural environment and its interrelated systems appears to have declined in urban populations. Consumers of agricultural goods need to understand basic principles of food and fiber sources, marketing, distribution and nutrition as they participate in policy and consumer decisions (Hubert, D. 2000).

Science programs in the Southeast District reach 86,578 youth through 4-H club programs, after school programs and special events such as water festivals and Ag awareness days. The audience for science and Ag literacy programs continues to grow as the metropolitan communities increased population between 2000 and 2010 by 13.7%.

These proposals will expanded science and Ag literacy programs and provide a foundation for the proposed Global Ag, Food and Environmental Center. These programs will provide experiential learning opportunity for youth, adults and science teachers. Learners will have a unique opportunity to experience science and the latest research related to food production and the environment. Students will have a chance to test their potential as a future scientist becoming "scientists in training". Consumers will understand sources of food and fiber and interrelated environmental systems.

Program Objectives

- provide a greater support of life sciences, agriculture and natural resources through science literacy targeted at urban audiences.
- increase the number of youth participating in science, engineering and technolog.
- help students make future career choices in science and bring students to UNL.

Impact on UNL 2017 Goals

- Increase the number of students enrolling in science majors at UNL.
- As the Global Center for Food, Ag and Environment develops there would be opportunities for graduate students in K-12 science education. Experience would include developing curriculum and teaching and conducting *action research* in educational practices.
- With the addition of faculty there would be an opportunity to increase grant funding related to research best practices to train teachers in science education and inquiry.
- Faculty will develop interactive educational displays that feature research from Innovation Campus and IANR Departments.
- Faculty who lead this project will translate education research into strategies that will improve teacher training in science education.

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University of Nebraska Lincoln EXTENSION

Five Year Review

Science Literacy – Livestock Committee

Introduction:

As more persons move from rural to urban areas, and are at least three generations removed from a farming background, the need to educate more urban persons about agriculture is essential. Agriculture is vital to Nebraskans and the Nebraska economy. According to the Nebraska Department of Agriculture (February 2012), Nebraska was ranked first in commercial red meat production, and commercial cattle slaughter; second in cattle on feed and all cattle and calves; sixth in all hogs and pigs on farms; seventh in commercial hog slaughter; and tenth in table egg layers. For Nebraska to continue to be a leader in agriculture and livestock production, it is essential that persons understand agricultural science and the importance of agriculture so they can make important policy and consumer decisions.

Nebraska land used for grazing

As indicated in the 2011 Rural Poll, 97% of respondents agreed or strongly agreed that livestock and poultry production are important to Nebraska's economy; 62% of respondents said they were familiar with current animal care practices used to raise livestock and poultry; and 40% of respondents indicate they are or have raised beef in the past. While these numbers indicate rural people think agriculture is important to the state and may raise livestock, some issues to note include: 69% of respondents believe that in addition to animal welfare including food, water, and shelter, adequate exercise, space, and social activities for animals should also be included. Persons who owned companion animals have a stronger likelihood to agree with the addition of exercise space and social activities. One in five persons also indicated that more regulations were needed on livestock practices. These results indicate that rural persons have a higher propensity to agree that animal welfare and care are very important.

As our nation is charged with feeding a growing population, we face concerns which include an aging farming population; with 40% of farmers in the U.S. being 55 years or older. In addition, we are seeing historically high land costs. In Nebraska alone, land prices have increased 31% from 2011 to 2012. With historically high grain prices and pastures converted to crop use, we may continue to see a decline in the number of livestock numbers retained.

Globally, livestock imports and exports are very important. In 2011, the U.S. Meat Export Federation (USMEF) reported over $11.5 billion in exports of red meat; both quantity and values were up from previous reports. Potential threats to the security of the meat import/export markets are disease outbreaks, unstable economies, food safety scares, and lack of knowledge about the agricultural industry by consumers. To remain competitive on a global scale, Nebraskans must continue to produce a safe and wholesome protein product. We must educator people about all aspects of safe food production. Furthermore, we must encourage our youth to obtain agricultural science degrees so they can help meet the increasing demand for food that will occur simultaneously as the world population increases.

Key Educational Concepts For Youth And Adults

The livestock team focuses on three key goals/concepts concerning livestock production which include:

Benefit to human health

Economics

Benefit to the environment

This summary will focus on potential educational displays, provide suggestions for interactive and hands-on displays to educate visitors, and will prioritize product and curriculum development. In addition, existing curriculum or activities to supplement and/or enhance these concepts will be identified. At each learning station, the livestock team thought it would be important to highlight potential careers available, education level needed for each of these careers, and entrepreneurial involvement opportunities. The livestock team will also suggest to things that could happen during a demonstration day. A demonstration day would be held weekly, bi-weekly, or monthly and would highlight more intense processes that would not be economical or feasible to do every day; thus it would be a great marketing tool to encourage persons to attend on demonstration day. In addition, the livestock team thought products created could be sold in an on-site store for additional marketing and funding. Species to be considered as learning opportunities (from highest priority to lowest) are: 1. Beef cattle, 2. Swine, 3. Poultry, 4. Dairy cattle, 5. Meat goats 6. Sheep, 7. Horses, and 8. Dairy goats (ranked according to prevalence and economic importance to the state).

The livestock team brainstormed about many possible educational displays that could be offered at the future Global Center. The team prioritized all of the ideas into three categories, high, medium, and low; for the sake of this summary we will just highlight the possible exhibits in the high priority column.

High	Medium	Low
• Lifecycle display • Milking process • Birthing pavilion • Nutrition • Livestock products (meat protein and value added; product enhancement) • Quality Assurance/Animal handling • Bio security/Food safety	• Reproduction/Genetics • Meat inspection • Animal harvest • Feedlots • Grazing • Grains	• Feedstuffs • Manure dust and odor • Dead animal management • Working/guard dogs • Horse use

Lifecycle Display – provide information on the lifespans; weights at various stages in the animal's life (i.e. birth, weaning, yearling); and fun facts specific to each specie. In addition, information would be provided about how livestock are used to make human and livestock life better (i.e. health, research, nutritional).

Existing curriculum and programs to highlight: Beef Production calendar (**http://beef.unl.edu/web/beef/beefprodcal.shtml**). This page highlights good productions practices by specific month that provide suggestions and recommendations for optimal herd health. In addition, there are many resources to other information that may be handy. Similar pages could be developed for other species if needed.

Milking process – provide information about how the milking process happens; discuss dairy breeds of animals primarily used for milking purposes; role of milk and calcium in the diet; pasteurization; how milk goes from the cow to the carton; what the differences are in whole, 2%, 1%, and skim; highlight foods and/or products where milk is an ingredient.

Interactive display: Live milking demonstrations – both by hand and by machine.

Interactive display: A fake animal with teats (capable of being filled with water) so people could learn to "milk" by hand.

Demonstration day activity: Take raw milk through the entire process to become a consumable product – let people watch and then taste at the end. Sell milk, cheese, ice cream, and other dairy products at the on-site store.

Birthing pavilion – a place where pregnant animals could be viewed having their offspring. The livestock team thought it was important to only show the births at times of the year when each species would normally be having offspring. The livestock team also thought it was important to not make this a petting zoo as the animals featured provide our food, fuel, and fiber – they are not our pets.

Interactive display: Chick embryology – year round. A program could then be developed where people could "adopt" a chick and raise it to take to their respective county fair.

Interactive display: Provide links to video footage where people can watch births or mother/offspring interaction (similar to the Decorah Eagle Cam http://www.ustream.tv/decoraheagles).

Interactive display: Find or create transparent plastic animals that would show fetuses and various birthing positions (i.e. normal, breech, multiple births).

Existing curriculum and programs to highlight: Existing materials from Mid-West Dairy available at: **http://www.midwestdairy.com/0p52/get-the-facts/?TARGET_MOD_ID=130&startRowCollection=5**

Nutrition – highlight the differences between ruminant and non-ruminant (monogastric) animals. Show why ruminants can utilize forages and non-ruminants (monogastrics) cannot, also discuss why ruminants play an important role in health of pastures. Include how various feedstuff are best digested by animals (i.e. corn: steamed, flaked, rolled, whole) and broken down by animals. Also, include how much water animals consume, and display in real life so persons could see how many gallons a cow, pig, or chicken could potentially drink in one day. Finally, discuss current research that is being conducted, and what the benefits to society are for this research.

Interactive display: Create a 3D "ride" of how forages and grains travel through the digestive tract. With ruminants it would important to show the process of how forages are consumed, regurgitated, moved from stomach compartment to compartment, and finally expelled as manure.

Interactive display: Use preserved stomachs to show the differences (size, texture, location, etc.) in the four compartments.

Existing curriculum and programs to highlight: Husker Beef Lab with fistulated steer. Persons can put their hand into the rumen and look at rumen fluid under a microscope to see the microbial activity.

Livestock products – discuss the diverse role that livestock play in our lives; through animal protein consumption, nutritional benefits, and benefit to human health through medicine. In addition, discuss how much animal protein is consumed around the world, and how much income persons around the world spend on animal protein sources. Compare food products to showcase how one serving of animal protein may provide all of the nutrients needed versus several servings of other food products.

Interactive display: create apps where people could create a menu, and see as they change items on their menu how nutritional values change, ultimately showing how eating certain foods in excess could lead to obesity and other health problems.

Interactive display: create QV codes to be on packaged food items which explain where the meat product came from (wholesale cut on the animal), nutritional content, etc.

Interactive display: create an app to match up by-products with the animal(s) that could produce it.

Existing curriculum and programs to highlight: "Everything but the Moo" by the National Cattlewomen – excellent for beef by-products.

Quality Assurance/Animal Handling – Discuss the good management practices by producers.

Existing curriculum and programs to highlight: at computer/iPad stations people could go through modules of the new youth QA program to gain a better understanding of various management practices. Education would focus on use of antibiotics and growth hormones, animal care and handling, and cage/pen size. Highlighting research in these areas would be very important.

Interactive display: Use the 4D capsule to show how and what livestock see and hear as they go through chutes and facilities. Discuss the importance of Temple Grandin's work and how it has decreased many of the problems.

Interactive display: create "cow cams" in which cameras would be attached to a halter of an animal, and persons can tune in and watch what the animal is doing 24/7.

Demonstration day activity: Demonstrate some procedures consumers most often ask questions about (i.e. dehorning, castration, tail docking, etc.). Through the use of pain medication and appropriate procedures, consumers would see that the animal's pain and discomfort is minimalized.

Demonstration day activity: Showcase low stress handling. Have persons demonstrate how this method is quiet, safe, efficient, and low-stress on the handler and the livestock.

Bio-security/Food safety – Discuss what practices and/or organizations are in place to help keep the food supply safe. Discuss the roles and responsibilities of USDA, FDA, and other governing organizations. Highlight the role of natural organic acids in a safe food supply. Debunk food safety myths; discuss proper animal protein storage, handling, and cooking. Discuss international travel precautions. This section will work closely with the human nutrition team.

Existing curriculum and programs to highlight: Use the *Fight-Bac* hand washing demonstration material to show how to properly wash hands and where germs are mostly commonly found. Tie this back into safe food preparation and handling.

Research Features

Educate the public about the technology advancements in production agriculture, especially as the challenge of feeding nine billion persons globally becomes a reality. Through technology, more food is being produced more efficiently, and is safer and more affordable than ever before.

Partnerships And Collaborative Opportunities

Surveys were developed and sent out to two groups: industry stakeholders (n=15) and teachers/educators (n=49). The topics in the "high" column were set as a high priority by both of the surveyed groups, indicating priority for the development of products and curriculum.

High	Medium	Low
• Importance of agriculture to NE • Importance of animal protein (meat, eggs, dairy) in the diet • Food safety at harvest facilities • Good management practices (livestock health) • Lifecycle of livestock • Proper meat cooking temperatures • Livestock handling • Livestock biosecurity	• Wholesale, retail cuts of meat • Ration balancing • Environmental conditions – impacts on livestock • The role of grain in livestock diets • Nutrient needs of livestock at different stages in their lives • The role of grass/hay in livestock diets • Market fluctuations and economic factors on the livestock industry • Livestock pests/diseases • Genetics and breeding • Ruminants vs monogastrics • Gestation and birthing process of livestock • Import/export market of livestock goods	• Minerals and vitamins • Breeds of animals (strengths/weaknesses)

Interestingly, the stakeholder group was asked what their dream exhibit would be, several comments include: working exhibit about DNA to meat, use of crops by livestock, and working farms designed for consumer visits. When asked if current materials already exist, the Nebraska Pork Producers Association indicated they have several items including five to scale models of finishing barns. Many stakeholders would be interested in collaboration, anything from volunteer time to monetary assistance.

Several themes emerged in the teacher surveys. When asked what important questions they needed to have their students answer about biological sciences, agriculture, and food production, responses included: agriculture and the economy, marketing of Genetically Modified Organism (GMO) products, how will agriculture feed a growing population, and biosecurity. When asked about the major deficiencies in agricultural knowledge, three major themes surfaced which included: 1. Where does our food come from, 2. Agriculture's role in feeding the world, and 3. Concerns about animal advocacy groups (specific groups and/or topics were not provided by respondents).

Teachers/educators were asked what materials would be best for UNL to have a partnership with them. Again, three major themes developed: 1. Mobile labs that can come to schools (hands-on activities), 2. Development of curriculum (even online curriculum), and, 3. Development of kits that teachers can use in the classrooms. When asked if they would use locally developed demonstrations, projects, and curriculum there was a resounding yes! When asked about the logistics of traveling to the center (time, cost, distance, etc.) respondents indicated problem areas may be time restrictions, distance to travel, and cost. Finally, when asked how far participants would travel, 10% would prefer to travel less than 1-hour, 52% indicated they would prefer to travel an hour, and 38% would be willing to travel more than an hour. When it came to cost per student, 12% indicated they could not pay anything, 24% indicated they would pay $5 per youth, 12% indicated they would pay $5-$10 per youth, 41% indicated they would pay $10, and 12% indicated they would pay more than $10. Persons also commented they would need this to have a huge "WOW" factor to warrant time and resources to attend, and that if lunch was included they would be more favorable of the opportunity.

Science Literacy – Plant Sciences Committee

Nebraska & Global Educational Concepts

Key educational concepts are divided into four areas: **food production; agricultural product end use; sustainability; and economics at the state, national, and global level.**

Food production encompasses those concepts that relate the importance of agriculture, how agriculture impacts the food chain, and the partitioning of Nebraska and the world to the various industries of food production; notably grains, animal husbandry, and special/horticultural cropping systems. These concepts are designed to help the learner gain a sense of appreciation for the commodities produced in Nebraska and around the world, as well as an understanding of commodity centralization and production breadth. Learners will comprehend how changing population demographics around the world drive the need for increased production, additional varieties, new specie uses, and better genetics.

Agricultural product end use defines the flexibility and manipulability of crops produced in Nebraska, and how value is added into the base commodity through manufacturing and refining. The learner will understand the various byproducts produced from manufacturing and how they are used or recycled to reduce waste and decrease the refining/carbon footprint. Participants will appreciate how production of those products impacts the state, federal, and global Ag product supplies. Learners will also gain an understanding of how overall supplies must be balanced between feeding the growing population and the demand of industrial products.

Sustainability defines agriculture as it relates to environmental and social issues; primarily from a view of population explosion and the need to feed a densely inhabited planet. The learner will understand why Nebraska is unique in its soils, climate, and resources. The global impact of environmental issues will be considered as arable land diminishes in quantity and quality. Learners will see how practices that nations implement to put marginal land into production impact the environment. The learner will understand why protecting the quality of scarce resources is pivotal to maintaining the level of production that is seen in Nebraska and the world as a whole. The learner will also understand how residents of Nebraska are key players in maintaining agriculture in Nebraska through their commitment to higher education and employment within agricultural industries.

Learners will investigate the economics of agriculture production as it relates to dollar returns, social issues, and technology. Insight will be gained into the value of agricultural ventures to local and national economies. Learners will explore commodity movement and its impact on availability to consumers and the social/political ramifications of a population in need of quality and quantity. Youth and adults will learn the value of all agricultural systems, both large and small. Understanding of local, federal, and global issues related to food production will be presented so the learner will be able to express a more informed opinion when facing decisions that impact Nebraska and the agricultural industry. Technology will continue to assist in the expansion of food distribution.

Research Features

A key feature of the Plant Science education will be to take the successful on-farm crops research, with 20-40 on-farm research trials directed by educators each year to the general public for science literacy. Crop trials are primarily initiated by educators, and also include collaboration with specialist/research scientists. Research data have been developed for a wide variety of crop production areas including planting dates, irrigation and water availability, biostimulants, and crop variety comparisons, which could be incorporated and effectively communicated into science literacy programs and featured at the Global Center.

With close proximity to campus, improved partnerships and linkages will be forged among Extension and research, campus-based faculty. The Global Center provides the opportunity to showcase research conducted on campus to the public and teach it at an appropriate educational level through exhibits and actual field plots.

Currently a program, Youth Innovative Corn Challenge is being conducted which provides 4-H and FFA youth the opportunity to conduct their own research trials by implementing different production practices. A similar research program for a more urban audience would enhance knowledge on conducting scientifically-based research. Urban Ag Magnet schools could have research plots at the ARDC or in partnership with area producers and participate in the Innovative Corn Challenge.

Educational Products

Curricula for Schools

The following are potential sources of curricula for plant agricultural literacy. The key educational concepts these curricula address are listed in parenthesis.

Immediate Outcomes

- Partner with the *Soybeans in the Classroom Project* with Tiffany Heng-Moss & others on this University of Nebraska-Lincoln project which integrates soybeans into elementary teacher curriculum. Students learn about plant parts and how soybeans grow, as well as soybean farming, processing, transportation, exportation and end uses for the crop.
- Utilize and contribute lessons to the *Plant and Soil Sciences e-Library* coordinated by Deana Namuth-Covert. The *Plant and Soil Sciences e-Library* (http://passel.unl.edu) focuses to update and develop new educational materials that keep instructors/outreach experts and their courses/workshops at the cutting edge so these new technologies may be rapidly adopted by end-users by providing on-line learning communities.
- Teach *Ag in the Classroom* lessons which seek to improve agricultural literacy among PreK-12 teachers and students and most fit educational standards. This would allow collaboration between UNL Extension and USDA Agriculture in the Classroom program and work closely with the Nebraska coordinator.
- Collaborate with the *Nebraska Agricultural Education Soils Project* to further agricultural education instructor understanding of soils. Soil resource materials will be posted to UNL Extension's CropWatch-Youth website.

Long Term Outcomes

- Utilize Junior Master Gardener, 4-H and other relevant horticultural curriculum teaching youth the science behind plant development and growth, in collaboration with the University of Nebraska-Lincoln Extension Master Gardener program. Collaboration among other well-established programs will be enhanced by incorporating new methods of delivery through technology, such as iPad and smart phone applications and gaming software.

- Develop a curriculum with the UNL Agricultural Economics Department that teaches youth (and consumers) 1) how agriculture impacts society and one's community and 2) becoming an entrepreneur and developing a business plan, and 3) commodity marketing through an interactive marketing simulation.

Exhibits for Center

The following key educational concepts would address plant science agricultural literacy for the Global Agricultural, Food and Environment Center.

- **Agricultural technology in plant sciences**: Incorporate the crop sensing unmanned vehicles such as the octocopter in an exhibit.

  Key concepts addressed: Global impact on food production

- **Soil Sciences: Basis for all Life**: 3-D Soil Profile/Rhizatron.

  Key concepts addressed: Plant growth & development, factors that affect plant growth below the ground/soil & water conservation, more productive with less inputs

- **Agricultural Economic Impact:** Farming Game where youth have money, bank loans and make decisions

  Key concepts addressed: Tie the relationship between crops and livestock, environmental impact, feeding global population, grain transportation and distribution issues

- **Plant Growth & Development:** Plant Cam at the center (year-round) & competition across Nebraska with seed kits, plant seeds at center

  Key concepts addressed: Plant cycle, inputs for crops at different stages, crop end uses, common & future Nebraska raised crops

- **Pathogen/Weed/Insect life cycle in 3-D**: Incorporate pesticide resistance and how it can occurs, proper integrated pest management strategies.

  Key concepts addressed: How biotechnology has increased # people fed/farmer & steps taken to insure food is safe

- **Tractor Simulator with computer technology:** Show how GPS is used, use of sensors to monitor crop input needs such as nitrogen

  Key concepts addressed: Understanding role technology & science play in agriculture

- **High Tunnels and Greenhouse:** Utilize so plants are available all season long.

  Key concepts addressed: Local food production, how biotechnology has increased number of people fed with increased health benefits for malnutrition issues, transportation/export issues, effect of weather on crop production

Partnerships & Collaborative Opportunities

A needs assessment was conducted in which surveys were sent to ag teachers, elementary teachers and science instructors (49 responses received) on what plant science related topics they viewed as most important (See Table 1).

Commodity organizations and other statewide agricultural leadership groups were contacted, in addition to other state organizations. UNL department heads and key faculty were also identified as key partners, specifically Tiffany Heng-Moss, Deana Namuth-Covert, Richard Ferguson, Charles Wortmann, and Mark Balschweid. Industry partners who have expressed an interest in this project are Ag in the Classroom, Nebraska Sorghum Board, Nebraska Soybean Board, and A-FAN. We have contacted various companies and other organizations and will continue this process to form collaborations and partnerships with industry in agricultural crop sciences, agricultural equipment and agricultural technology. Opportunities to partner with federal and state agencies will also be pursued so there are a variety of viewpoints represented.

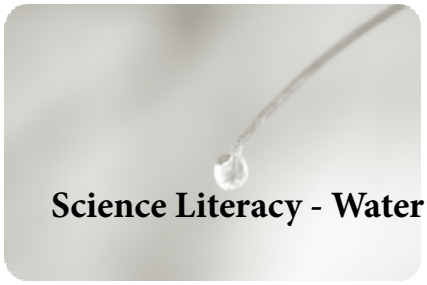
Key themes from teachers that emerged based on what students need to grasp included where food comes from, where production agriculture is headed, importance of agriculture and how we will feed the growing population. Many teachers felt their students were deficient in understanding how agriculture affects everyone, opportunities in agriculture, and disconnect about where food comes from. Teachers embraced the idea of having curricula, modules, kits, etc. available for them to use as well as workshops providing them hands-on activities.

Representatives from industry also provided insight into these topics. One stakeholder indicated "It is important to include other crops beside corn, soybeans and wheat and that there are a number of uses for the crops grown in Nebraska, such as feed, food and fuel". Another suggestion was an interactive tool that showed the impact of management practices on efficiency of production and the impact on the environment. A couple of comments indicated the importance for the integration of crops and livestock for agriculture to be sustainable and feed the world.

Plant Sciences Stakeholder Feedback (Table 1)

Surveys were sent to high school agriculture education instructors, elementary teachers and science instructors (49 responses received) on what plant science related topics they viewed as most important. Surveys were also sent to Industry (15 responses received) on what plant science related topics they viewed as most important. Topics which ranked highest (ranks were high, medium or low) included:

Teachers	Highest Priority	Stakeholders	Highest Priority
The effect of agriculture on society	83%	How farmers grow a crop	93%
The uses of corn, soybeans, wheat, etc.	77%	Effect of agriculture on the environment	93%
The steps taken to insure that food is safe	72%	Agriculturist's role in protecting the environment	87%
The global impact on food production	71%	The uses of corn, soybeans, wheat, etc.	80%
Agriculturist's role in protecting the environment	69%	The steps taken to insure that food is safe	80%
Effect of agriculture on the environment	67%	The relationship between agriculture & natural resources	80%
How farmers grow a crop	65%	How a plant grows & develops	73%
The relationship between agriculture & natural resources	65%	Common crops in Nebraska	73%
How a plant grows & develops	63%	The effect of agriculture on society	73%
Common crops in Nebraska	60%	The global impact on food production	60%
Soil & water conservation	59%	The effect of weather on crop production	53%



Science Literacy - Water

Introduction

A major constituent of all living matter (Merrium-Webster, 2011) water is, in fact, essential for life. But it is much more.

> Water is a resource that man cannot do without. Water fulfils a range of functions for humans. Water is used to grow agricultural produce, as a line of defense by inundating land, for drinking water, as a repository for waste, as political and cultural symbol, and a location for recreation to mention just a few possibilities. Given its value for humans it is no surprise that attempts at managing water, that is, simply put, 'taking care that users have the right amount of water, of the right quality available at the right time', has attracted the attention of human societies for long *(Understanding and Managing Water Transitions: A Policy Science Perspective).*

Learners will increase knowledge, skills, and aspirations related to water resources. Individuals will make informed decisions and take appropriate action related to its management so that future generations will "have the right amount of water, of the right quality available at the right time." The way water is managed has changed considerably over time and will continue to change in the future. Changes have, and will continue to reflect evolving technological capabilities, altered understandings, and perceptions of water. This science literacy project will present those capabilities, understandings and perceptions to the world population.

Key Educational Concepts For Youth And Adults

The Water Cycle

A better understanding of water in the earth system is required to support informed decisions related to water management. All phases of the global hydrologic cycle must be understood. Stakeholder input emphasized that groundwater is a hidden and often misunderstood resource which Nebraskans rely heavily upon. Groundwater, aquifers, and the groundwater-surface water connection is a critical part of the hydrologic cycle that must be highlighted.

Adults and youth will learn about Nebraska issues related to the water cycle:
A misunderstanding of groundwater, aquifers and the surface water – groundwater connection can lead to poor management decisions.

Adults and youth will learn about Global issues related to the water cycle:
Localized shortages of sufficient water resources to meet demands for domestic use, food production, business sustainability, etc.

Water use

Nebraskans use 8.3 billion gallons of water per day; (Nebraska Department of Natural Resources) the majority being used for irrigation. Public water supplies are a distant second. Water mining or reduced groundwater levels, integrated water management, managing over and fully appropriated basins, well drilling, and water conservation were listed as concerns by stakeholders. Competing demands for water use exist and will continue to increase over time.

Nebraska has a long history of water management with NRD's regulating pumping as of 1978 and managing canal project water withdrawals, and Nebraska Department of Water Resources regulating water permits for surface water. Knowledge and skills leading to wise water use are required to manage a sustainable system that meets a variety of needs in the future. Emphasis must be placed on irrigation water management, coupled with nutrient management - within the context of balancing the needs for food production, business development and growth, domestic use, recreation, wildlife, power generation, as well as balancing the water need between states.

Adults and youth will learn about Nebraska issues related to water use including:

- Flow requirements mandated by interstate compacts resulting in "rationing" use in Nebraska.
- Surface water designations of "fully or over-appropriated" resulting in moratorium on wells.
- Irrigation development in marginal aquifers.
- Inefficient application of water for turf and ornamental landscapes.
- Inefficient application of water for food production.
- Questions related to water availability can prevent business development and growth.

Adults and youth will learn about Global issues related to water use including:

- Lack of water for food production to meet needs of growing population.
- Climate change and the impact on freshwater supplies.
- Lack of strategically located potable drinking water to meet needs of growing populations.
- Lack of strategically usable water to support business growth needs.

Water Quality

Water quality continues to be of concern, both for drinking water use and for surface water compliance. Groundwater nitrate concentrations are of great concern to nearly all stakeholders. In addition, toxic algae,E. coli, and atrazine were mentioned as current concerns. Stakeholders specifically expressed concern regarding management of the Republican, Platte, and Elkhorn Rivers. The need for a safe and adequate drinking water supply was mentioned often, and stakeholders encouraged better protection of community drinking water supplies for future generations.

Nebraska has a long history of protecting water quality with mandatory and voluntary practices including partnership efforts by Natural Resources Districts and UNL Extension related to nutrient management of urban and rural settings. UNL partnerships with the Department of Environmental Quality have focused on management of human and animal waste to protect water quality, and partnerships with the Nebraska Department of Health and Human Services have focused on drinking water supplies. Understanding and adopting best management practices to protect water resources is critical. Practices to reduce nitrate in groundwater must be highlighted.

Adults and youth will learn about Nebraska Issues related to water quality including:

- Elevated nitrate in groundwater (drinking water), which is increasing in some areas.
- Excess nutrients in surface water causing toxic algae blooms.
- Atrazine in surface water and (to a lesser degree) groundwater.
- Salinity

Adults and youth will learn about Global Issues related to water quality including:

- Lack of potable water and sanitation facilities resulting in water-borne disease.

Research Features

- Current Nebraska research to be featured in science literacy programs includes:
- Evapotranspiration loss from various plant communities throughout the year
- Continuous no-till compared to conventional tillage practices
- Turf cultivars and water efficiency
- New groundwater well grout study, (current methods may need improvement.)

Future Nebraska research needs include:

- Site specific nitrate transport through the soil profile.
- The value of water to the State associated with various uses including irrigation, drinking water, recreation, wildlife habitat, power generation, etc.

Educational Products

Interactive Water Cube Model

To convey research based information and a greater understanding of the water cycle and the prevention of water pollution, an **Interactive Water Cube Model** will be used to demonstrate the cause and effect relationship that urban, peri-urban (acreage) and agricultural best management practices have on water resources in Nebraska. The educational display will consist of four large-scale surface water/groundwater models placed to form a cube. The cube will be connected and covered by a large relief map depicting urban, peri-urban, and production agriculture environments. It will be open and inviting, encouraging participants to manipulate components within the various environments depicted. Participants will apply management practices by manipulating the model and will observe the impacts to surface water and groundwater quality resulting from their actions.

Hydrologic Cycle 4-D Ride

To convey a better understanding of the water cycle a **Hydrologic Cycle 4-D Ride** will be created. Participants will enter a "cockpit" and will select their age group from a panel of buttons. Seconds later, the participant will sense an upward thrust much like a rocket and will view surrounding video screens. A talking water molecule will appear and welcome the participant to a cloud at 10,000 feet altitude. The water molecule will explain they got there through evaporation, which will then be demonstrated on video screens. Participants will then have a choice of when and where to fall from the sky and how they continue to move through the hydrologic cycle. All options for water movement within the hydrologic cycle will be made available. Each will be sensed and explained in terms of the hydrologic cycle.

Interactive Water-of-Nebraska Map Table

To convey a greater understanding of Nebraska's surface water and groundwater resources, an interactive **Water-of-Nebraska Map Table** highlighting the State's topography will be created. Nebraska's principle surface water bodies and groundwater aquifers will be featured and shown in relation to the State's population. A "button" will be created for each surface water body and aquifer. As participants push a button, the featured water body will be highlighted on the map with lights and a recording will provide information about the water body. Smaller versions of Water-of-Nebraska Maps will be created for use at various venues including schools, water festivals, and more. A second phase of the project will highlight the Earth's topography, water resources, and population density.

Outdoor Rhizotron with Greenhouse Cover

To meet the objective of enhanced groundwater and science education, a Rhizotron facility would be built south of the current ARDC. A Rhizotron is a laboratory constructed underground in order to study the water table and soil and its interactions with plants. It consists of multiple panels of steel-reinforced glass to create viewing and research windows. A greenhouse cover would allow year around growth of plants. The ARDC location is unique in that a Rhizotron can be constructed in a sub irrigated, dryland cropping system near a wetland area. The site would have easy access for youth and adult learners. Besides groundwater education, the Rhizotron would allow study of carbon storage and soil microbiology, beneficial and pathogenic soil organisms, and restoration of compacted, tilled or degraded soil with a high mycorrhizae crop such as oats.

Youth Classroom Education

The earth's limited freshwater resources must be shared by the global community to provide food for all and to prepare for future population growth. This freshwater resource must supply not only food production but water for drinking, sanitation, recreation, wildlife, and power generation. It is critical for youth to understand their water resources and to equip them to make the difficult decisions that may be required in the future. We envision creating a Water for Food curriculum designed to effectively present new content while matching state standards for each subject area. Two delivery approaches will be developed. In the Omaha metro area, 4-H staff would be trained to deliver the curriculum with the prospect of moving curriculum delivery to teachers in the future. A second option would empower teachers to deliver curriculum immediately by offering teacher training for university credit or continuing education credit. Additional supporting material would include Water for Food web resource for science teachers and critical issues water education activities kits. While the project would be piloted in Nebraska, expansion of educator trainings from Nebraska to the U.S. to the global community would be pursued.

Partnerships And Collaborative Opportunities

Team members received input from the following stakeholders:

UNL Extension Specialists Wayne Woldt

Water Center Interim Director Suat Irmak

Department of Health and Human Services Drinking Water Division Director Jack Daniel

Nebraska Well Drillers Association and Nebraska Onsite Waste Water Association Executive Director Lee Orton

Ward Laboratories in Kearney Owner Dr. Ray Ward

Nebraska Corn Growers Field Services Director Mat Habrock

Nebraska Soybean Association Lori Luebbe

Nebraska Soybean Board Executive Director Victor Bohuslavsky

Walker Ag Supply Agronomist and Crop Consultant Walker Luedtke

Wiles Brothers Fertilizer Agronomist John McNamara

Nebraska Farmer Magazine Editor Don McCabe

Lincoln Water System Superintendent Steve Owen

Lower Platte North NRD Larry Angle

Lower Platte North NRD Director John Miyoshi

Lower Platte South NRD McKenzie Barry

Upper Big Blue NRD Water Department Manager Rodney DeBuhr

Lower Big Blue NRD Director Dave Clabaugh

Little Blue NRD Director Daryl Andersen

Crete Public Schools teacher Ronnie Kassmeier

Science Literacy - Nutrition

Introduction

Obesity and Diabetes continue to be serious nutrition-related diseases in America. Unfortunately, the obesity epidemic in this country continues to grow at an alarming rate. Having almost tripled since 1990, one in three adults in America is now considered to be obese. Over the last ten years, obesity among Nebraska adults has increased from 21.1 percent to 27.5 percent. One third of children and adolescents are also overweight or obese.

This increase in obesity is of concern to public health officials because obesity has been linked to a variety of health issues including heart disease, Type 2 Diabetes, and high blood pressure. Over the past ten years the incidence of Diabetes among Nebraska adults has increased from 4.9 percent to 7.7 percent. Consequently, an estimated 105,000 Nebraska adults are currently at an increased risk of experiencing a heart attack, a stroke, developing kidney disease, loss of vision and peripheral neuropathy which can result in amputation.

Steps must be taken to reverse these trends. Helping Nebraskans – young and old – understand the food chain and know how to select and prepare healthier foods will be central to achieving this goal. With its dynamic, interactive educational exhibits, the Global Agriculture, Food and Environmental Education Center has the potential to play a powerful role in helping Nebraskans take steps to prevent disease and, thereby, lower health care costs.

This document reflects input generated from the Southeast District Food and Nutrition Team and feedback from stakeholders. An on-line survey was developed and completed by 28 stakeholders. Stakeholders were allowed to define themselves in more than one role. As a result, the composition of the group reflected a variety of perspectives:

60% **Food, nutrition, or health professionals (n=17)**	**7% School administrator (n=2)**
35% **Parents (n=10)**	**7%** Food producer/processer (n=2)
35% **Consumers (n=10)**	**7%** Food service employee (n=2)
21% **Other (n=6), consultant, program or coalition co-ordinators, public health administrator**	**7%** Public official (n=2)

What are the key educational concepts (global and local) that youth and adults should learn?
A list of possible educational concepts was generated by the team. From the list, stakeholders identified the following areas as having the greatest need for education:

- **Nutrition** – 86% (n=24)
- **Food Preparation** – 64% (n=18)
- **Food Safety** – 57% (n=16)
- **Farm to Fork** – 53% (n=15)
- **Food Science** – 28% (n=8)

What important research should be featured?

Stakeholders clearly indicated that they expect UNL research initiatives to build on basic nutritional science by staying abreast of emerging issues. Examples of current research priorities identified by stakeholders included:

- Organic foods
- Food safety
- High fructose corn syrup versus cane sugar
- Grass fed beef versus corn fed beef
- Free range versus conventional
- Processed food versus non-processed

Describe education products that can be developed.
Stakeholders were asked, "What is the most effective way to reach people about food and nutrition?" Responses included the following:

71% (n=20) in house teaching presentation or demo

54% (n=15) Facebook

46% (n=13) TV

39% (n=11) Print (newspapers, magazines, etc.)

39% (n=11) Webinar

36% (n=10) Webpage and Blogs

Stakeholders also provided the following additional suggestions:

Food Sampling

Face to face trainings work best for our teachers. They are inundated with webinars, blogs, webpages, etc.

All of the above. We need a variety of ways to teach people of different ages, needs, etc.

Hands-on food and nutrition experiences for learners.

Stakeholders were also asked, "What do you think would be an ideal hands-on food and nutrition experience for your students/clients/members?" Responses included:

89% (n=25) Demonstration kitchen

75% (n=21) Cooking classes

50% (n=14) Garden to table

43% (n=12) Professional seminars

36% (n=10) National/celebrity speakers

32% (n=9) Interactive simulator

21% (n=6) Camps

Short-term Deliverables

89% of stakeholders said that they would utilize a traveling food and nutrition educational program that comes to their facility. The team proposed creating a mobile lab with a motion simulator theater that would be housed in a semitrailer. This lab would also feature an interactive teaching kitchen. 4-H youth would be involved in the educational concept and design.

In addition, the team proposed developing an application for electronic devices that focus attention on the human digestive tract, food processing and/or food preparation.

Long-term Deliverables for the Global Center

82% of stakeholders said that they would be interested in having their students/clients/ members travel to an education center that provides hands-on, interactive learning experiences about food and nutrition. They also added the following comments:

I think it would be a real drawing point to bring people in from urban areas, possible even outside the state.

I think consumer would really utilize and enjoy hands-on learning experience.

Time away from the classroom and costs of transportation are obstacles.

It would be a great learning opportunity.

I recommend thinking about the name of this center. The name doesn't roll off the tongue.

Based on the team's ideas and stakeholder input, we foresee the following features being valuable components of the Global Agriculture, Food and Environmental Education Center:

- **Teaching Kitchen and Laboratory**
  The teaching kitchen will feature state of the art equipment and provide learners the opportunity for hands on experiences at kitchen work stations and taste testing booths. The kitchen will include providing meat samples (all species) in conjunction with the Livestock team's vision.

- **Broadcasting Center**
  The broadcasting center will feature a Nutrition culinary program modeled after the popular Backyard Farmer series. The program would be hosted by UNL Extension staff and guest "hosts" that are partners or national speakers.

- **Retreat and Conference Center**
  Host and/or provide lodging for:
  - Youth and adult camps (day, weekend, and week-long camps) focused on culinary arts, crops, agriculture and/or water
  - National and local conference and workshops
  - Vacation packages for families
  - Senior citizen tours
  - Tours for national conferences held in Nebraska

- **3-D Motion Simulator Theater**
  A 3-D motion simulator theater provides an exciting opportunity to feature endless education opportunities throughout many subject areas, some of which may include:
  - The human digestive system
  - Cultural culinary adventures
  - Becoming food, from seed to plant to table
  - Tours through food processing systems

- **Restaurant and Gift Shop**
  Serving and selling a variety of products that are native to Nebraska as well as products that can be found around the globe. Many of the foods would be grown in green houses and gardens located at the Global Center.

- **Interactive Evaluation Component**
  Computer game for participants to play upon entry and exit to measure knowledge change or utilize a Quick Response Code (QR code) quiz throughout the facility.

Identify partnerships and collaborative opportunities

Metro Community College	**National Restaurant Association**
UNL Food Processing Center	Nebraska Grocery Association
Con Agra	Nebraska Academy of Nutrition & Dietetics
Henry Doorly Zoo	Youth Leadership Groups
IMAX Theater	Schools
Nebraska Commodity Groups	Napa Valley Culinary Program

4 Contributions to IANR Growing a Healthy Future

The following program highlights share examples of how SREC works to achieve the mission of IANR. Extension Educators apply research to help Nebraskan's find solutions to critical problems. You will see in the report we cultivate a number of partnerships across UNL, businesses and agencies to deliver our programs. Listed below are some overarching program objectives. The sections that follow provide a summary of accomplishments since the 2006 review.

Food

Increase production efficiency by 25% by 2025.

- Increase yields in crops using economical and environmentally sound practices.
- Improve the nutritional intake and increase exercise in youth and adults.
- Improve the profitability of Nebraska's beef producers while using environmentally sound practices.

Water

Increase efficiency of water utilization for Ag by 15% by 2025.

- Increase use of water conservation practices while retaining crop yield.
- Protect ground and surface water quality by reducing contamination from commercial fertilizers, pesticides, and manure.

People

Decrease the median age of rural Nebraska by 2.5% by 2025. Increase science literacy 20,000 members of general public and 10,000 K-12 students each per year.

- Increase numbers of youth participating in SET and exploring related careers.
- Improve the skills of families and caregivers of young children to support learning and school readiness.
- Increase science literacy of youth and adults through programs in agriculture and life sciences.
- Increase opportunities for youth and adults for entrepreneurship and leadership in rural communities.

Landscapes

Increase efficiency of water utilization and sustain the environment.

- Increase water conservation practices in urban and peri-urban areas by using low-water plant and grass varieties in sustainable landscapes.
- Protect human health and water quality by reducing water runoff, contamination from fertilizers, pesticides, and lead in soil.

Southeast Research & Extension Center

IANR®

Food ~ Crops

Nebraska On-Farm Research Network

Farmers are continually evaluating products and practices, often by comparing their current practices to an alternative that is new or expected to be better. Extension Educators and Specialists in farm research groups realize the value of conducting valid, scientifically-based research on their own fields. They work to make certain that information generated and inferences made are based on sound experimental design, statistical analysis and economic interpretations. Participants note that farmer research is a very important means to improving the area's agriculture. An evaluation of 2006 farm research programs in the Southeast District revealed participating farmers improved their annual whole farm profitability by $2,370 in planting, $3,643 in tillage, $5,188 in soil fertility and $3,181 in pest management systems, respectively. Results are posted on the Cropwatch on-farm research website and have been screened and reviewed by a team of UNL Educators and Specialists.

"Working with critical thinkers, farmers, and consultants is addictive and a formula for professional success." **- NSFGPP participant.**

http://cropwatch.unl.edu/web/farmresearch

Just recently the two organized farm research groups in Southeast District – the Nebraska Soybean and Feed Grains Profitability Project (producers in Saunders, Dodge, Washington, Cass and surrounding counties) and the Grater Quad County On-farm Research Group (York, Hamilton, Fillmore, Seward, Clay, Nuckolls and surrounding counties) merged to form the Nebraska On-Farm Research Network.

In partnership with the Nebraska corn Growers Association the statewide on-farm research program will address critical farmer production, profitability and natural resource questions. Nebraska Corn Growers are challenged to grow corn responsibly using proven best-management practices with less impact on the environment while conserving natural resources. The Nebraska Agricultural Water Management Network (NAWNM) plays an important role in the project. Educators work with the producer to develop the research fist and throughout the growing season and harvest. On-farm visits are made during the growing season. A GIS technician and Educator review the harvest plans, harvest data is collected and the UNL Statistics Department provides the analysis. Educators meet with producers for individual consultations and financial analysis. Growers can choose from 1 or more of these research comparisons.

- Irrigation – water application management in corn production
- Nitrogen management in corn production – both irrigated and dryland
- Corn population study in irrigated and dryland.

Crop Management Diagnostic Clinics

Over 12,000 agriculture business representatives, Ag producers, crop consultants and educators from 64 Nebraska counties and 13 states have attended the Crop Management and Diagnostic Clinics (CMDC) since 1996. In 2011, the 310 registrant managed 8,602,479 row crop acres planted to corn, soybeans and alfalfa or 55% of these row crops in Nebraska. They estimated the value of knowledge gained at $7.53 per acre or just over 68.6 million dollars. The goal of the

CMDC is that Nebraska producers will adopt research-based best management practices to increase crop production and increase profitability while protecting our soil and water resources. The CMDC curriculum focuses on the latest research in four areas:

- Crop Production
- Nutrient Management
- Pest Management
- Soil and Water Management

Clinics are held at a site developed exclusively for the program. UNL researchers and industry agricultural professionals come together to provide the latest, most up-to-date information. Presentations include hands-on activities or field demonstrations in small groups to encourage interaction between presenters and participants. Certified Crop Adviser credits provide professionals with continuing education credits.

Clinic participants between 2003 and 2007 were asked to complete an online survey to determine which practices taught at the clinics ere actually adopted by producers or recommended by crop advisors. Over the 5 years of the study 652 attendees participated in 47 clinics. The response rate to the survey was 23% . Producers and advisors attending the CMDC are well-qualified professionals operating or advising an already fine-tuned production system. Adoption of new practices and improvements in skills can only be modest for these professionals. However, modest changes over a large production scale can have a big impact. Impact was greater with some topics than others and was attributed to three factors: the subject matter newness, prior knowledge of the professional and producer and the degree of emphasis placed on the topics during the five year period.

- 44% of the professionals greatly improved skills in identifying plant disease damage.
- 37% improved their skills in identifying herbicide injury
- 34% improved skills in identifying problems with crop growth and development
- Professionals that recommended rotating herbicide modes of action more that 75% of the time increased by 13%
- The number of producers that aligned nitrogen, phosphorus, potassium nutrient management practices with UNL recommendations over 50% of the time increased by 17% as a result of the trainings.

The top three educational experiences that influenced producers to adopt practices and professional to recommend practices were

Hands-on in field trainings	89% producers	88% professionals
Talking to Ag Professionals	74% producers	78% professionals
Hands-on classroom training	63% producers	70% professionals

Additional results are available in the Crop Management and Diagnostic Clinic 2010 Impact Report.

Soybean Management Field Days

Ensuring continued competitiveness of U.S. soy in the global marketplace is integral as we look towards the future for both the profits of the producer and for feeding a hungry world. By the year 2020, the world's population is expected to exceed 8 billion people. The U.S. soybean industry can and will be a leader in food production and providing energy to sustain global economic growth.

Soybean Management Field Days (SFMD) have been held in Nebraska for the past 14 years. Each year SFMD is held at 4 different sites across Nebraska. Sites are carefully selected annually to capture new audiences and to ensure that the program reaches as many producers as possible. In 2011, additional

funding was secured from the Soybean Board to conduct replicated translational on -farm research at all four SMFD sites. That year 478 persons attended representing. Soybean growers 404,544 acres and crop advisers attending training represented 2.7 million acres. Growers estimated the value of knowledge gained or anticipated management changes by attending to be at 3.3 million. Group advisers estimated the value to be 22 million dollars.

This year video was taken of the SMFD trainers explaining the value of this research used in their technology transfer project. The videos were made into six pod casts housed on CropWatch, a TV segment, and a social media effort helped further disseminate UNL Soybean Research to clientele. This year's topics included:

- Row spacing/seed rate, fungicides
- Soil fertility options for soybean production
- Plant populations/planting date and maturity group interactions
- Learn how to identify common soybean diseases
- View trials and results with fungicides and insecticides
- View trails and results with the common seed treatment options on the market
- Biostimulants/inoculants and growth/yield responses
- Maximizing pesticide applications
- The importance of adequate carrier rates
- Herbicide-resistant weeds update
- Understanding the global soybean market
- Marketing soybeans in the new era
- Current values
- Coffee shop vs. surveys
- Landlord/tenant communications
- Options for cash leases

Nebraska No-Till

The use of no-till has sharply reduced soil erosion, improved soil health, reduced use of farm chemicals, reduced fuel usage and enhanced yields. Educators work with producers on no-till through demonstrations, consultations, trips and conferences.

In 2011, the Nebraska No-till Conference was held at the ARDC, Ord and Holdrege. 414 participants attended representing 253,327 acres. Since attending their first no-till conference, past participants estimated that adoption no-till saved or made an additional $15 per acre annually or an additional $3.9 million value. Growers represented 57 Nebraska Counties and 5 states. Also in 2011, the Southeast Nebraska No-till conference was held in Hallam with an emphasis on enhancing carbon levels in soils. 225 producers from 42 communities attended. Out of a response of 121 producers documented a savings from knowledge gained of $15 per acre or almost five million dollars. Producers reported improved soil testing or fertility management skills, improved residue management, added diversity in their rotation or wheat, carbon knowledge and improvement of soil structure, changing planter settings, cover crops and grazing.

Department of Defense's Agriculture Development Program in Afghanistan

Fifty-eight Nebraska National Guard soldiers currently serving on ADT2 all have some agricultural experience. They received additional training from UNL Extension Educators and Specialists before deployment, including information on irrigation best management practices for the area. They are using their knowledge to implement watershed irrigation and demonstration projects designed to help the rural people in Afghanistan improve their lives and sustainability. Team members and the rural population face some challenges that would not be encountered in Nebraska, including the lack of sanitation facilities and safe drinking water. Training for team members included a crash course on water treatment methods utilizing materials available and the power of the sun.

URBAN Program

Rural Advantage Conference

Nebraska's agricultural producers and consumers will increase their knowledge of diversified and sustainable agriculture as a result of the collaborative efforts of UNL Extension and the Nebraska Sustainable Agriculture Society.

2011 marked the ninth year for the Rural Advantage Conference which provides opportunities for agricultural producers to acquire information on diversified and sustainable agriculture and to provide opportunities for producers, consumers and supporting organizations to network.

Impact:

Six months following the 2009 conference an evaluation was sent to both 2008 and 2009 conference participants. Participants were asked: "As a result of attending the conference(s), I have adopted practices that improve or enhance…"

- 58% of respondents reported they expanded or modified current practices that influence resource conservation.
- 56% of respondents reported they expanded or modified current practices that influence stewardship of natural resources.

When asked for additional comments, some responses were:

"I am quite glad and still getting used to University of Nebraska Lincoln Extension partnering with NSAS. NSAS has been quite lucky from the very beginning to have some very high quality University Educators that understood the difference between production agriculture and sustainable agriculture. If this partnership continues to flourish, I might be happier about my tax dollars supporting Nebraska's land grant university...."

"This conference is a much needed balancing agent against all the other conventional "bigger is better" conferences around the state."

Farm Beginnings®

By participating in the UNL Extension-led Farm Beginnings® Program, participants learned firsthand about low-cost, sustainable methods of farming and saw potential opportunities for themselves in rural Nebraska. Nineteen potential farm businesses have participated in two programs, with fifteen of the participants initiating agricultural farming enterprises at some level.

Impact:

Participants were asked, "What impact did this program have on your operation?"

Responses include:

"It had a tremendous impact on our operation and we have developed a holistic goal for our farm/life and are excited about where we are headed."

"This program had a huge impact. I have improved my business plan, my overall efficiency and continue to try new ideas I thought to not be possible."

"This program helped me organize my activities and efforts, helping me to understand what the most important tasks were."

Food ~ Nutrition, Health, Safety

"A goal is a dream with a deadline." ~ Napoleon Hill

"Good business leaders create a vision, articulate the vision, passionately own the vision, and relentlessly drive it to completion," accordingly to Jack Welch, former Chairman and CEO of General Electric. Five years ago, our district created its "What Will Be" vision of its destiny in Nutrition, Health, and Food Safety Education Programs.

The strength of Nebraska Extension is we are a statewide organization with representation in every county by well-trained staff with specialty areas of focus. In turn, we are connected to specialists at UNL and spread research from UNL to our clientele and contribute back to research. Our increased commitment to and expertise in technology has enabled our professionals to share our expertise with our Extension colleagues in other parts of Nebraska in several statewide programs. At the same time, we remain flexible and responsive to needs that may not be statewide.

Four areas of were identified in our last 5-year review. We're proud to share these highlights of what we've accomplished.

Healthy Lifestyles Education

- **Urban Agriculture.** This program area, initiated in the spring of 2011, is unique to our district. Urban agriculture may be defined as the practice of producing food within or surrounding an urban area. Recognizing the growing importance of urban *agriculture—economic opportunities, sustainability, and healthy foods —a* cross-cutting district team created a website that pulled together all of Extension's resources in this area.

The website—http://food.unl.edu/UrbanAg—includes resources for farms (large & small), community gardens, and backyard gardens.
The website had over 5,600 pageviews its first year. As a measure success, Google the words "urban agriculture" and search among "edu" listings—the website comes up sixth among about 541,000 results (December 29, 2011)!

- **Control Diabetes for Life.** This program serves people in areas not previously offering classes for persons with diabetes and provides a way to reach low income people diagnosed with diabetes as it is offered free of charge. It has reached close to 5,000 people statewide since its inception 10 years ago. Evaluations indicate participants make statistically significant changes in almost all of the traits tested. Calculated savings in medical care for all participants is estimated at $510,000.
- **Small Steps to Health and Wealth.** Small Steps to Health and Wealth is part of UNL Extension's health/finance initiative and included a 13 week on-line web program, which was also offered at local host sites, presented by UNL Extension Staff from across the state. The live broadcast was recorded so it also could be watched at a later time. A survey (2010) showed 95% of Small Steps participants reported eating healthier; about 60% increased physical activity levels; participants lost 2.8 lbs. on average, with losses up to 7 lbs.; 61% improved spending habits; and 44% saved money.

- **Medicare Education Program.** By 2030 Nebraska's population over age 65 will have increased more than 60% from 2000. Medicare does not cover all health issues, therefore, people need to consider what is not covered—their dental, vision, hearing and long-term care costs.
  Cumulatively, a conservative estimate of total savings for the time UNL Extension has been involved with the Medicare Education Program equals nearly $4 million; 74% stated they saved money, with an average savings per person reported at $670. Thirty-four rural counties were reached across the state. Over 900 people filled out the surveys, and reported they potentially shared information they learned with almost 800 additional Nebraskans.

- **In Tune with Food and Fitness.** This program is the one of the latest offerings by Extension, made possible by the combination of host site groups and online education throughout the state via live webinars during the spring of 2011. In Tune with Food & Fitness is an in-depth course that addressed the psycho-social aspects of eating behaviors.
  Paired t-test analysis showed statistically significant improvements ($p<0.05$) in the following areas: physical activity levels, using physical activity or other activities to respond to emotions rather than food, satiety recognition and meal termination, eating smaller portions, developing smaller, realistic goals, journaling to record and reflect on progress, and body-size acceptance. The course will be repeated in the future.

- **Child Care Provider Training: Eating Smart from the Start.** Recognizing that child care providers face many of the same challenges as parents in creating healthy meals with limited resources, Eating Smart from the Start, is a professional training program designed to empower providers to plan, prepare and serve healthy meals and create a healthy food environment for their kids. The initial grant money came from Share Our Strength, and current grant money is from "Live Well Omaha Kids."
- As a result of participating in these courses, metro area child care providers reported these changes: 70% serve more vegetables; 59% serve more fruit; 63% serve more whole grains in a manner children enjoy; 88% have used the healthy, CACFP recipes provided in class; 83% reported an improvement in their cooking skills; 100% recommend this training to other child care providers and will be sending other staff; over 60% were going to eat with their children at the meals to be a good role model; over 40% were going to get the children involved in meal preparation; over 40% were going to move towards children serving the food themselves, so they would learn portion control; and over 40% were going to use a thermometer to make sure their food was safe.

Food Safety Education

- **Food Safety Labels and Education for Meals-on-Wheels (MOW) Participants.** Our district was the site of a research project between a UNL food safety specialist and a county Extension educator. MOW recipients may be more at-risk for foodborne illness than healthy elderly adults. Delivered meals usually do not have food handling/safety labels and limited food safety education is provided. This project developed user-friendly food safety labels and education materials. The study demonstrated a food safety label for MOW home-delivered meals was needed to remind participants how to safely store uneaten foods. Of the 47 MOW recipients interviewed after one week, 94% stated they read the label on their delivered meals.

- **Food Safety for Childcare Providers.** This highly successful course, including leadership from our district, was offered statewide, in 2011 and taught a 3-session food safety basics course through a live webinar to 200+ childcare providers via their home computers. An evaluation conducted 6-months after the course indicated 51% of participants are using a food thermometer more often, 46% have developed and use a food allergy action plan, and 27% have improved infant feeding practices.

- **Good Agricultural Practices (GAPs).**The Food Safety Modernization Act (FSMA), signed into law by President Obama on January 4, 2011, shifts the focus of food safety for federal regulators from responding to contamination issues, to preventing them. FSMA gives the Food and Drug Administration (FDA) a mandate to require comprehensive, prevention-based controls across the food supply chain, starting with fruit and vegetable growers. The issue of foodborne illness and its prevention is a new one for most fruit and vegetable growers. Contamination of produce may occur at any stage of production- field or greenhouse growth, harvest, postharvest handling or transportation- but there are many things that can be done to reduce risk.

- GAPs training began in 2011. Growers learned causes foodborne illness, and how contamination can be prevented. They began to assess current food safety strengths and weaknesses of their production operations, learned how to integrate GAPs practices into their farm operations, and began to write a farm food safety plan.
- One hundred and thirty-three fruit and vegetable growers increased their knowledge of GAPs and used these practices in their production operations enabling them to maintain or improve the safety of their produce by preventing contamination with microbial pathogens.

- **ServSafe Foodservice Education.** Nebraskans eat safer food, thanks to UNL Extension's ServSafe workshops which provide up-to-date food safety information from the Food Code to food service managers. As a result of participation in a ServSafe workshop, participants say they have increased their knowledge in safe food handling practices and transfer what they have learned to their operations.
- **Food Safety.** In 2011, 198 restaurant managers representing 175 restaurants have been educated about food safety through the ServSafe program. In addition, 95 employees from Hispanic restaurants were trained in Employee ServSafe in Spanish plus 100 employees trained in Employees ServSafe. 1,200 volunteers trained in safe alcohol service for the Century Link and TD Ameritrade park.

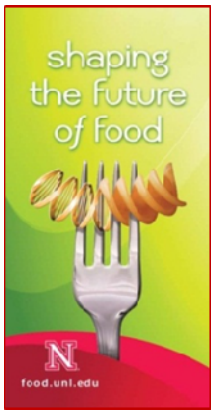
  Since the program started in Douglas and Sarpy Counties, over 2, 500 food managers have completed the ServSafe class. Classes are taught in both English and Spanish. This results in over 1,812,000 people being served safe food annually. No restaurant receiving instruction by Extension Faculty has experienced a food-borne illness outbreak. We value safe and healthy food choices that reduce health costs and encourage active lifestyles.

  The program is a joint effort between the Douglas County Health Department and Extension. The health department handles the regulation part of the class.

- **Handwashing Promotion.** Staff routinely teach and promote handwashing in our district, especially in schools. The CDC reports addressing the spread of germs in schools is essential to the health of our youth. In an evaluation of a handwashing program that reached all 25 Polk County school classrooms and 456 students, 90% of teachers reported following the Clean Hands Campaign, students were more likely to understand and comply with handwashing.

- Handwashing materials developed in our district come up first in the world in a Google search and have been spotted as far away as a Miami airport restroom! They've been available through the web for over 5 years and downloaded thousands of times over the years. Statistics indicate they were downloaded 30,000+ times in 2011.

- **Extension Community Programs: Bite when the Temperature is Right.** Extension Community Programs, developed by a combination of Extension Educators and Specialists, are used throughout the state. Evaluation is done on a statewide basis; however data from Saline County is typical of the impact in our district. Using a rating "1=strongly disagree to 4=strongly agree, "the average rating was 3.4 on all items measured, such as planning to make changes, sharing the information, and feeling the information will impact their lives in a positive way.



- **Using Technology as a Program Delivery Method**

- **Food.unl.edu Website.** UNL Extension FOOD website is the only university website of its type nationally, pioneering in connecting all the food-related areas of a university on one "umbrella" website. An Extension educator in our district provided leadership for developing and continuing to coordinate this website, which was launched August, 2010. Food.unl.edu provides information, resources, and food experts about food from farm to factory to fork. Over 500 webpages were created for http://food.unl.edu and more are being added. Additionally, over 400 educational materials have been uploaded.

  Over 800,000 "pageviews" of webpages from 199 countries/territories, including all 50 states, occurred its first year (August 2010 - 2011). 400+ educational materials were downloaded over 500,000 times for over 1.3 million total actual pageviews the first year. Statistics indicate the website is growing in popularity:

  By the end of 2011, counting webpage and downloaded materials, there were over 2.5 million pageviews—or within 4 months, the total number of views doubled.

- **Program Delivery through Technology.** As an indicator of success in utilizing technology for program delivery, four programs cited in this report used technology to deliver programs to people at home as well as at county host sites. We are becoming, as evidenced by examples in this report, a "go to" internet site on for educational information.

Nutrition Education Program (NEP).

NEP has been active in Nebraska for 15+ years and consists of the Expanded Food and Nutrition Education Program (EFNEP) and the Supplemental Nutrition Assistance Program-Education (SNAP-Ed). Both programs receive federal funding from USDA. NEP staffs in local Extension offices deliver the program to 40 Nebraska counties. Distance education is available statewide. NEP helps families on a limited budget improve the quality of their diet and is free to people who meet income guidelines. Within our district, SNAP-Ed staff provides direct programming in these counties: Adams, Cass, Dodge, Douglas, Gage, Hall, Johnson, Lancaster, Nemaha, Otoe, Pawnee, Richardson, Saline, Saunders, Sarpy, Washington, and York with EFNEP programming available in Adams, Douglas, Hall, Lancaster, and Sarpy. (NOTE: At the end of 2011, Adams County was moved to a different district.) Within our district, NEP coverage for SNAP-Ed participants (formerly food stamps) has increased from 103,508 in 2008 to 126,269 in 2011.

EFNEP. From FY2009-FY2011, EFNEP reached a total of 6,549 adults and 12,749 youth. According to EFNEP evaluation of graduates, by 2011 there was a trend to 75% improving at least one food resource management skill, 83% improving one or more nutrition practices, and 56% improving one or more food safety practices. During FY2010-11, of the 4,576 youth reached, EFNEP evaluation showed 85% of 1,571 youth now eating a variety of foods, 66% of 2,686 youth increasing essential human nutrition knowledge, 93% of 400 youth increasing ability to select low-cost nutritious foods, and 85% of 749 youth improving food safety and
preparation practices.

SNAP-Ed. In FY2011, SNAP-Ed reached 2,126 adults. Evaluation of graduates indicated one or more improvements in these areas: food resource management skill (70%), nutrition practices (86%), and food safety practice (57%). Fruit consumption improved from 0.6 cups/day on entry to 1.2 cups/day on exit; 94% of graduates had a positive change in at least one food group, and Nutrient Adequacy Ratio of food intake improved from 0.61 on entry to 0.68 on exit.

In FY2011, SNAP-Ed in our district had 13,241 youth contacts and 966 youth groups. Statistics are available for the 9,309 youth who participated in school enrichment kit programming (K - 5th grades). Highlights include: 45% of kindergarteners identified the correct time to wash your hands; 1st graders improved vegetable and fruit group knowledge; 2nd graders improved MyPyramid knowledge—for example, after NEP, 72.5% correctly identified the food groups, a 33.5% improvement; 3rd graders improved knowledge of food preparation and food spoilage; 4th graders improved knowledge and behavior related to handwashing before preparing food; 5th graders reported reading food labels 27% of the time before NEP and increased to 35.5% after NEP.

Food ~ Livestock

Nebraska Youth Livestock Quality Assurance (QA) Program

In 2010 initiative was taken to re-work the entire Livestock Quality Assurance program for youth. Previously it had been delivered face-to-face by a variety of methods and persons statewide. While this method served the purpose, the youth commented it was not exciting and they were discouraged by the required attendance due to the consistent repetition of the same material presented annually. The other challenge with the Quality Assurance program was that it was not designed from an educational perspective; meaning the same content was being taught in the same setting to youth between the ages of 8 – 18. In addition, there were an increasing number of Extension personnel without a livestock background who lacked the knowledge and confidence to teach the material. The team's priorities were to advance with technology and make the messages youth were receiving consistent statewide as well as designing the program to teach age appropriate material that grew with the youth as they advance throughout their 4-H career.

The team decided to make the course available online through eXtension using Moodle. The National Pork Board gave the team permission to pilot the project for the 2012 year, with intentions to share what was learned in the fall of 2012. New features that had not previously existed included, breaking apart the material by age groupings (Junior, 8-10 years; Intermediate, 11-14; Senior, 15-18) and better accommodating different learning styles. The new module offers the youth chances to read the text, watch a voice over powerpont, or watch videos. Coming in 2013 will be activities that complement each module, which could be used for additional hands-on interaction.

The 10 member team plans to complete all modules and activities this fall, and by the new year have a complete program. The goal is to not only make this a top notch online learning experience for Nebraska's 4-H and FFA youth, but to market and eventually sell this to other states.

To date, over 2,300 persons have completed at least one module!! Furthermore, the team will have a chance to present this material at the National eXtension conference in Oklahoma City in October. Finally, representatives from Tennessee and Virginia have contacted the team about possibly purchasing the program for their state's use.

Animal Care and Welfare

In 2010, UNL assembled a team of Specialists, Veterinarians, and Educators to begin to have discussions on what was needed to stay current and educated on this topic. Currently, UNL does not have a person on staff that has been trained in animal welfare/ethology/animal behavior, so it is essential to collaborate with Universities who do have these persons on staff. UNL partnered with Iowa State University and held an Animal Welfare Professional Development meeting for Extension personnel in Council Bluffs, IA. At that meeting, brainstorming sessions indicated Extension personnel wanted and needed more resources on animal care, wanted more professional development opportunities on this topic, and wanted a better understanding of ballot initiative implications.

Since that time an Animal Care Resources webpage has been developed (http://4h.unl.edu/resourceanimalcare) to provide current resource material. A monthly webinar featuring a variety of speakers on a variety of topics to provide professional development opportunities has been in place for approximately seven months. In addition, professional development opportunities to attend animal welfare conferences have been made available. Members of the animal care and welfare team have presented at conferences and have prepared policy responses to animal welfare issues.

Recently, members of the animal welfare and care team have worked in collaboration with personnel from other Universities to provide a series of educational papers for youth and their livestock projects. Furthermore, the beef spire felt it was important to focus education efforts on beef cattle welfare (i.e. dehorning, early castration, feedlot readiness, non-pregnant heifers entering the feedlot, weaning strategies, heat stress, etc.), and will actively address one or more of these issues at beef focused meetings in 2012-2013. While UNL may not have a staff person focused in this area, the assembled team is being noticed, and has been approached by two Universities about the possible collaboration on future programming and research efforts on animal care and welfare.

A Win-Win for Producers and Consumers -
Demonstrating the Fabrication of Value-Added Cuts from the Beef Chuck Roll

The chuck roll is a portion of the chuck wholesale cut on a beef carcass. Typically, retailers merchandise the chuck as roasts, hamburger, and other low-value products. Muscle profiling research has identified muscles, including those in the chuck, as having eating characteristics (tenderness and flavor) that would increase their value if fabricated differently and properly merchandised.

The objectives of the chuck roll fabrication demonstration are to educate producers, processors, and retailers about the potential of these cuts to increase profits, while seeking to increase consumer awareness and acceptance of these easy to prepare, moderately priced cuts. Across Nebraska, UNL Extension demonstrations showcasing the fabrication and preparation of Delmonico and Denver steaks, Boneless Country-Style Ribs, and Sierra Cut from the chuck roll have educated over 4,000 individuals at over 100 programs, plus over 15,000 attendees at the 2010 Husker Harvest Days. Cutting demonstrations have also occurred at the Ag Expo in Omaha, the AppleJack Festival in Nebraska City, various home and garden shows, and producer meetings.

Attendees sampled the cuts and provided feedback on a scale (1-5). Results indicate the demonstration was important and relevant (4.50), and attendees were satisfied with the flavor and juiciness of the new cuts (4.66). Ninety-seven percent of participants have indicated they would order one of these new cuts at a restaurant; 92% indicated they would purchase one of these cuts from their local retailer. Of those who raise their own beef, 9% requested their local meat processing facility fabricate these new cuts. Post survey results indicated that 3% of participants had cut up a chuck roll themselves.

These results indicate an interest and value to producers, processors, retailers, and consumers. Continued education is being conducted to increase availability at retail and foodservice outlets.

University of Nebraska Lincoln EXTENSION

Water

Nebraska Ag Water Management Network

The Nebraska Ag Water Management Network (NAWMN) encourages the adoption of newer technologies such as ET gauges and WaterMark sensors that will enable producers to use water and energy resources associated with irrigated crop production efficiently. SREC has 49% of the domestic wells in the state and over 28% of the irrigation wells water quality and quantity is major educational focus for the District. Ag producers in the region have 34,443 irrigation wells covering 2,113,874 acres.

Educators work closely with Biological Systems Engineering (BSE) faculty on the Ag Water Management Demonstration Network and helped grow the producer involvement from 15 producers to over 800 producers in the past four years. Educators will work to increase membership next year and also include more on-farm research efforts with these producers as part of the new network. In 2010, 506 participants from 36 counties responded to a survey. Producers represented 342,350 acres while crop consultants/agri-business and public agency representatives reported representing 33,667 acres.

- On average participants reported a water savings of 2.4 inches per acre on corn and 2.1 inches per acre on soybeans.
- Producers documented an average savings of 260 acre-inches of water and the equivalent of 650 gallons of diesel fuel on a quarter section pivot.

Natural Resource Districts (NRD's) have been a big part of the water demonstration project. Several have cost shared on equipment for producers. The project was also funded through BSE and USDA. Producers are encouraged to post their soil moisture readings on a web site.

Urban/Peri-Urban Water Program

According to the 2010 Census, Omaha's population was 408,958 ,making it the nation's 42nd largest city. More than ½ million residents within a 50-mile radius of Omaha's center form the Greater Omaha area. This includes Omaha's peri-urban area; the belt of non-urban land fringing the metropolitan center. This area is neither fully urban nor rural. It is an area most often developed for acreage living.

Acreage residents most often are served by a private sewage treatment system. Onsite systems recycle treated sewage back to the environment, most often to the groundwater. This groundwater often supplies private drinking water wells upon which acreage residents rely. UNL Extension programs include primer classes for onsite wastewater certification exams and continuing education training for certified professionals. SREC Educators also work with BSE faculty on onsite wastewater treatment system installer/pumper/inspector certification and continuing education programs training the majority of Nebraska's 525 certified professionals who collectively attended 12,760 hours of training over the past 10 years.

The quality of private drinking water wells that serve most families in the peri-urban area is not regulated by state or federal statutes. A $25,000 grant from the NE Well Drillers Association supports the development of consumer information. Individuals can download drinking water information through the water website:

http://water.unl.edu http://acreage.unl.edu

District Educators work with BSE and Civil Engineering on drinking water protection, quality, treatment, and distribution system education for public water supply managers, well drillers, and homeowners.

The metro area is home to five large surface water lakes developed for flood control. Programs educate residents on the negative impacts of storm-water runoff and stormwater runoff pollution and ways to reduce the impact. 374 engineers, government employees and inspectors attend urban surface water quality workshops. 85% improved their understanding of sediment erosion control and 86% improved their understanding of storm-water pond maintenance.

Homeowners in the metro were educated through demonstration gardens, radio and television and web site. A three-part series targeted at the green professionals to adopt sustainable practices showed an 89% adoption of sustainable practices . Examples included making irrigation system repairs, sweeping or blowing fertilizer products from driveways, aerification, mulch.

URBAN Program

Crops and Water Quality – Atrazine

Regulators continue to record high levels of atrazine in some Nebraska watersheds. Several tributaries and rivers of the Big Blue River and Little Blue River Basins in southeast Nebraska have drawn particular attention because this watershed provides part of the water supply of Topeka and Manhattan, Kansas.

The UNL Extension conducted surveys of production practices in corn and sorghum in the Lower Big Blue Watersheds in 1996 and 2006. The results have been summarized in the publication, Protecting Surface Water Quality: Adoption of Best Practices in the Lower Big Blue River Basin. They show that farmers have increased their use of no-tillage and buffer and filter strips since 1996. Weed management, however, is still very dependent upon atrazine, particularly in sorghum.

Kansas State University in cooperation with the Nebraska Department of Agriculture monitored the Big Blue River Basin for atrazine levels from 1998-2004. This data showed variable movement of atrazine across years. The data is currently being studied in connection with weather conditions and planting progress to try to determine which factors had the greatest influence on atrazine movement.

Syngenta and the EPA have been monitoring atrazine levels in selected watersheds in Nebraska from 2003-present. This data is being used to determine characteristics of watersheds highly vulnerable to pesticide runoff.

Educators obtained funding from Syngenta to review, modify and reprint the Nebraska Crop Records book for over 800 applicators. A series of producer meetings and the development of a new watershed council group led to voluntary reduction of an estimated 5, 078 pounds in 2011 and atrazine levels in runoff water in the monitored watersheds dropped to the lowest levels since monitoring began or below the level of concern.

University of Nebraska Lincoln EXTENSION

People ~ 4-H Youth

URBAN Program

Ag and Water Festivals

4-H SET programs for youth development reach 14,325 youth in the club program and 41,153 youth in after school programs and 31,100 youth in special events such as water festivals and Ag awareness days.

These features are experiential learning opportunity for youth, adults and teachers to understand how food is produced resulting in a greater support of life sciences, agriculture and natural resources. Understanding science will help students make future career choices, consumers and increase the likelihood that they will enroll in science-based majors.

Field days are an opportunity for students, teachers and parents to learn about Nebraska's Agriculture and Water resources and how important they are to the state. Learning is hands-on, often outdoors and includes a variety of topics. UNL Extension partners with a vast number of agencies to do these events including NRD's, Farm Bureau, Ag relations Council, NRCS, FSA, FFA, Agri-business Clubs, Commodity Organizations, Campus Departments, Foundations, Game and Parks, Ag in the Classroom, and schools.

Program	Locations Served	Educational Concepts	Students Reached	Grade	Frequency	Program Location
Earth Festival	Gage, Jefferson Saline	Water, Conservation River Management Trees Buffer Strips	480	5th	Late April every year 7 sessions 30 minutes	Camp Jefferson
Day on the Farm	Gage	Beef, Sheep, swine, poultry, nutrition, dairy, grain crops, bees, auctioneering, life in Ag.	180	3rd	Early May seven 20 minute sessions	Gage Co. Fairgrounds
Ag Awareness Festival	Saunders Lancaster Douglas	Beef, grain crops, dairy Ag products	ARDC 450 Lincoln 250	4th	Every Fall	ARDC Lancaster Event Center
A Day on the Farm	Washington Dodge	Ag technology, beef, bee keeping, corn & soybeans, dairy and swine.	500	3rd	End of April six 15-min. sessions	Washington Co. Fairgrounds
KidsZone	Dodge	Livestock, feed, equipment	500	All ages	Interactive fair exhibit	Dodge Fair Grounds
River City Roundup	Douglas	Ag products, Ag production and viewing animals	3,700	4th	Fall	CenturyLink Omaha
Ag Day at School	Omaha	Ag production, Ag products Viewing animals	1,000	4th	Spring	Omaha Elem. Schools
Mobile Beef Lab	All Southeast Counties	Fistulated Steer, beef nutrition and Feed	5,514	All ages	all	Mobile
Earth Festival	Gage Jefferson Saline	Ground and surface water quality, irrigation, aquatic	500	4,5,6	Spring	Camp

Program	Locations Served	Educational Concepts	Students Reached	Grade	Frequency	Program Location
Earth Wellness Festival	Lancaster	Environment, water quality, quantity, watersheds, water	3,000	4	Spring	Southeast Comm. college
Water Celebration	Otoe, Cass, Johnson, Nemaha, Pawnee, Rich-	Ground and surface water quality, irrigation, aquatic life, watersheds, water cycle	200	4	Spring	Peru College
Water Jamboree	Fillmore	Environment, water quality, quantity, watersheds, water	800	4	Spring	Liberty Cove
Water Works	Douglas/ Sarpy	Ground and surface water quality, aquatic life, watersheds, water cycle	1,600	4	Spring	Schramm State Park Eastern Nebraska 4-H Center
World O! Water Family Festival	Sarpy	Ground and surface water quality, aquatic life, watersheds, water cycle	1000	Adults /youth	Fall Weekend	Wehrspann Lake

Youth Crop Science Investigation Program

As a large number of farmers approach retirement, it will be essential to replace those farmers with young, bright, and forward-thinking people. The best way to achieve this is by educating youth with the attractive features and future possibilities for agricultural producers.

Parents, teachers and other adults should be encouraging to youth to remain in agricultural careers. Youth should be exposed to agricultural sciences at an early age to develop a knowledge base to build on topics such as crop production. The Crop Science Investigation (CSI) workshop series held in Nebraska teaches youth various agronomic principles.

Since 2008, youth have participated in a comprehensive series of workshops throughout the year. Those who have attended learned not only the technical content related to cropping systems, but applied those concepts with hands -on activities or projects.

Topics taught at each workshop include: crop end uses, agronomic-related careers, crop growth, pest management, irrigation management, cropping systems, tillage, etc. Each year, youth continue the CSI series learning about different topics and for previous participants, more in-depth information covered from the previous year's sessions.

Youth involved in a 2009 Crop Science Investigation program experienced the influence of science and technology on crop management through hands-on activities. One participant reported using science and technology in 4-H to "read the watermark sensors, calculate how much irrigation is necessary, and help my dad decide when to water the fields." Another youth said that as a result of the CSI workshop series, he is now considering a major in agronomy.

4-H Science Engineering and Technology (SET)

Youth will actively engage in discovery and exploration in science, engineering and technology to increase personal knowledge and individual skill level.

Youth will develop positive attitudes about science, engineering and technology and identify potential career paths and post-secondary education in SET fields.

The Science Festival for 7th and 8th grade students focuses on hands-on experiential learning modules in three academic areas:

- Agronomy and Horticulture
  - ◊ Soil Investigations
  - ◊ Turfgrass and Landscape Management
- Biological Systems Engineering
  - ◊ Wind Power
  - ◊ Robotics, GPS and GIS
- Natural Resources
  - ◊ Meteorology and Climate

Impact:

More than 50,000 youth participated in Science, Engineering and Technology programs in the Southeast District last year through school enrichment, after-school programs and out-of-school experiences such as day camps and specialty clubs.

Projects include: Robotics, Agricultural Awareness Events, Embryology, Microbes in Food and National Science Experiments in Biofuels and Polymers

In a study of robotic-specific workshops involving more than 600 participants, 83% indicated they are planning to pursue a career in SET. Each year thousands of young students watch eggs hatch on our web cam at:
http://lancaster.unl.edu/4h/Embryology/

Nebraska 4-H ATV Safety Program

ATV accidents are the leading cause of fatalities in agriculture in Nebraska. Between 2008 and 2012, a series of fifty-two Nebraska ATV Safety Program sessions have been conducted by thirteen ATV Safety Institute (ASI) certified trainers reaching over 740 adults and youth. ASI provides two million dollars of liability coverage and ten thousand dollars in accident insurance for training sessions. The training sessions have been conducted at county day camps, local training sessions, 4-H camps, after school programs and public ATV courses. Extension staff recruit and market the training sessions to 4-H youth and adult volunteers. Local ATV dealers and other interested businesses provide local support for some of the training sessions.

A special emphasis has been placed on Life Skill development including problem solving and critical thinking skills. The safety training includes modules on safety equipment, active riding techniques and decision making when riding ATVs. Instructors utilize curriculum provided by ASI for the training sessions.

Grant provided by National 4-H Council and ASI are used to cover expenses for travel, training material and safety equipment. Each instructor has been provided with supplies and materials to conduct the local training sessions. Local sites for the training are identified by the sponsoring counties. Participants wear safety helmets and eye protection, long sleeve shirts, long pants and shoes that cover their ankles. A trailer is utilized to transport the training material and machines to the various training sites. Each training session participant receives a RiderCourse® manual following the training. Grant funds are used for mileage, training supplies. Marketing and promotion materials are developed to promote the ATV training program. An on line E-Course (http://southeast.unl.edu/atvsafety) has been developed to allow youth and adults to go on line at their convenience and take the course before experiencing the hands on RiderCourse®.

Grants totaling $51,310 have been utilized to train 740 people utilizing the ASI RiderCourse® curriculum. Grant funds have also provided training kits for 13 ASI certified instructors as well as covering expenses for the training sessions.

Military 4-H Program

Nebraska OMK builds partnerships to increase capacity for youth, families and communities across Nebraska to support military youth.

- Hidden Heroes reached 18 communities developing volunteer capacity to support children before, during and after their parent's deployment.
- 400 civilian youth learned about military service and compiled over 700 HERO Packs given to military youth as a tangible way to honor their heroic sacrifices while a parent is deployed.
- Speak Out for Military kids (SOMK) is a youth driven effort for military and civilian teens to raise community awareness and foster community activism by speaking at service clubs and youth groups.
- 4-H members attended Family Readiness Group meetings and completed activities with the military kids allowing their parents to fully participate in learning about their deployed soldier.
- The Mobile Technology Lab (MTL) helped deploying soldiers create DVD's to share with their children while they were gone and also provided a way for family members to create letters of support for their military servicemen/ women.
    - ◊ The MTL was used by over 400 youth at a reintegration event.
    - ◊ Hundreds of military kids used the MLT during Family Readiness Group events across Nebraska and during Cyber Fair at the Nebraska State Fair.

Impact:

"We talk in 4-H about serving our club, community, country and world…this year put a face on that service. Our members were able to put a face with OMK and understand that the soldiers they see on the news have kids here who miss them." – Nicki (4-H leader)

Dear Dad,

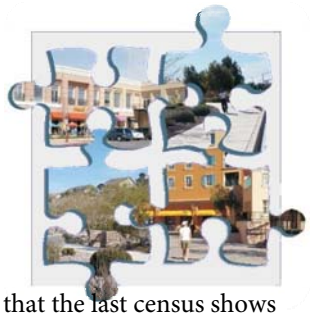
Did you get the email I sent? OMK came to our meeting with a Mobile Technology Lab. We played games and all the kids got to send emails and pictures to our soldiers.

Dear Dad,

A bunch of 4-H kids came to our FRG meetings. They played games and did crafts with us while mom went to the meeting. I signed up for baseball…I wish you were here to be my coach.

Operation: Military Kids is a partnership of Army Child and Youth Services, National 4-H Headquarters/ USDA and the University of Nebraska–Lincoln Extension. Operation: Military Kids – Nebraska is supported by the 4-H/Army Youth Development Project under Kansas State University.

University of Nebraska Lincoln EXTENSION



People ~ Communities

Community Development

Dr. Randy Cantrell, University of Nebraska Rural Initiative Rural Sociologist, states that the last census shows a second consecutive decade of population growth. The 2010 Census counted 1,826,341 Nebraskans, an increase of 6.7% (+115, 076 residents) since the 2000 Census.

Nebraska's population growth was not evenly distributed. Eight of Nebraska's nine Metropolitan counties grew during the last decade. Metropolitan counties, which are now home to 58% of the state population, saw 13.7% growth while Non-metropolitan Nebraska population declined by a net -1.3%.

Although much of the population is based in urban counties of the Southeast District, a great deal of geographical area is still quite rural. Cantrell continues, "Population losses have left many rural communities with a shortage of residents willing and able to take on the public and volunteer leadership roles required to keep their communities running smoothly."

Nebraska communities are vibrant when citizens have the leadership capacity to evaluate assets, take advantage of opportunities, become innovative and support entrepreneurial efforts. Extension faculty working in communities, encourage and inspire participants to thrive in rural Nebraska and contribute to the state's success.

The 2006 Southeast District Five Year Review Plan of Action listed two objectives to work on during the ensuing five years.

Objective One, Human & Social Capital Objective: "Community vitality will increase after local leaders enhance their human and social capital following participation in experiential leadership training delivered with community partners."

As a result of the 2006 Southeast District Action Plan, Extension staff witnessed leadership graduates using personal motivation and leadership skills to develop strong networks and advocate for agricultural industry and rural communities and coalition building leading to economic growth.

- ***Community Based Leadership Programs*** taught by UNL Extension faculty includes *Leading Locally: Building Entrepreneurial Communities in Butler, Merrick and Thayer Counties, Leadership Tomorrow in Hamilton County and Leadership York in York County.* The in-depth (40+ hour) classes for youth and adults develop/enhance leadership skills, while creating an awareness of the importance of community support for entrepreneurial efforts in the community. Class participants report they are more engaged in their communities, more active in leadership roles, create stronger networks, use skills to settle issues and disputes, increase the level of advocacy for the agricultural industry, and have increased capacity to deal with change after participating. Specific examples of impact include:
    - ◊ Seventy five percent of the Butler County Chamber of Commerce Directors are alumni of *Leading Locally*.
    - ◊ Over 60% of the Butler County Foundation Board members are graduates of *Leading Locally.*

- ◊ A survey of two leadership classes showed that 100% now realize that communities need to be very supportive of new businesses trying to get started.
- ◊ During a recent Leadership class trip class trip to the State Capital, a participant shared with Governor Heineman, the importance of UNL Extension by saying "Extension is very valuable to us in rural communities. Without the great resource of our extension educators we could never move forward in our communities. Don't cut extension!"

- ***NACO Institute of Excellence*** classes are offered state-wide with training locations in Lincoln and North Platte. Many of the elected and appointed county officials in the eastern end of the state travel to Lincoln for training. Most of the NACO Institute workshop trainers come from the Southeast district.

  - ◊ *NACO Institute* graduates internalized and are applying higher-level Listening Skills, Personality Preference and Generational Difference concepts to enhance co-worker, client and constituent relationships. 76% of *NACO* graduates have changed their attitude towards their constituents. One graduate states, "I listen and talk with my young staff (I'm 50+ and they are 25) differently than before with better success. Positive results!" Regarding conflict situations, a participant says she, "Separates the person from the problem and focuses on interests rather than positions." Another participant states, "I'm less aggressive."

  - ◊ As a result of *NACO Institute* training, one elected official asked the County Commissioners for permission for all elected and/or appointed officials within the county, city, hospital board and other organizations to be trained in Myers Briggs Type Indicator to increase communication and build relationships between organization leaders and the community.

- Leadership capacity within *UNL Extension support groups*, nonprofit organizations and coalitions has been enhanced as a result of Extension staff involvement. Support groups and partnerships include the extension board, 4-H council, FCE board, Master Gardener board and 4-H Foundations, etc.

Objective Two, Economic & Financial Capital Objective: Individuals, businesses and communities will enhance economic and financial capital by participating in educational programs delivered with community partners.

- University of Nebraska-Lincoln collaborations, coalitions and partnerships are extensive in the Southeast District. Extension faculty is pro-active with a variety of partners working toward educating the community and helping to develop healthy and successful programs in rural and urban settings. Collaborative examples include:

  - ◊ UNL Extension Public and Private Partnerships throughout the Southeast District work toward economic growth. One current enterprise is UNL Extension and *West At Home* (an urban company located in Omaha) partnership to increase the employment opportunities by hiring rural workers who want to continue living in their own communities.

  - ◊ UNL Extension and Union Pacific partnership share expertise and resources to enhance youth career development through the 4-H program.

  - ◊ Extension collaboration and partnerships are very pro-active and extensive throughout the Southeast District to create and sustain healthy communities.

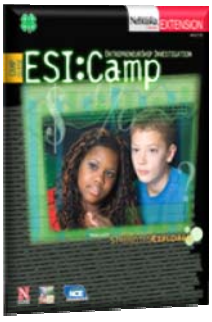
◊ Personal financial security of individuals is better assured following UNL Extension, Nebraska Supreme Court and the Nebraska State Bar Association collaboration which provides for *Guardianship Education*. Over 960 guardians/conservators of minor or disabled adult Nebraskans better understand their legal responsibilities and are better advocates for their wards. In addition they will make sound financial decisions that are in the best interest of their Ward.

- Extension staff served in leadership roles in Resource Conservation and Development (RC&D) Councils representing their counties/communities. In addition, Extension Educators served as Nebraska Great Plains RC&D hosted the **Annual RC&D State Conference at Mahoney State Park with Extension** Educators serving in leadership roles in planning and facilitating the Conference. Extension Educators also were in the fore front of education on non-traditional, urban agriculture and community development presentations.
- National collaboration resulted when Nebraska successfully hosted the National Association of Extension 4-H Agents Conference in Omaha. The support and effort from Extension faculty throughout the state resulted in an outstanding conference for youth professionals from across the country.
- Extension's collaboration with urban partners resulted in the "Extension in the City" program to expand awareness of Extension programming. The partnership with extension administration and Lovegren Marketing Group created a plan to showcase UNL Extension urban programming. A highlight of the partnership includes the successful River City Roundup with 100,000 attendees.
- Nebraska Broadband – Engaging People – Linking The World initiative is key to economic growth and enhanced quality and will help bridge the digital technology divide, improve access to education and healthcare services, and boost economic development for communities held back by limited or no access to broadband in both rural and urban locations.

◊ UNL Extension is a key partner with National Institute of Healthy Homes where Extension Educators will educate how families and individuals can live in safe and healthy homes.

- Youth and adult entrepreneurship education is conducted through a variety of platforms.

◊ EntrepreneurialShip Investigation (ESI) and Community Connections) help youth understand the complexities of becoming a business owner. After receiving a BECA (Building Entrepreneurial Communities Act) grant, three ESI pilot programs were completed in Butler, Seward and Thayer counties. Students completed studies of business opportunities in their community, developed a business plan, assimilated customer service concepts, sold products/services and determined profits/losses for their businesses. UNL Extension collaborated with Gallup to be able to provide Strengths Explorer and Strengths Finder assessments.



- A Thayer County ESI graduate was accepted into the *UNL Engler Agribusiness Entrepreneurship Program* (with a scholarship).
- ESI students advocated for ESI at a UNL Foundation Fundraiser, IANR Emeritus gathering, National Extension 4-H Agents National Conference, and on a Gallup promotional video.
- Students developed business plans, promoted and marketed their businesses through advertising and presentations to the Deshler Chamber of Commerce and Hebron Rotary Club.

◊ The Merrick Foundation director has taken the *Leading Locally Building Entrepreneurial Communities* program to another step by planning, sponsoring and coordinating an ESI Camp in Central City the past two summers reaching 27 youth with the experience of starting a new business.

◊ The entrepreneurial culture is changing as the result of *Inventors, Investors and Entrepreneurs Club (I2E)* in southeast Nebraska. Participants are embracing change and innovation and reducing negative barriers. As a result of I2E Innovation:

- Five new businesses started up.
- Six survey respondents indicated they have increased their sales and revenue because of the program.
- One respondent said, "I2E is a place where you can learn about the challenges and successes of other entrepreneurs, learn from each other, network and form friendships for collaboration prospects and learn about ways to expand or improve business practices."

◊ *Networking in a Global World* workshops targeting entrepreneurs, small business owners and organizational leaders, teaches participants how to use social media tools to expand to new clientele and customers.

People ~ Families

Building Strong Families

The goals set by the Building Strong Families team in 2006 were in these areas: Family Relationships and Financial Management. The ultimate desired outcome was to have "**Strong families and relationships across the life cycle".** At that time, the major programs being taught across the state were: Parents Forever, Guardianship, Building Nebraska Families (grant project through HHS), and Preventing Credit Card Blues.

To address the area of financial management, a variety of programs were offered from 2006 - 2010 to address needs of different age groups: "Making Cents of It" (UNL elementary Money Camp), "Preventing Credit Card Blues" (for high school seniors), Welcome to Autotown! Website (for early teens), Pay Down Debt website (adults), Medicare Prescription Drug Program (seniors), estate planning (adults), Shopping Smart 101 (teens), and High School Financial Planning Program.

All of these have helped reach these goals:

- Reduce debt and spending
- Increase savings
- Establish personal retirement plan
- Families live on reduced income
- Retirees maintain standard of living

To address the area of family relationships, several programs have continued: "Parents Forever" (reached over 6000 parents experiencing divorce or changing custody arrangements in past 5 years), "Guardianship" (reached 2,661 individuals appointed as guardians by the court in past 5 years), Child Care Provider training and a variety of Family Strengths programs. Unfortunately, the Building Nebraska Families program grant was not continued and as a result the five educators in this district were not retained and the program closed.

Two years ago, the focus of the BSF action team was changed to "The Learning Child" and since then, nine educators in Nebraska have been moved to the "Child Care and Youth Training and Technical Assistance Project." With these changes, a great deal of effort has been put into:

- a new web presence,
- facebook page,
- webspots,
- revision of the "Parents Forever" curriculum into an online or face-to-face program renamed "Co-Parenting for Successful Kids,"
- co-writing a book with Dr. John DeFrain, "Getting Connected, Staying Connected" (to improve couple relationships resulting in better environment for children to learn).

Educators have been trained in several programs made available through the Child and Youth Training and Technical Assistance Program which can also be taught in Nebraska for child care providers.

All of these programs are working together to reach these goals:

- Youth and young adults build healthy relationships
- Families develop communication and problem solving skills
- Caregivers have resources to fulfill responsibilities

Through the Guardianship Program over 6,000 participants gained skills including:

"Importance of not co-mingling assets." "Not pay myself without court approval." "Legal resources/requirements with guardianship." "Support ward's personal preferences."

Through the Parents Forever classes over 2,600 participants learned:

"How important good communication is with child and the other parent." "Take more time to be with my child and listen to them." "The ages and stages information was very helpful for my multi-age children." "Keep the kids out of the middle."

Urban Families

Caring People Sudan

- Approximately 367 Sudanese have participated in a variety of programming efforts including helping them secure and maintain a contract with the Department of Health and Human Services to provide culturally relevant family support services to Sudanese families who are involved with the child welfare system.

Peace by Piece: Sensory Structured Trauma Intervention Program (SSTIP)

- Secured contract with State Probation to teach skills to help women de-trigger post-traumatic stress disorder (PTSD) symptoms as a result of some type of trauma in their past or current life. Work specifically with women who have been incarcerated and now on probation. Conduct a 4-8 week sessions @ twelve women persession (384 women – primarily single moms).

Self-Leadership – Youth

- Middle School – (North Omaha), 2,400 – teaching them experientially about how they operate in life, help them to identify their top 5 values and provide opportunities for them to share with their peers by presenting their beliefs, their strengths and places where they can grow themselves to be contributing members to society.

Self-Leadership – Adult

- Douglas County Jail – Maximum Security MOD 14; Teaching 12 values/served the re-search component to measure growth around 12 values (integrity, respect, trust, etc.); 1,260 inmates.

Playground Safety

- Creating safe environments for children doesn't end at the front door. Extension helps neighborhoods, schools, churches, parks and childcare centers to ensure that practices, procedures and equipment on the playground will maximize fun, while minimizing risk.

Poverty Simulations

- Walk a mile in their shoes lets people experience the very real challenges older adults, families and children face as the result of poverty

Landscapes

"Making us aware of food safety issues. Excellent resources for preparing a comprehensive farm food safety plan."

- 2011 GAPs training participant

Alternative Crop Horticulture

Horticulture plays a part in Nebraska's economic structure, through commercial production of fruit and vegetable crops, landscape and floriculture plants, and commercial horticulture professionals, such as arborists, landscapers and lawn care companies. Whether the question is the best herbicide to control broadleaf weeds in a four-week old sod planting, or how to manage Fusarium wilt in a 40-acre watermelon field, each group has unique educational needs and relies on research-based information available from their local UNL Extension office.

Crop	Number of Farms		Sales	
	2007	2002	2007	2002
Vegetables, melons, potatoes, and sweet potatoes	344	261	$63,840,000	$58,337,000
Nursery, greenhouse, floriculture and sod	371	355	$41,215,000	$34,259,000
Fruits, tree nuts, and berries	253	158	$2,594,000	$1,375,000
Cut Christmas trees and short rotation woody crops	71	84	$ 592,000	$ 797,000

2002, 2007 USDA National Agricultural Statistics Service Reports

Environmental Horticulture

The use of environmental and economically sustainable greenspace practices have increased as a result of Extension programs teaching best management practices to over 1400 green industry professionals statewide. SREC Educators support the Agronomy and Horticulture Department Specialists on the Nebraska Green Expo, Clinics and Field Days.

URBAN Program

Through the Hort Update newsletter, green industry professionals make changes to their landscape management practices, including seasonal insect and disease control, so that natural resources are protected from fertilizer and pesticide runoff. The newsletter is delivered twice monthly from April through September, and monthly during the winter, to a listserv of 948 subscribers.

By using better landscape design and management practices, green space managers reduced pesticide and fertilizer inputs and used less labor while improving Nebraska landscapes, protecting both human health and the natural environment.

An evaluation of readers of the Horticulture Update newsletter (n=51) was completed in the summer of 2011. Respondents included professionals in nursery/garden center; lawn & landscape maintenance; landscape design & installation; greenhouse, field ornamental, sod, tree, shrub, and vegetable growers; and horticulture education.

Acreage Programming

Strong growth of acreage developments in the urban/rural interface areas of Nebraska's expanding population centers is producing an ever-growing audience interested in a wide range of issues associated with "rural" living, including traditional home, family and nutrition topics, windbreak establishment, landscape & pasture management, wildlife habitat, wildlife damage control, and animal husbandry, as well as proper management of a septic system, wastewater lagoon.

The goal of the acreage team is to help acreage owners increase their knowledge of the rural environment, enabling them to make more environmentally sensitive decisions.

***A*creage properties are better managed and natural resources protected** through use of the Acreage Insights website, http://acreage.unl.edu,
with timely email information received by a listserv of over 1300 acreage owners, and an average of 3,350 page views per week in 2011.

An evaluation of web users (n=68) was completed this summer.

- 87% either adopted new acreage management practices that better protect the environment, such as refining their pesticide usage to minimize chemical applications, or continued to use good acreage management practices that were reinforced through the newsletter and web site.
- 82% adopted new practices that saved them money, such as reducing the use of their sprinkler system and allowing grass to go dormant decreasing their water bill, or continued to use good acreage management practices that were reinforced through the newsletter and web site. One acreage owner comments, ***" By learning to rotate pasture use I have saved money on reseeding, herbicides and fertilizers. Managing our pasture space effectively…results in soil conservation."***

The public value of acreage programming includes protecting surface and ground water quality by preventing soil erosion and minimizing pesticide applications, protecting human health through proper maintenance of private wells and septic systems, reducing energy requirements for heating and cooling, conserving diversity of native plants, insects and wildlife."

Urban Agriculture

The Urban Agriculture Team consists of about 25 extension staff in the metro area of Lincoln and Omaha. Since its inception in March 2011, it has had 2,574 visitors and has been featured in regular and social media releases. The website http://food.unl.edu/urbanag acquaints consumers and commercial growers with the benefits of growing food/ agriculture products, what it takes to sell these products and how to prepare and preserve food.

A proposal has been developed for the Kimmel Education and Research Center to become a Small Farms and Small Business Innovation Center. Grant funds would add extension educator positions with a focus on small farm management, vegetable, fruit and grape production and agro-tourism. This is a partnership with the Kimmel Foundation and the Kimmel Orchard and Vineyard Foundation.

Prairie Pines is within Lincoln's peri-urban ring and is an ideal location to develop an environmental education center and the only sustainable agri-tourism and small farm demonstration in the region. Educators from Lancaster and Douglas/Sarpy counties are working closely with the School of Natural Resources to build educational programs to showcase value-added agriculture and innovation. The living laboratory will provide quality experiential and collaborative opportunities for local school children and the public. Prairie Pines can offer children and families the opportunity to see a small farm and increase agriculture and food literacy.

Master Gardeners

Master Gardeners is one of our most popular programs. Master Gardeners not only undergo extensive classroom time and training, they put their specialized knowledge to work volunteering their time to staff horticulture
helpline, provide garden demonstrations, raise vegetables for the local food bank and continue their growth through certification and continuing education. Master Gardener programs exist in every county. The following highlights Omaha's program.

- 200 Master Gardener volunteers
- MGs design and use the gardens to teach. There are 15 demonstration gardens.
- Master Gardeners contributed over 10,000 hours of volunteer time to the community answering questions and conducting workshops.
- The value of the volunteer time equates to over $200,000.
- 20,000 questions/inquiries have been answered.
- The volunteers also tended the HOPE Garden (Help Omaha People Eat), providing over 7,000 pounds of vegetables to area food banks.

Living Safely with Lead Program

As a result of Omaha Lead Coalition team efforts, families and professionals in the Omaha area will reduce the risk of lead poisoning in children by adopting practices in:

- *Lead safe home repair/maintenance practices*
- *Lead safe landscaping choices*
- *Lead safe housekeeping methods*
- *Lead safe nutrition choices*
- *Lead screening in young children*
- *Lead disclosure during home sales*

University of Nebraska – Lincoln Extension is an active member of the Omaha Lead Safe Coalition. UNL Extension's contribution to the Coalition includes:

- Securing more than $500,000 in grant funds
- Leading the coalition team educational outreach effort
- Reviewing coalition educational curriculum to assure messages are non-biased and research-based.

As a result of Coalition efforts, over 17,000 families learned lead poisoning risk reduction practices as a result of one-on-one educational delivery. An additional 6,000 families were contacted and taught through health fairs, and 115,000 with printed information (98,000 in English and 17,000 in Spanish.) Over 500 real estate professionals were taught methods to reduce lead poisoning risks in homes and were given tools and strategies to provide that information to home buyers. Five-hundred-forty housing contractors were certified in Lead Safe Work Practices (LSWPs.)

Impact:

1) Of the 17,000 families taught how to reduce lead poisoning risks:

- 96% indicated they are more aware of lead risks.
- 52% have made changes in their behavior to reduce risks to their children. Changes include maintenance of homes, upkeep of homes, nutrition for their children, and landscaping.
- 67% have had their children screened. (This number is increasing and is confirmed by the Douglas County Health Department.)

2) Of the 540 contractors certified in Lead Safe Work Practices:
   - 84% use LSWPs even when those practices are not required by law.

3) Real estate professionals who were educated documented 350 sales of homes where lead was a risk. In all cases additional information was provided to buyers to assist them in reducing lead risk for their families.

5 Contributions to IANR 2017 Goals




Student Recruitment Plans

External Funding Opportunities

Ties to Innovation Campus

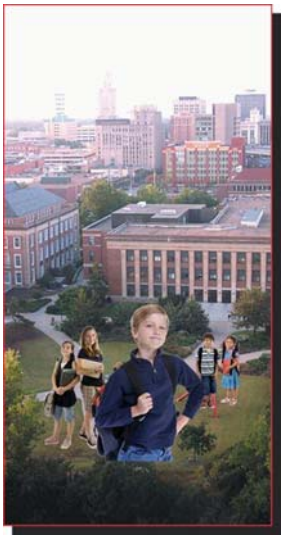
Program Priority Requests

- **Science Literacy**
- **Translational Research**

Southeast Research & Extension Center

IANR®

Student Recruitment



Student Recruitment has become more of a direct mission of extension since 2006, with more educators / assistants intentionally conducting programming that helps to expose youth to potential opportunities available to them at the University of Nebraska – Lincoln. With this added focus, the results are being seen at the university level. Along with this, Dr. Ronnie Green's "IANR to 2025" mission is an aggressive approach to move the University of Nebraska – Lincoln into being one of the top five universities worldwide in the areas of agriculture, natural resources and human sciences. Chancellor Harvey Perlman has set a transformative goal to create a student body population of 30,000 academically talented students moving us from the current 24,593 enrollment figure. Therefore, our efforts in Student Recruitment must continue to be in the forefront of our extension programming.

Student enrollment within the College of Agricultural Sciences and Natural Resources (CASNR) has seen a constant increase over the past six years.

2011	**1,938 students**	**+ 2.97 %**
2010	**1,882 students**	**+ 7.1 %**
2009	**1,758 students**	**+7.1 %**
2008	**1,642 students**	**+ 12.9 %**
2007	**1,455 students**	**+ 12.9 %**
2006	**1,303 students**	**+ 11.7 %**

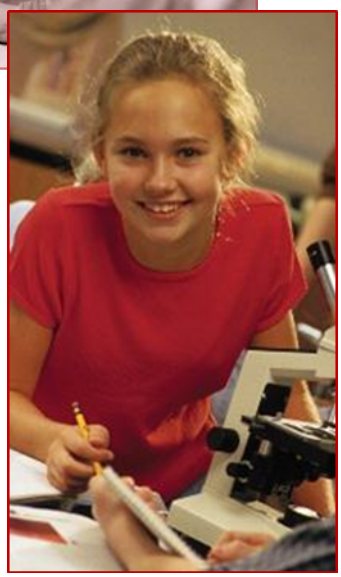
As a result of the 2006 Five-Year Review process, a newsletter was developed through cooperative communication between the College of Agricultural Sciences and Natural Resources and the Student Recruitment committee made up of educators within the southeast district. This newsletter was shared electronically with all extension staff to help provide a strong reference of current and upcoming issues available and pertaining to student recruitment.

- District-wide specific efforts have been implemented utilizing student recruitment funding sources made available through the Southeast District Director. Some examples of how those funds have been spent include:
- Support of a Science Festival for junior high youth. The festival provided the opportunity for youth to experience two different science tracks throughout their day and to learn more about what college majors they may be interested in investigating further.
- Support of the Money Day Camp for sixth grade students on campus as a part of the "Making Cents of It" program.
- Support the development of promotional materials utilized during county, district and state fair events and career / college fairs.

Looking ahead:

Student Recruitment will continue to be a solid effort through extension. The Southeast District will be working on the following over the next five years:

- Providing local extension offices with display materials and promotional items which can be used during youth functions.
- Working with departments on campus to create a better communication between what is happening on campus and local extension staff. This will be done by:
    - ◊ Monthly newsletters to extension staff that will include highlights that can be used in 4-H newsletters.
    - ◊ Monthly conference calls with department recruiters, career services, admissions, etc. to enable extension staff a clearer understanding of current trends on campus.
    - ◊ Annual campus tours for extension staff which feature department visits.



Student Recruitment Plan

Initial Work:

- Create a comprehensive list of High Schools in Southeast District
- Create a database of Guidance Counselors and Science Teachers in Southeast District
- Create a database of CASNR Alumni, LEAD Alumni
- Determine what % of students attend UNL (rural / urban)

Student Recruitment Leadership Team:

Team Leader - Karna Dam
Team Assistant - Amy Virgl (Project Coordinator)
County Contacts - Tracy Behnken (Dodge & Washington Counties)
Mark Simmons (Douglas / Sarpy Counties)
Sarah Purcell (Cass / Otoe Counties)
Deb Weitzenkamp (Johnson / Nemaha / Pawnee / Richardson Counties)
Paul Hay (Gage / Saline / Jefferson Counties)
Gary Bergman (Lancaster County)
Karna Dam (Saunders County)
Katie Larsen (Butler / Seward Counties)
Brandy VanDeWalle (Fillmore / Clay / Thayer / Nuckolls Counties)
Tammy Stuhr (Merrick / Polk / Hamilton / York Counties)

Phase I

- Conduct a Face-to-Face meeting for extension student recruitment contacts.
- Present team with contact resources on campus
    - ◊ Who to contact for CASNR majors
    - ◊ Who to contact for downtown majors
- Discuss school locations/sizes and contact information
- Share and define responsibilities / duties
- Discuss expected goals
    - ◊ To increase enrollment by 250 students
        - This may be done through:
            - Campus Visits (Individual or Group)
            - Science Function (on campus or off)
- Increase the use of the "Nebraska Information Card"

- ◊ Redesign the information on this card to include:
  - Name 3 colleges you are currently considering
  - What major are you currently interested in?
  - What event were you at when this card was completed?

Phase II

- Formalize our commitment to campus visits by:
  - ◊ Assuming a more active role in getting youth directly to campus
  - ◊ Build stronger relationships with junior high and high school youth in seeking prospective students
  - ◊ Conducting a campus visit for Guidance Counselors / Liaisons / Team members
  - ◊ Conduct a Campus Science Day for students (hands-on learning)
- Establish a working relationship with High School Guidance Counselors
  - ◊ Seek a liaison who has an established relationship with each school (i.e. LEAD alumni / CASNR graduates)
  - ◊ Conduct a Dinner for Guidance Counselors / Liaisons / Leadership Team / Selected UNL Faculty
- Create a NEW Student Recruitment Marketing Package for Southeast District
  - ◊ Banner Stands
  - ◊ Vinyl Banners
  - ◊ Display Material
    - For Use during any appropriate event
      - County Fair
      - School Events
      - Extension Office display areas
      - Banks
      - Libraries
      - Shopping Centers

Phase III

- Establish a team of Ambassadors who are current UNL Students
  - ◊ Preferred that they be able to connect specifically with the student brought to campus
    - Keep records of what high school each ambassador graduated from
    - Keep records of what county each ambassador came from
    - What extra-curricular activities where they engaged in (develop relationship with prospective students)
- Provide counties with:
  - ◊ Short descriptive paragraph on each major available for use in 4-H newsletters, social media, newspapers, etc.
  - ◊ Consistently provide clientele with a current calendar of events at UNL
  - ◊ Provide to clientele information focused on "What's NU at UNL?" (new majors, new opportunities, etc.)
- Recognize high schools who are successful in encouraging students to attend UNL
  - ◊ Plaque for guidance counselors with annual recognition (10 students, 20 students etc.) medallions to place on the plaque
- Have Leadership Team and Liaison meet with Guidance Counselors and take them a UNL gift.
  - ◊ Provide them with a list of questions that they can go through with the counselors

Growing Our External Funding and Partnerships

One of the goals of IANR to 2017 is to grow External Funding by 8%. SREC plans to contribute to that goal by growing existing partnerships, forming new partnerships and growing grants.

Grant Activity

Grant activity has grown since 2001 from a low of 100,000 to a high of over 1 million dollars in FY' 11. Business center support for grant activities includes assistance with grant applications, grant budget management, hiring persons funded on grants and monitoring salary savings expenditures. Grant activity for the unit is listed in the appendix section beginning 7/1/2005 through 6/30/2012. Educators are increasing their grant activity each year through partnerships with communities, agencies, industry, commodity groups and working with campus specialists from UNL and other land grant institutions.

FY' 06	$ 491,045	FY' 10	$ 904,010
FY' 08	$ 895,397	FY' 11	$1,252,347
FY' 09	$ 542.756	FY' 12	$ 686,030

- To continue to grow partnerships and grants faculty suggest that we focus on three areas of development:
- Create networking opportunities with partners, specialists and funders.
- Provide professional development on grant writing and partnership development.
- Share strategies on mechanism that manage partnerships and secure grants.

Global Center for Ag, Food and Environment

The Global Center for Agriculture, Food and Environment is designed to build partnerships with a wide variety of campus departments in the NU System and a number of industry and commodity groups that share the mission of agriculture and science literacy.

The center is designed to be an experiential learning opportunity for adults, teachers and youth to understand how food is produced and how the environment is protected resulting in a greater understanding and support of life sciences including agriculture and natural resources.

The Southeast Research and Extension District has a strong foundation for agriculture and environmental literacy programs. Over 13,000 urban youth have visited Ag Awareness festivals at the Ag Research and Development Center near Mead since 1996. Annually another 5,000 youth attend either Ag or environmental festivals in the District. Each summer Extension trains Ag and science teachers providing classroom ready educational materials. Extension Educators have a strong connection to schools through 4-H programming and science curriculum. We feel science education should involve active learning.

The Global Agriculture, Food and Environment Education Center will provide a unique opportunity for youth, adults and teachers to experience the science and latest research on food production and the environment. The center features four interactive sites: The Education and Innovation Center, the Livestock Education Facility, the Crops Education Facility and the Agro- Environmental Trail.

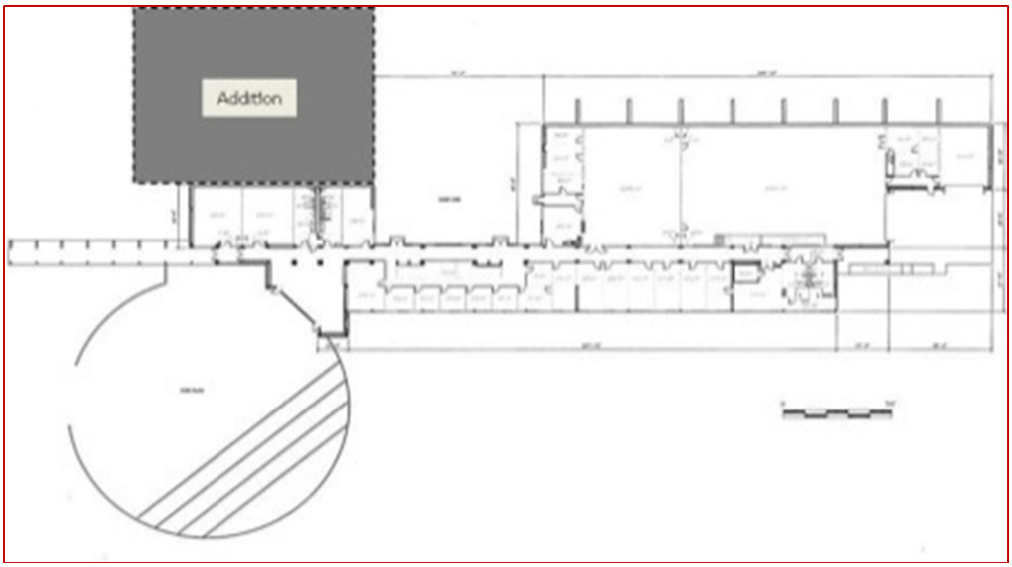
Individuals will enjoy a wide variety of hands-on interactive educational experiences. Students will have a chance to test their potential as a future scientist becoming "scientists in training". Teachers will have an opportunity to experience scientific inquiry, develop a connection with scientists and take lessons they learn back to their classroom. Web cams, online teaching, virtual tours, mobile units will help students and teachers continue the learning experience. Understanding science will help students make future career choices, consumers make informed decisions, and leaders make sound public policy decisions.

Phase I Develop the Current Christensen Building

Mobil Beef Lab	Completed Spring 2012
Interactive Displays in Lobby	Completed Fall 2012
Kids Interactive Learning Center	Completed Fall 2012
Virtual Tours – Media Center	Fall/Winter 2012
Improve Exhibition Hall Sound	Winter 2012

Phase 2 Christensen Building Addition **Begin Planning 2013**

Additional Teaching Office Space



Phase 3 Agro Environmental Trail Grant **Winter/Spring 2013**

Phase 4 Science Center – Fund Raising **Summer 2013**

Phase 5 Crops Center - Fund Raising

Phase 6 Animal Barn – Fund Raising

Growth Plans include the following items:

- Expanding programming reach in existing facility from 1,000 students. annually to 5,000 students annually by updating current facility and creating virtual tours.
- Hiring two IANR Specialists –
    - ◊ Science Education Specialists – Secondary Education. This specialists would develop strategies to train secondary teachers on scientific inquiry exposing them to the latest research tools and techniques in plant and animal science. Measure best practices of teacher training and student enrollment in college science degree programs
    - ◊ Science Education Specialists – Elementary – This specialists would develop strategies to train elementary teachers on science enrichment education with an emphasis on scientific inquiry in life sciences. Secure grant funding to correlate best practices of teacher training to student engagement.
- Hire three Extension Educators to teach continuous classes at the science center, take mobile labs to schools for on location programs and deliver virtual tours via distance technology for schools across the nation.
- Form a team for IANR Department sharing for educational displays and content about the latest research projects.
- Develop an advisory board.
- Further develop the marketing, business and funding plan.

Kimmel Small Farms and Small Business Innovation Center

Southeast Research and Extension Center has been in partnership with the Kimmel Foundation to deliver educational programs at the Kimmel Research and Education Center in Nebraska City since 2001. As we transition to work with the newly formed Kimmel Orchard and Vineyard Foundation we hope to expand our educational offerings to create a Kimmel Center for Small Farms and Small Business Innovation. The goals of the program will be:

- Provide opportunities for families to experience agriculture and food production and environmentally sustainable educational setting.
- Providing research and educational opportunities for adults and students in value-added agriculture, local foods, entrepreneurship, restaurant management and agro-tourism resulting in sustainable and profitable small farms and business growth.

Research and educational opportunities in value added agriculture, local foods, entrepreneurship, restaurant management and agro-tourism, resulting in profitable small farms, business growth and new business. This model provides a number of opportunities for students. Summer undergraduate interns could work in Horticulture, Hospitality and Tourism, Marketing, Youth Development/Education and Ag Economics. Engler Business Students would have an outlet to test market their products and inventions.

The outcomes for success will include:

Food Production and Small Farms

- ◊ Diversified revenue streams
- ◊ Increased profits
- ◊ Decrease chemical and water inputs
- ◊ Increased environmental sustainability
- ◊ Youth learning about science and food

Innovation and Business Growth.

- ◊ New profit centers and increase revenue
- ◊ Increased visibility through marketing and networking
- ◊ Improved management and business leadership
- ◊ Middle school youth practicing entrepreneurship

Extension faculty currently include: Extension Educator in Fruit and Viticulture, Extension Educator in Innovation and Entrepreneurship and Extension Educator in 4-H Science. We hope to add through foundation support: Extension Educator Vegetable Production, Extension Educator in Small Farms and Risk Management, Extension Educator in Agro-tourism and Extension Educator in Hospitality.

Ties to Nebraska Innovation Campus

Much of the perceived success of Nebraska Innovation Campus (NIC) will depend upon the level of stakeholder engagement that UNL aspires to achieve. Extension should take the lead in connecting NIC to greater Nebraska and beyond—Educating individuals, businesses, organizations and communities about NIC—Connecting innovation with relevance to stakeholders. The Southeast Extension District (SED) is well positioned to facilitate immediate and on-going engagement, understanding and participation among Nebraskan's and beyond. Our contributions to this effort might include:

1. Innovation – Invite Midwestern entrepreneurs, businesses, community leaders and youth to visit and experience NIC via one-on-one consultations with researchers, small-group concept discussions, entrepreneur clubs, virtual education tours, and innovation themed conferences. Facilitate an ongoing spirit of innovation throughout the region tied closely to the heartbeat of NIC—A connection to the Rural Futures Initiative.

2. Engagement - Extension takes the lead on connecting NIC to greater Nebraska and beyond. Educate individuals, businesses, organizations and communities about NIC and the outcomes relevant to enhancing social, economical and environmental well-being—Connecting innovation and relevance. Speaking engagements, tours, social media, and academic department relationships contribute to this role. Lead the vital translational research role of NIC.

3. Science Education – Facilitate K-12 schools, NU campuses, State Colleges and Community college connections to NIC laboratories, classrooms, researchers and teams. Foster internships/relationships among secondary and post-secondary students with the NIC research community. Establishing STEM relationships with Omaha Public Schools, Lincoln Public Schools and others. Perhaps a STEMmate (adopt-a-scientist) concept where faculty engage aspiring student scientists. STEM clubs meet, innovate, collaborate with scientists face-to-face at NIC while also connecting via distance on demand.

4. Student recruitment—A keen focus on exposing college-bound students to the rich learning and research opportunities at NIC. Host STEM events, science fairs, social events, 4-H/FFA activities to connect student scientists with NIC scientists. Visiting and experiencing NIC is a core component of the recruiting process.

University of Nebraska Lincoln EXTENSION

Rural Futures

Southeast Research and Extension District plans to work cooperatively with the Rural Futures Institute to increase the capacity of rural people and create a sustainable rural future. Rural Futures Institute embraces the land grant model and desires to help people think creatively about the future. They embrace diverse teams working together to solve complex problems and a culture that is futuristic and capitalizes on existing assets. This is not to be prescriptive but rather collaborative utilizing the local knowledge as part of the solution.

In the 25 counties in Southeast Nebraska we can provide the connectivity between the local citizens and the Rural Futures Institute faculty and staff. We can use the trust we have built over years of quality programming to engage the local community with new partners. We can help youth feel valued in the process of growing their community. Extension Educators are in it for "the long haul" as they live, work and raise families in these communities.

As the formation of the Rural Futures Institute continues, we will work to

- Mobilize our talents in community facilitation and networking to bring people together and have robust discussions on critical issues.
- Utilize our knowledge of the University System to create opportunities to bring other departments and units of the University system to work with people in the community to solve critical issues.
- Train new community leaders through experiential and research based community leadership programs expanding the pool of entrepreneurial and innovative leaders.
- Assist communities in looking at regional projects such as energy, environment, connectivity, business developments, marketing and tourism.
- Involve youth in community projects giving them experiential leadership opportunities and increasing the likelihood they will return to the community upon graduation.
- Connecting with the urban audience and build an understanding of the rural-urban interdependencies.

Southeast Research and Extension District Priority Area 1

Global Center for Ag, Science and Natural Resource Literacy

SREC science programs reach 86,578 youth annually through 4-H club, school programs and special events and festivals. SREC Educators are developing a comprehensive science literacy plan as part of their 5-year unit review. Funding this priority will provide leadership for: expanding Ag and science literacy programs, coordinating campus wide efforts and researching best practices in science education. Working with departments on campus, this program will become a national leader in addressing the issue of Ag, science and environmental literacy.

The development of a Global Center for Ag, Science and Natural Resource Literacy will provide a place for students and adults to experience science and research related to food production and the environment. It will also provide opportunities for developing curriculum, mobile displays and mobile labs to travel across the state in a coordinated and interdisciplinary approach to meeting the following objectives:

- Students who participate in science discovery programs will become excited about science resulting in an increased number of students that seek science careers.
- Urbanized populations who experience research and educational programs in food production, a safe and nutritious food supply and agro-environmental systems will make informed consumer food choices and informed policy decisions on environmental and agricultural issues.

Impact on IANR or UNL priority goals:

2.a.1 Increase the number of students enrolling in science majors at UNL. Each year, 100 students will enroll in science as result of a science-based experience (probability based on 110 faculty/staff who would use mobile curriculum or global center to recruitment of science students).

2.a.2 Provide opportunities for 6 -10 graduate student a year in K-12 science education. Experience would include developing curriculum and teaching and conducting *action research* in educational practices. (Proximity to campus provides an opportunity for both undergraduate and graduate work in science education.)

2.b.1 Increase grant funding related to research best practices to train teachers in science education and inquiry. It is expected that educational research will increase SREC annual grant funding from 1.2 million to 2 million dollars. Possible research funding sources include: NSF grants for Informal Science Education; U.S. Dept. Education grants for Strategies to Improve Performance of teachers that lead to increased student performance in STEM; National Center for Education Research and Institute of Education Science and NIH – Science Education Partnership Awards

2.c.1 Faculty will develop interactive educational displays that feature research from Innovation Campus and IANR Departments.

2.d.1 Faculty who lead this project will translate education research into strategies that will improve teacher training in science education.

Summary of Faculty Resources – Priority Area 1

Faculty Position	E	T	R	Status	Justification
Existing faculty resources (your unit and other units)					
Tiffany Heng-Moss		X		Ento	PK-12 Ento Science Edu.
Tom Weissling	X	X		Ento	NU Teach – Ento Science Edu.
John Pederson		X	X	CEHS	NU Teach – Science Literacy
Don Lee		X		Agro	Bio-tech Education
Brad Barker	X			4-H	4-H robotics
Matt Kriefels		X			AG LEC – State Dept of Ag.
Redirected resources					
New resources required					
Science Education Specialists - Elementary	.75		.25		Develop strategies to train elementary teachers on science enrichment education with an emphasis on scientific inquiry in life sciences. Secure grant funding to correlate best practices of teacher training to student engagement. Connect with Agronomy/Horticulture, Entomology, Animal Science and CEHS.
Science Education Specialists - Secondary	.50		.50		Develop strategies to train secondary teachers on scientific inquiry exposing them to the latest research tools and techniques in plant and animal science. Measure best practices of teacher training and student enrollment in college science degree programs. Connect with faculty in plant and animal genetics, plant pathology, soils, AgLEC and CEHS.
Consumer Agri-food Specialist	.75		.25		Translate research on livestock and crop production including genomics, additives, biotechnology for Urban consumers resulting in a better understanding of safe nutritious animal and plant food products
Agri-Tourism Specialist	75.		.25		Develop programming and research strategies to support Ag and Environmental Literacy through Agri-Tourism. Partner with Hospitality Management and Rural Futures.

Southeast Research and Extension Center Priority Area 2

Translational Research Initiative:

Since its very inception, applied research has been an integral part of Extension's educational delivery system. Whether it be through the youth work initiated in Ohio by A. B. Graham or as a result of on-farm demonstrations established by Seaman Knapp, extension educators have long known that engaging clientele in 'hands on' learning is a powerful way to effect behavior change. And the use of applied research is even more critical today than it has been in years past! In fact, today's approach – coined 'translational research' – takes this educational strategy to a new level with even more powerful implications for impacting behavior change.

Based on groundwork laid by the National Institutes of Health (2005), translational research includes two areas of translation. One is the process of applying discoveries generated during research in the laboratory (basic) to the development of trials and studies in environments associated with extension work. The second area is research aimed at enhancing the adoption of best practices in the community of stakeholders and, thereby, developing partnerships for life.

Researchers at Washington State University cited the benefits that come from engaging Extension professionals in translational research. Extension systems also facilitate translational research by brokering relationships so that 1) state and local agencies can collaborate rather than operating as "silos"; 2) campus-based researchers gain access to broad and diverse populations; and 3) community-based educators can inform the practice-to-research feedback loop" (Hill, Becker, Parker, 2008).

Impact on IANR or UNL priority goals

Because of its tremendous diversity in program expertise and its close proximity to Innovation Campus, the Southeast Research and Extension District is uniquely positioned to engage in translational research projects. Translational research is currently underway in a variety of disciplines including agronomy, entomology, food safety and childhood obesity.

If we are to remain competitive we must establish a cadre of well-trained professionals who value being engaged in collaborative research initiatives. We must follow the lead of several major institutions including Texas Agricultural Research and Extension, Cornell University, Penn State and the University of Florida that have programs specifically targeted to conducting translational research.

2.a This initiative will provide opportunities for graduate students to participate in research projects. Currently two grant funded graduate students are fully funded with projects at the Kimmel Research and Education Center. This program could be expanded to support students (8) also at the ARDC and in our Metro offices. Funding would come from foundations and grants.

2.b. RFP's are more frequently emphasizing outreach to stakeholder communities, decision support and science that serves societal needs. Grants to NIFA and NIA would be strengthened with a translational research initiative.

2.c. Translational research projects are a natural bridge between the science labs and Innovation Campus and application in our communities. Specialists focused on the best ways to build this collaboration will strengthen support for research, innovation campus and Extension.

2.d Extension faculty in SREC have expressed enthusiasm for partnering on translational research projects, noting excellence in this principle will earn respect from industry and a higher level of credibility with all clientele.

Summary of Faculty Resources – Priority Area 2

Faculty Position	E	T	R	Status	Justification
Existing faculty resources (your unit and other units)					
Charles Wortman	x		x		Provides leadership for On-farm Research Agronomy/Hort.
Suat Irmak	x		x		Provides leadership for NE Ag Water Mtg. Network/ BSE
Julie Albrecht	x		x		Translational research in food safety Nutrition
Tonia Durden	x		x		Early childhood research CEHS
Redirected resources					
New resources required					
Translational Research Specialist – Science	.5		.5		Develop partnerships and consult on experimental design in hard science areas related to crops and livestock systems and human nutrition. Aid in statistical analysis and research inferences delivered in technical and popular publications. Research new methodologies and new partnerships and measure effectiveness of various experimental designs and collaborations, determining the best practices for translational research.
Translational Research Specialist – Social Science	.5		.5		Develop partnerships and consult on experimental design in social science areas related to education, youth development and human development. Aid in statistical analysis and research inferences delivered in technical and popular publications. Research new methodologies and new partnerships and measure effectiveness of various experimental designs and collaborations, determining the best practices for translational research.

Source: Versch, B., Glewen, K. et. al. (2012). SREC Five-Year Review Committee Report on Translational Research.

Request for Applications for the CTSA program, National Institutes of Health, 2005.

Hill, L., Becky, L., Parker L. Mobilizing Extension as a Partner in Translational Prevention Research. American Public Health Association, 2008).

6 Review Process

Visiting Team Members

Site Visit Schedule

Review Team Members

Program Teams

Questions from SREC Unit

In March 2011, the SREC administrative team met with Dean Dickey and Associate Dean Birnstihl to presented ideas for a focused issue based review for the Southeast District. We recognized that, because SREC is a large urban and rural Extension unit and our faculty work in all of the current Extension program spires, it would seem confusing to rework current extension team statewide plans. We proposed a focused program review on five principles of excellence and one program area of excellence. We set forward four guidelines:

- Develop interdisciplinary discussions around the challenges of delivering programming in the unique setting of the Southeast District and in a rapidly changing environment. We titled these five principles of excellence *Next Generation Extension*. They include: New Delivery Systems, Measuring Return on Investment, Partnerships, Translational Research and Staying on the Cutting Edge.
- Look forward at future trends and needs related to our program of excellence. The program of excellence we chose cuts across all disciplines and serves all audiences *Agricultural and Science Literacy*.
- Align our program efforts with IANR 2025 priorities: Food-Fuel-Water-Landscapes-People and with current Extension spires work plans.
- Develop strategies to meet the IANR 2017 goals including student recruitment, external funding and ties to innovation campus.

At the March 31st Spring District Conference educators discussed key concepts that would contribute to excellence through 2018. They also discussed concepts that youth should understand in science and agriculture literacy. At the November 10th Fall District Meeting teams formed to vision and plan in two areas. These team members contacted stakeholders, studied demographics and developed recommendations to achieve excellence and deliver science literacy programs.

Review Team

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Southeast Research & Extension District

Departmental Review 2012

September 17	**(Christenson Research & Education Building)**	
12:00 pm	Lunch	
1:00 pm	Welcome and Introductions—Susan Williams	
1:15 pm	Charge to External Review Team—IANR Administration	
2:00 pm	Overview of the Southeast Research & Extension District—Susan Williams and Dave Varner	
3:00 pm	Break	
3:15 pm	Southeast District Program Highlights	
4:30 pm	Review Team Discussion and Planning	
September 18	**(Christenson Research & Education Building)**	
8:30 am	Welcome and Morning Instructions—SW/DV	
9:00 am	(Water/Livestock/Crops/Nutrition)	
9:35 am	(Water/Livestock/Crops/Nutrition)	
10:10 am	(Water/Livestock/Crops/Nutrition)	**Science/Agricultural Literacy**
10:10 am	Break	
11:00 am	(Water/Livestock/Crops/Nutrition)	
11:35 pm	Morning Wrap-up—SW/DV	
12:00	Lunch	
12:45 pm	Afternoon Instructions—SW/DV	
1:00 pm	Translational Research	
1:35 pm	Return on Investment	
2:10 pm	Partnerships	
2:45 pm	Break	**Next Generation Extension**
3:00 pm	Staying on the Cutting Edge	
3:35 pm	New Delivery Systems	
4:10 pm	Afternoon Wrap-up—SW/DV	
5:00 pm	Adjourn	
September 19	**(Agricultural Hall – East Campus)**	
8:30 am	External Team convenes to discuss and write	
10:00 am	Break	
10:15 am	Exit Repot to IANR Administrators	
11:30 am	Exit Report to Faculty and Staff via Webinar	
12:00 pm	Lunch for Review Team – East Campus Union	

Unit Review Teams

New Delivery Systems
Soni Cochran
Kayla Colgrove *
Jeanette Friezen
Paul Hay
Dennis Kahl
Katie Larson
Darci McGee
Bob Meduna
Carrie Miller
Colleen Pallas
Sarah Purcell
Mark Simmons
Monte Stauffer
Nicole Stoner
Nancy Urbanec
Deb Weitzenkamp

Measuring Return On Investment
Sarah Browning *
Maureen Burson
Tom Dorn
Barbara Schmidt
John Fech
Mary Ann Holland
Jessica Jones
Jennifer Rees
Michael Rethwisch

Partnerships
Lorene Bartos
Tracy Behnken
Gary Bergman
Mary Frogge
JoAnn Jensen
Eileen Krumbach
Joseph Lemmons
Kristie Nutsch-Fulton
Randy Pryor
Joyce Reich
Phyllis Schoenholz
Tammy Stuhr
Dave Ulferts *
Vernon Waldren
Karen Wobig

Translational Research
Natalia Bjorklund
Gail Brand
Keith Glewen *
Gary Lesoing
Barb Ogg
Gerald Peterson
Lisa Poppe
Connie Reimers-Hild
Rebecca Versch *

Staying on Cutting Edge
Gail Brand
Cindy Brison
Lindsay Chichester
Karna Dam
Sara Ellicott
Jeff Hart
Bobbi Holm
Audra Losey
Amy Peterson
Deanna Vansickel *, **

Agriculture Science Literacy-Crops
Gary Bergman
Tom Dorn
Paul Hay
Joe Lemmons
Gary Lesoing
Colleen Pallas
Jenny Rees
Michael Rethwisch
Brandy VanDeWalle *

Agriculture Science Literacy – Livestock
Tracy Behnken
Lindsay Chichester *, **
Sara Ellicott
JoAnn Jensen
Jessica Jones
Steve Landon
Katie Larson
Darci McGee
Bob Meduna
Kristie Nutsch-Fulton
Gerald Peterson
Jami Rutt
Mark Simmons
Monte Stauffer
Deanna Vansickel
Deb Weitzenkamp

Agriculture Science Literacy-Water
Lorene Bartos
Natalia Bjorklund
Sarah Browning
Soni Cochran
John Fech
Mary Jane Frogge
Keith Glewen
Paul Hay
Bobbi Holm
Dennis Kahl
Barb Ogg
Lisa Poppe
Randy Pryor *
Connie Reimers-Hild
Sharon Skipton *
Nicole Stoner
Vernon Waldren
Gary Zoubek **

Agriculture Science Literacy-Nutrition
Cindy Brison
Kayla Colgrove
Jeanette Friesen
Jeff Hart
Alice Henneman
Kathy Kneifl
Eileen Krumbach
Audra Losey
Diane Mayfield
Amy Peterson
Lyndsay Pohlmeier
Sarah Effken Purcell
Joyce Reich
Carrie Schneider-Miller *
BeckyVersch
Holli Weber
Karen Wobig

*Team Leader
** Steering Committee

Questions for Site Review Team

We would like the team's response to the following four questions for the following Next Generation white papers.

- **New Delivery Systems**
- **Measuring Return On Investment**
- **Partnerships**
- **Translational Research**
- **Staying on the Cutting Edge**

1. ***Does the outside team feel we were on target with our assessment of trends and stakeholder input?***
2. ***What does the team think of the implementation strategies? Did we miss any key strategy?***
3. ***What suggestions do they have in regards to putting these strategies in place?***
4. ***What strengths and weaknesses does the team see on each of these issues and does the team have any recommendations on this effort?***

We would like the team's response to the following four questions for the Science and Ag Literacy program development focus papers.

- **Science Literacy Crops**
- **Science Literacy Livestock**
- **Science Literacy Water**
- **Science Literacy Nutrition**

1. ***Does the outside team feel we were on target with our assessment of current needs and stakeholder input?***
2. ***What does the team think of the key educational concepts suggested? Did we miss any key concept?***
3. ***What suggestions do they have in regards to the variety of delivery strategies and efforts to put these strategies in place?***
4. ***What strengths and weaknesses does the team see on each of these content subject matter pieces and does the team have any recommendations on this effort?***

General Questions

The Southeast Research and Extension District is a strong Extension program unit with significant impacts and serving a large, diverse population base.

1. ***Are we on the right trajectory? Should we work in these topics and with these audiences? Have we clearly and correctly identified the end results?***
2. ***Would the addition of Extension/Research Specialists positions enhance the unit's ability to generate external resources, develop translational research projects and further develop partnerships with departments?***
3. ***Should we dedicate a full FTE or share an FTE with admissions to work with extension educators on student recruitment?***
4. ***Should we move to a more focused model, having educators more exclusively focused on one discipline? Would this ensure that educators are well-trained experts and provide time for them to seek professional development, develop partnerships, seek grant/funding and develop new delivery strategies?***
5. ***How can we be more next generation friendly in all aspects of our business/education model including targeted marketing, customer preference tracking, online payments, online enrollment and learning, brand recognition and cross program promotion?***

Chapter 7 Supporting Materials

Demographics

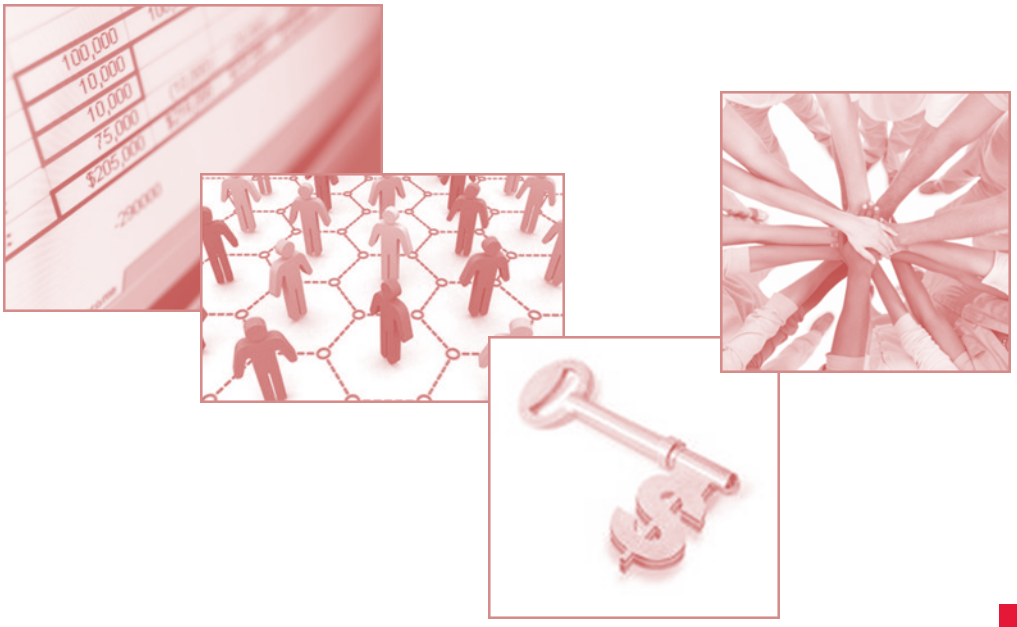
Program Maps

Faculty Directory

Diversity Report

Employee Engagement

Summary of Grants



Southeast Research & Extension Center

IANR

Nebraska Lincoln EXTENSION

Southeast District Demographic Profile
Residents population by age (April 1—complete count) 2010
Source: U.S. Census Bureau—Census 2010

County	Total Pop.	<5		5 - 9		10 - 14		15 - 19		20 - 24		25 -29		30 - 34		35 - 39		40 - 44	
Butler	8,395	492	5.9	581	6.9	616	7.3	559	6.7	310	3.7	386	4.6	411	4.9	444	5.3	478	5.7
Cass	25,241	1,585	6.3	1,800	7.1	1,828	7.2	1,749	6.9	1,071	4.2	1,303	5.2	1,376	5.5	1,557	6.2	1,685	6.7
Clay	6,542	403	6.2	482	7.4	457	7.0	477	7.3	273	4.2	305	4.7	347	5.3	319	4.9	363	5.5
Dodge	36,691	2,500	6.8	2,458	6.7	2,294	6.3	2,402	6.5	2,216	6.0	2,190	6.0	2,145	5.8	2,020	5.5	2,108	5.7
Douglas	517,110	40,081	7.8	38,203	7.4	35,468	6.9	35,363	6.8	38,775	7.5	43,758	8.5	37,435	7.2	33,976	6.6	33,050	6.4
Fillmore	5,890	330	5.6	364	6.2	387	6.6	443	7.5	188	3.2	257	4.4	274	4.7	259	4.4	346	5.9
Gage	22,311	1,386	6.2	1,399	6.3	1,428	6.4	1,371	6.1	1,121	5.0	1,123	5.0	1,153	5.2	1,205	5.4	1,327	5.9
Hamilton	9,124	526	5.8	638	7.0	712	7.8	674	7.4	332	3.6	437	4.8	443	4.9	518	5.7	575	6.3
Jefferson	7,547	426	5.6	472	6.3	436	5.8	421	5.6	291	3.9	387	5.1	364	4.8	392	5.2	417	5.5
Johnson	5,217	278	5.3	267	5.1	283	5.4	244	4.7	251	4.8	347	6.7	402	7.7	340	6.5	310	5.9
Lancaster	285,407	20,171	7.1	18,907	6.6	16,719	5.9	21,186	7.4	30,840	10.8	24,157	8.5	19,783	6.9	17,627	6.2	16,686	5.8
Merrick	7,845	474	6.0	536	6.8	547	7.0	564	7.2	353	4.5	399	5.1	386	4.9	429	5.5	485	6.2
Nemaha	7,248	438	6.0	428	5.9	405	5.6	626	8.6	639	8.8	395	5.4	306	4.2	314	4.3	382	5.3
Nuckolls	4,500	234	5.2	279	6.2	262	5.8	236	5.2	142	3.2	191	4.2	206	4.6	216	4.8	217	4.8
Otoe	15,740	1,008	6.4	1,006	6.4	1,089	6.9	1,002	6.4	711	4.5	802	5.1	808	5.1	910	5.8	911	5.8
Pawnee	2,773	146	5.3	148	5.3	185	6.7	186	6.7	84	3.0	91	3.3	104	3.8	128	4.6	166	6.0
Polk	5,406	322	6.0	365	6.8	390	7.2	327	6.0	170	3.1	211	3.9	263	4.9	301	5.6	332	6.1
Richardson	8,363	425	5.1	480	5.7	527	6.3	549	6.6	318	3.8	384	4.6	370	4.4	419	5.0	448	5.4
Saline	14,200	1,006	7.1	909	6.4	940	6.6	1,279	9.0	1,127	7.9	796	5.6	829	5.8	837	5.9	846	6.0
Sarpy	158,840	13,377	8.4	13,237	8.3	12,011	7.6	10,893	6.9	10,246	6.5	12,620	7.9	11,884	7.5	11,501	7.2	11,295	7.1
Saunders	20,780	1,398	6.7	1,463	7.0	1,523	7.3	1,450	7.0	842	4.1	1,030	5.0	1,117	5.4	1,205	5.8	1,329	6.4
Seward	16,750	1,021	6.1	1,102	6.6	1,120	6.7	1,561	9.3	1,375	8.2	815	4.9	870	5.2	878	5.2	962	5.7
Thayer	5,228	304	5.8	280	5.4	321	6.1	315	6.0	152	2.9	205	3.9	221	4.2	225	4.3	295	5.6
Washington	20,234	1,195	5.9	1,387	6.9	1,516	7.5	1,594	7.9	1,024	5.1	973	4.8	1,037	5.1	1,191	5.9	1,316	6.5
York	13,665	869	6.4	781	5.7	836	6.1	945	6.9	862	6.3	811	5.9	689	5.0	714	5.2	763	5.6
SE District	1,231,047	90,395	7.3	87,972	7.1	82,300	6.7	86,416	7.0	93,713	7.6	94,373	7.7	83,223	6.8	77,925	6.3	77,092	6.3
% State Total	67.4	68.5		68.2		67.1		67.0		72.5		73.1		71.7		70.6		69.8	

University of Nebraska Lincoln EXTENSION

Southeast District Demographic Profile
Residents population by age (April 1—complete count) 2010
Source: U.S. Census Bureau—Census 2010

County	Total Pop.	45 - 49		50 - 54		55 - 59		60 - 64		65-69		70 - 74		75 - 79		80 - 84		85 & over	
Butler	8,395	710	8.5	683	8.1	621	7.4	501	6.0	406	4.8	330	3.9	305	3.6	272	3.2	290	3.5
Cass	25,241	2,147	8.5	2,021	8.0	1,936	7.7	1,580	6.3	1,153	4.6	832	3.3	633	2.5	454	1.8	531	2.1
Clay	6,542	511	7.8	537	8.2	470	7.2	430	6.6	323	4.9	236	3.6	245	3.7	174	2.7	190	2.9
Dodge	36,691	2,649	7.2	2,526	6.9	2,372	6.5	2,071	5.6	1,682	4.6	1,434	3.9	1,291	3.5	1,115	3.0	1,218	3.3
Douglas	517,110	35,609	6.9	34,869	6.7	31,095	6.0	24,553	4.7	16,398	3.2	12,085	2.3	10,262	2.0	8,052	1.6	8,078	1.6
Fillmore	5,890	436	7.4	459	7.8	459	7.8	372	6.3	317	5.4	277	4.7	234	4.0	210	3.6	278	4.7
Gage	22,311	1,737	7.8	1,790	8.0	1,671	7.5	1,274	5.7	1,066	4.8	937	4.2	837	3.8	707	3.2	779	3.5
Hamilton	9,124	748	8.2	771	8.5	677	7.4	574	6.3	413	4.5	334	3.7	281	3.1	224	2.5	247	2.7
Jefferson	7,547	510	6.8	611	8.1	625	8.3	534	7.1	388	5.1	364	4.8	324	4.3	262	3.5	323	4.3
Johnson	5,217	460	8.8	476	9.1	363	7.0	277	5.3	225	4.3	200	3.8	172	3.3	153	2.9	169	3.2
Lancaster	285,407	18,216	6.4	18,754	6.6	17,346	6.1	13,914	4.9	9,221	3.2	6,760	2.4	5,646	2.0	4,671	1.6	4,803	1.7
Merrick	7,845	615	7.8	568	7.2	587	7.5	486	6.2	375	4.8	351	4.5	279	3.6	216	2.8	195	2.5
Nemaha	7,248	489	6.7	548	7.6	514	7.1	461	6.4	316	4.4	285	3.9	237	3.3	220	3.0	245	3.4
Nuckolls	4,500	304	6.8	396	8.8	339	7.5	304	6.8	277	6.2	266	5.9	211	4.7	213	4.7	207	4.6
Otoe	15,740	1,224	7.8	1,295	8.2	1,034	6.6	969	6.2	750	4.8	600	3.8	525	3.3	457	2.9	639	4.1
Pawnee	2,773	178	6.4	222	8.0	208	7.5	207	7.5	163	5.9	156	5.6	130	4.7	133	4.8	138	5.0
Polk	5,406	388	7.2	438	8.1	436	8.1	394	7.3	256	4.7	227	4.2	202	3.7	160	3.0	224	4.1
Richardson	8,363	647	7.7	695	8.3	641	7.7	544	6.5	503	6.0	408	4.9	332	4.0	316	3.8	357	4.3
Saline	14,200	1,011	7.1	985	6.9	859	6.0	701	4.9	540	3.8	388	2.7	402	2.8	324	2.3	421	3.0
Sarpy	158,840	12,182	7.7	10,488	6.6	8,640	5.4	6,922	4.4	4,640	2.9	3,508	2.2	2,510	1.6	1,508	0.9	1,378	0.9
Saunders	20,780	1,819	8.8	1,668	8.0	1,439	6.9	1,277	6.1	927	4.5	744	3.6	637	3.1	498	2.4	414	2.0
Seward	16,750	1,224	7.3	1,236	7.4	1,119	6.7	922	5.5	672	4.0	600	3.6	471	2.8	384	2.3	418	2.5
Thayer	5,228	361	6.9	413	7.9	420	8.0	369	7.1	307	5.9	275	5.3	243	4.6	231	4.4	291	5.6
Washington	20,234	1,755	8.7	1,644	8.1	1,475	7.3	1,286	6.4	859	4.2	650	3.2	519	2.6	394	1.9	419	2.1
York	13,665	987	7.2	1,096	8.0	1,032	7.6	791	5.8	595	4.4	595	4.4	479	3.5	389	2.8	431	3.2
SE District	1,231,047	86,917	7.1	85,189	6.9	76,378	6.2	61,713	5.0	42,772	3.5	32,842	2.7	27,407	2.2	21,737	1.8	22,683	1.8
% State Total	67.4	67.6		65.4		64.9		64.6		62.1		60.5		59.0		57.5		57.7	

Nebraska Lincoln EXTENSION

Southeast District Demographic Profile
Residents population by race (April 1—complete count) 2010
Source: U.S. Census Bureau—Census 2010

	White Alone: Not Hispanic		White Alone: May Be Hispanic		Black Alone: May Be Hispanic		American Indian & Alaska Native alone: May Be Hispanic		Asian alone: May Be Hispanic		Native Hawaiian & Other Pacific Islander alone: May Be Hispanic		Two or More Races: May Be Hispanic		Hispanic or Latino Origin: Any Race	
	Number	%	Number	%	Number	%	Number	%	Number	%	Number	%	Number	%	Number	%
Butler	8,092	96.4	8,192	97.6	24	0.3	11	0.1	27	0.3	0	0.0	57	0.7	195	2.3
Cass	24,083	95.4	24,457	96.9	87	0.3	83	0.3	85	0.3	13	0.1	366	1.5	608	2.4
Clay	5,941	90.8	6,082	93.0	22	0.3	31	0.5	10	0.2	1	0.0	95	1.5	502	7.7
Dodge	32,120	87.5	33,337	90.9	205	0.6	180	0.5	191	0.5	75	0.2	520	1.4	3,689	10.1
Douglas	372,029	71.9	395,025	76.4	60,071	11.6	3,731	0.7	13,755	2.7	394	0.1	14,489	2.8	57,804	11.2
Fillmore	5,619	95.4	5,703	96.8	36	0.6	28	0.5	9	0.2	0	0.0	48	0.8	178	3.0
Gage	21,432	96.1	21,610	96.9	72	0.3	108	0.5	86	0.4	3	0.0	299	1.3	385	1.7
Hamilton	8,839	96.9	8,955	98.1	19	0.2	15	0.2	18	0.2	1	0.0	65	0.7	181	2.0
Jefferson	7,225	95.7	7,323	97.0	24	0.3	27	0.4	18	0.2	2	0.0	91	1.2	200	2.7
Johnson	4,355	83.5	4,546	87.1	278	5.3	58	1.1	71	1.4	0	0.0	26	0.5	435	8.3
Lancaster	240,702	84.3	248,615	87.1	9,920	3.5	2,140	0.7	9,961	3.5	150	0.1	7,885	2.8	16,685	5.8
Merrick	7,405	94.4	7,550	96.2	15	0.2	31	0.4	60	0.8	6	0.1	78	1.0	271	3.5
Nemaha	6,939	95.7	7,026	96.9	63	0.9	19	0.3	31	0.4	2	0.0	71	1.0	133	1.8
Nuckolls	4,333	96.3	4,383	97.4	6	0.1	10	0.2	9	0.2	0	0.0	61	1.4	97	2.2
Otoe	14,499	92.1	14,932	94.9	75	0.5	46	0.3	68	0.4	18	0.1	179	1.1	902	5.7
Pawnee	2,683	96.8	2,708	97.7	9	0.3	4	0.1	8	0.3	0	0.0	34	1.2	35	1.3
Polk	5,186	95.9	5,292	97.9	6	0.1	11	0.2	6	0.1	2	0.0	54	1.0	156	2.9
Richardson	7,830	93.6	7,886	94.3	15	0.2	250	3.0	27	0.3	1	0.0	153	1.8	112	1.3
Saline	10,817	76.2	11,783	83.0	125	0.9	55	0.4	225	1.6	14	0.1	223	1.6	2,870	20.2
Sarpy	133,132	83.8	138,879	87.4	6,321	4.0	733	0.5	3,353	2.1	168	0.1	4,960	3.1	11,569	7.3
Saunders	19,992	96.2	20,201	97.2	71	0.3	53	0.3	83	0.4	1	0.0	221	1.1	415	2.0
Seward	16,152	96.4	16,315	97.4	60	0.4	53	0.3	72	0.4	2	0.0	180	1.1	272	1.6
Thayer	5,077	97.1	5,120	97.9	12	0.2	8	0.2	16	0.3	0	0.0	48	0.9	76	1.5
Washington	19,405	95.9	19,673	97.2	122	0.6	44	0.2	54	0.3	8	0.0	197	1.0	419	2.1
York	12,725	93.1	12,980	95.0	158	1.2	58	0.4	60	0.4	7	0.1	139	1.0	555	4.1
SE District	996,612	81.0	1,038,573	84.4	77,816	6.3	7,787	0.6	28,303	2.3	868	0.1	30,539	2.5	98,744	8.0
% State Total	**66.45**		**66.03**		**93.88**		**42.26**		**87.64**		**67.87**		**77.29**		**58.99**	

Nebraska Lincoln EXTENSION

Southeast District Demographic Profile
Total, Urban, Rural, Rural Farm and Rural Nonfarm Population
Source: U.S. Census Bureau—Census 2010

County	Total Pop.	Urban Pop.	% Urban	Rural Pop.	% Rural	Rural Farm Pop.	% Rural Farm	% Rural Farm (Rural Pop. Only)	Pop. Rural Nonfarm	% Rural Nonfarm
Adams	31,151	24,131	77.5	7,020	22.5	880	2.8	12.5	6,140	19.7
Butler	8,767	2,586	29.5	6,181	70.5	1,506	17.2	24.4	4,675	53.3
Cass	24,334	7,149	29.4	17,185	70.6	1,471	6.0	8.6	15,714	64.6
Clay	7,039	0	0.0	7,039	100.0	788	11.2	11.2	6,251	88.8
Dodge	36,160	25,769	71.3	10,391	28.7	1,352	3.7	13.0	9,039	25.0
Douglas	463,585	452,245	97.6	11,340	2.4	747	0.2	6.6	10,593	2.3
Fillmore	6,634	0	0.0	6,634	100.0	882	13.3	13.3	5,752	86.7
Gage	22,993	12,894	56.1	10,099	43.9	2,018	8.8	20.0	8,081	35.1
Hall	53,534	45,064	84.2	8,470	15.8	1,248	2.3	14.7	7,222	13.5
Hamilton	9,403	4,233	45.0	5,170	55.0	1,050	11.2	20.3	4,120	43.8
Jefferson	8,333	4,299	51.6	4,034	48.4	1,036	12.4	25.7	2,998	36.0
Johnson	4,488	0	0.0	4,488	100.0	705	15.7	15.7	3,783	84.3
Lancaster	250,291	226,460	90.5	23,831	9.5	3,077	1.2	12.9	20,754	8.3
Merrick	8,204	3,293	40.1	4,911	59.9	1,014	12.4	20.6	3,897	47.5
Nemaha	7,576	3,517	46.4	4,059	53.6	778	10.3	19.2	3,281	43.3
Nuckolls	5,057	0	0.0	5,057	100.0	760	15.0	15.0	4,297	85.0
Otoe	15,396	7,059	45.8	8,337	54.2	1,413	9.2	16.9	6,924	45.0
Pawnee	3,087	0	0.0	3,087	100.0	701	22.7	22.7	2,386	77.3
Polk	5,639	0	0.0	5,639	100.0	963	17.1	17.1	4,676	82.9
Richardson	9,531	4,428	46.5	5,103	53.5	942	9.9	18.5	4,161	43.7
Saline	13,843	5,883	42.5	7,960	57.5	1,409	10.2	17.7	6,551	47.3
Sarpy	122,595	113,638	92.7	8,957	7.3	722	0.6	8.1	8,235	6.7
Saunders	19,830	3,945	19.9	15,885	80.1	2,509	12.7	15.8	13,376	67.5
Seward	16,496	6,333	38.4	10,163	61.6	1,641	9.9	16.1	8,522	51.7
Thayer	6,055	0	0.0	6,055	100.0	871	14.4	14.4	5,184	85.6
Washington	18,780	7,357	39.2	11,423	60.8	1,732	9.2	15.2	9,691	51.6
Webster	4,061	0	0.0	4,061	100.0	718	17.7	17.7	3,343	82.3
York	14,598	7,890	54.0	6,708	46.0	1,397	9.6	20.8	5,311	36.4
SE District	1,197,460	968,173	80.9	229,287	19.1	34,330	2.9	15.0	194,957	16.3
SE % of Total	**70.0**	**81.2**		**44.2**		**38.6**			**45.4**	

Nebraska Lincoln EXTENSION

Southeast District 4-H Participation by County

SREC ES237's	ADAMS	BUTLER	CASS	CLAY	DODGE	SARPY	DOUGLAS	FILLMORE	GAGE	HALL	HAMILTON	JEFFERSON	JOHNSON	LANCASTER	MERRICK	NEMAHA	NUCKOLLS	OTOE	PAWNEE	POLK	RICHARDSON	SALINE	SAUNDERS	SEWARD	THAYER	WASHINGTON	WEBSTER	YORK
How do young people participate in 4-H?																												
Organized 4-H Comm. Clubs	394	203	572	187	296	1257	130	401	340	108	69	127	1213	191	224	94	302	106	255	0	286	784	394	155	497	251	303
Organized 4-H In-School Clubs	1	0	52	0	0	3716	13	20	2	57	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Organized 4-H After-School Clubs	0	0	0	0	0	655	0	0	0	0	0	0	65	0	0	0	0	2	0	0	0	0	0	89	0	0	0
Military 4-H Clubs	0	0	0	0	0	302	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total 4-H Memberships	395	203	624	187	296	5930	143	421	342	165	69	127	1278	191	224	94	302	108	255	0	286	784	394	244	497	251	303
4-H Special Interest / Short-Term Programs	1,123	164	33	397	365	3715	535	930	1368	157	172	359	14758	125	1358	341	1164	337	771	210	611	204	128	524	371	885	2
4-H Overnight Camp. Programs	57	0	0	0	0	0	0	24	0	0	30	0	122	18	0	5	0	0	11	0	17	0	16	3	6	0	0
4-H Day Camp. Programs	3	0	0	0	0	0	21	0	0	0	44	57	0	243	60	0	0	92	672	0	0	0	127	28	0	0	0
Total youth - 4-H Camping Programs	60	0	0	0	0	0	21	24	0	0	74	57	122	261	60	5	0	92	683	0	17	0	143	31	6	0	0
School Enrichment Programs	3,638	28	4225	0	1295	14603	205	354	1172	0	118	0	10922	0	109	0	280	28	1257	455	904	104	0	304	1060	0	92
Individual Study / Mentoring / Family Learning Programs	185	20	20	17	0	145	0	274	94	94	0	6	351	60	5	33	0	18	107	0	19	65	0	0	72	10	0
After-School Programs Using 4-H Curricula / Staff Training	0	0	17	34	0	7810	0	8	321	0	46	0	0	0	27	49	29	30	0	0	37	0	69	0	0	0	100
Instructional TV/Video/Web Programs	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	8	0	0	0	0	0	0	0	0	0	0
Total (with duplications included)	5,401	415	4919	635	1956	32203	904	2011	3297	416	479	549	27431	637	1783	522	1783	613	3073	665	1874	1157	734	1103	2006	1146	497
Ethnicity																											
Hispanic/Latino	537	10	69	13	227	2718	41	10	1120	2	11	2	2205	8	2	5	42	18	56	0	428	7	8	2	33	17	22
Not Hispanic/Latino	3115	394	2364	373	1724	29386	856	1497	2118	404	367	308	20452	282	1027	138	1085	440	857	267	1092	803	532	78	1304	371	453

SREC ES237's	What Do We Know About 4-H Participants?																			Who works with 4-H Participants / 4-H Activities?		
		Kdg.	1st	2nd	3rd	4th	5th	6th	7th	8th	9th	10th	11th	12th	Post HS	Not in School	Special	Total grade:	Male	Female		Total # of Adult Vol.	Total # of Youth Vol.
ADAMS		258	205	115	313	829	743	282	71	95	57	50	47	45	219	323	0	3652	1748	1904		435	45
BUTLER		3	8	22	30	37	40	56	61	52	30	23	17	16	8	1	0	404	191	213		36	0
CASS		314	247	200	367	226	202	149	120	206	94	92	108	95	11	2	0	2433	1236	1197		166	31
CLAY		4	9	12	31	29	108	97	29	21	10	18	12	5	1	0	0	386	185	201		94	9
DODGE		320	146	62	326	113	61	38	29	43	44	593	52	39	21	64	0	1951	925	1025		281	30
DOUGLAS SARPY		1249	1688	3163	3967	5714	5896	2269	3481	2647	853	513	299	176	26	162	1	32104	16015	16089		1324	12
FILLMORE		49	22	98	97	289	145	52	22	18	26	25	20	10	10	21	0	897	440	457		42	66
GAGE		0	0	132	457	190	248	102	77	78	68	67	46	38	11	0	0	1514	689	825		250	3
HALL		247	149	241	240	843	328	566	121	97	86	83	49	39	110	39	0	3238	1429	1809		193	0
HAMILTON		32	35	28	47	114	54	41	16	12	9	13	4	0	0	1	0	406	186	220		33	157
JEFFERSON		0	0	105	64	85	86	14	7	7	7	1	1	2	0	0	0	379	195	183		110	31
JOHNSON		3	7	10	32	59	75	36	14	14	17	14	15	10	4	0	0	310	130	180		40	0
LANCASTER		1606	1903	4815	5122	2009	4327	956	639	521	185	134	140	110	104	86	0	22657	11003	11654		1382	182
MERRICK		5	18	23	22	43	31	34	16	22	16	24	7	11	6	12	0	290	121	169		50	1
NEMAHA		16	86	71	82	76	78	65	83	79	96	86	100	105	1	5	0	1029	557	472		113	18
NUCKOLLS		8	4	9	15	8	24	22	10	8	7	7	4	9	6	2	0	143	70	73		27	5
OTOE		30	10	64	179	136	211	98	182	33	48	38	44	31	3	20	0	1127	519	608		297	42
PAWNEE		9	7	6	16	10	324	20	16	22	10	5	4	6	1	2	0	458	214	244		91	10
POLK		182	118	79	125	107	42	63	35	35	13	16	44	47	2	5	0	913	410	503		317	14
RICHARDSON		47	49	63	1	22	3	1	3	39	3	1	1	2	0	32	0	267	134	133		44	0
SALINE		32	284	193	223	311	119	165	44	34	23	29	33	23	0	7	0	1520	751	769		257	35
SAUNDERS		26	53	46	59	74	129	75	71	70	63	48	41	38	9	7	1	810	397	413		155	0
SEWARD		51	52	66	72	55	64	41	35	24	26	14	16	12	7	5	0	540	253	287		88	34
THAYER		80	38	73	73	84	73	18	32	37	32	29	34	36	2	39	0	680	300	380		54	0
WASHINGTON		64	152	78	387	129	122	85	61	45	33	98	50	23	2	8	0	1337	628	709		100	10
WEBSTER		2	2	7	24	14	14	28	39	54	46	38	104	13	2	1	0	388	186	202		144	3
YORK		39	29	30	39	32	164	32	21	18	19	15	15	5	0	8	9	475	233	242		69	0

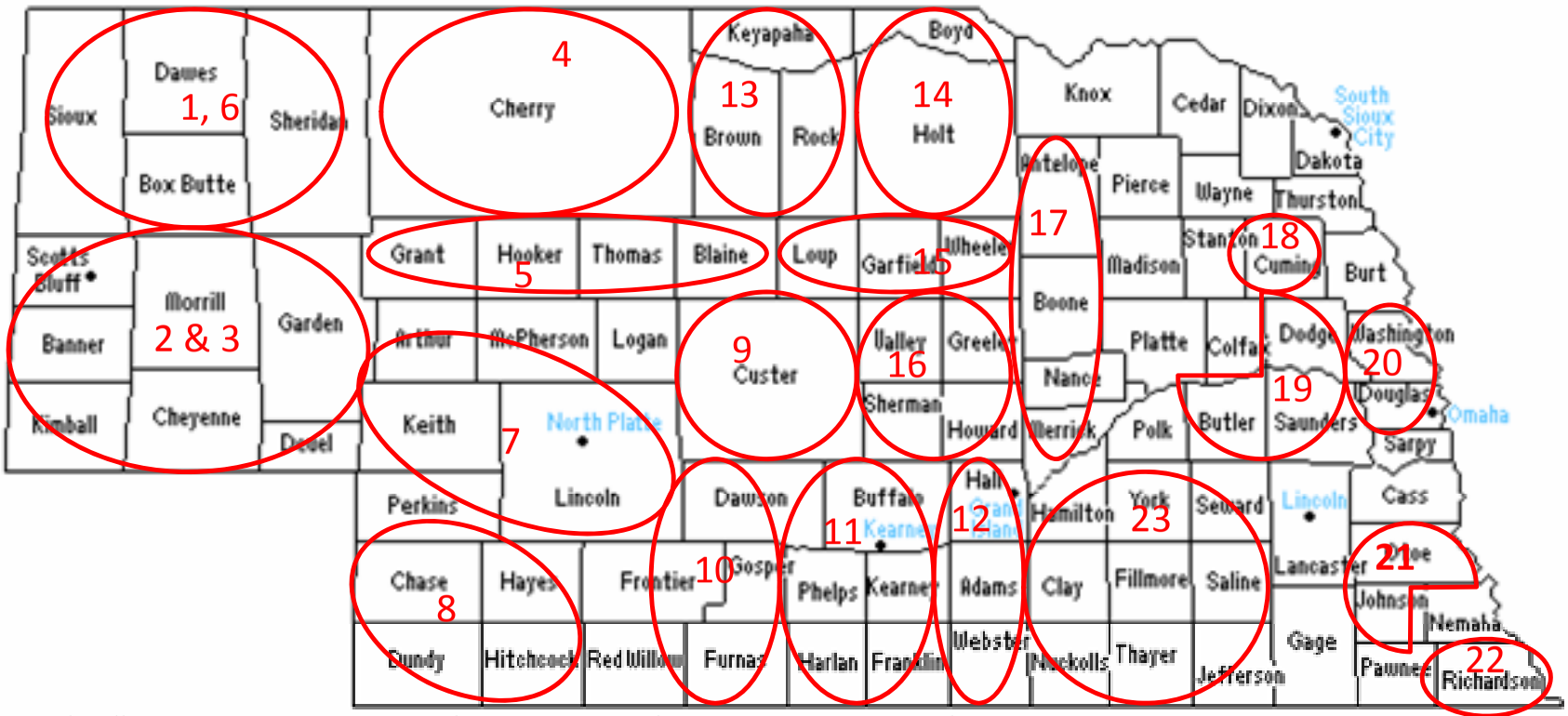
University of Nebraska Lincoln EXTENSION

Southeast District Agricultural Data

County	Reg. Wells	# Wells Domestic	# Wells Irrigation	Irrigated Acres	2011 Production Corn (Bu)	2011 Production Soybeans	Number of Farms	Land in Farms	Avg Farm Size	Mkt Value Products	Crops	Livestock	Mkt Value of Sales	Avg Gov. Pmts	Total Gov. Payments
Butler	2,488	551	2,199	117,973	27,002,000	6,049,820	809	356,151	440	182,574,000	121,187,000	61,387,000	225,679	9,780	6,797,000
Cass	1,387	587	67	2,959	19,136,000	6,304,060	682	280,920	412	98,152,000	88,160,000	9,992,000	143,918	8,350	4,008,000
Clay	3,225	3,052	162	218,108	31,981,000	5,615,960	454	365,099	804	261,650,000	129,318,000	132,332,000	576,322	18,250	6,296,000
Dodge	3,367	596	2,043	116,051	25,213,000	6,029,100	715	338,475	473	250,397,000	129,409,000	120,988,000	350,205	9,171	5,063,000
Douglas	4,388	713	414	13,804	4,765,000	1,268,800	362	84,374	233	46,341,000	43,844,000	2,497,000	128,012	6,990	1,230,000
Fillmore	3,296	161	3,239	223,522	35,296,000	6,838,240	478	362,155	758	223,774,000	151,911,000	71,863,000	468,147	17,781	7,130,000
Gage	2,188	692	812	59,275	23,404,000	6,928,830	1,280	540,226	422	173,805,000	108,486,000	65,319,000	135,785	10,250	10,711,000
Hamilton	4,099	336	4,119	257,748	38,978,000	6,034,200	550	319,115	580	235,493,000	155,747,000	79,746,000	428,170	15,357	6,941,000
Jefferson	1,353	245	957	80,979	16,028,000	4,267,200	601	325,577	542	131,698,000	77,938,000	53,760,000	219,132	12,098	5,722,000
Johnson	568	129	242	11,281	6,517,000	2,042,550	541	175,500	324	43,996,000	25,015,000	18,981,000	81,323	8,180	3,804,000
Lancaster	6,101	2,784	536	15,553	19,284,000	5,917,300	1,698	421,409	248	125,909,000	98,824,000	27,085,000	74,152	6,048	6,864,000
Merrick	6,981	441	6,254	163,806	19,933,000	3,613,660	473	247,927	524	198,000,000	95,055,000	102,945,000	418,604	11,242	3,811,000
Nemaha	506	124	157	8,439	12,381,000	3,548,250	449	212,686	474	72,133,000	59,564,000	12,569,000	160,652	8,347	3,097,000
Nuckolls	1,622	209	1,111	61,115	16,931,000	3,447,360	405	307,096	758	108,054,000	67,409,000	40,645,000	266,801	13,055	4,686,000
Otoe	749	271	71	4,150	17,392,000	5,675,000	804	322,146	401	103,600,000	80,189,000	23,411,000	128,855	7,811	5,061,000
Pawne	139	46	5	4,620	5,693,000	1,982,300	489	217,669	445	47,003,000	33,342,000	13,661,000	96,122	10,636	4,456,000
Polk	2,600	257	2,583	164,566	21,623,000	4,654,420	505	269,195	533	254,739,000	99,459,000	155,280,000	504,435	10,688	4,564,000
Richardson	498	242	57	2,180	15,928,000	4,554,680	707	279,148	395	97,914,000	66,406,000	31,508,000	138,492	8,047	4,868,000
Saline	2,047	305	1,500	81,850	22,169,000	5,355,280	702	298,304	425	116,785,000	91,503,000	25,282,000	166,363	9,293	5,595,000
Sarpy	2,518	920	164	11,844	5,118,000	1,665,860	360	100,835	280	68,104,000	35,126,000	32,978,000	189,178	7,031	1,631,000
Saunders	3,795	1,124	1,267	93,428	29,652,000	8,007,680	1,131	427,682	378	230,830,000	136,360,000	94,470,000	204,093	8,344	7,451,000
Seward	2,907	820	2,012	127,433	22,552,000	6,138,240	893	332,597	372	221,946,000	118,078,000	103,868,000	248,540	9,747	6,784,000
Washington	1,331	671	143	18,479	12,645,000	3,317,400	762	217,306	285	131,435,000	65,452,000	65,983,000	172,487	6,451	3,193,000
York	4,257	269	4,329	254,711	37,286,000	6,212,400	549	346,137	630	278,436,000	165,893,000	112,543,000	507,169	16,856	7,215,000
SREC	62,410	15,545	34,443	2,113,874	486,907,000	115,468,590	16,399	7,147,729	464	3,702,768,000	2,243,675,000	1,459,093,000	251,360	10,408	126,978,000
Nebraska	204,257	31,489	123,866	8,558,559	1,536,000,000	258,405,000	47,712	45,480,358	953	15,506,035,000	6,843,325,000	8,662,710,000	324,992	11,091	387,340,000
SREC % of State Totals	31%	49%	28%	25%	32%	45%	34%	16%	49%	24%	33%	17%	77%	94%	33%

University of Nebraska Lincoln EXTENSION

Beef Systems



Panhandle
1. Cindy Tusler
2. Aaron Berger
3. Tom Holman
4. Jay Jenkins
5. Bethany Johnston
6. Scott Cotton

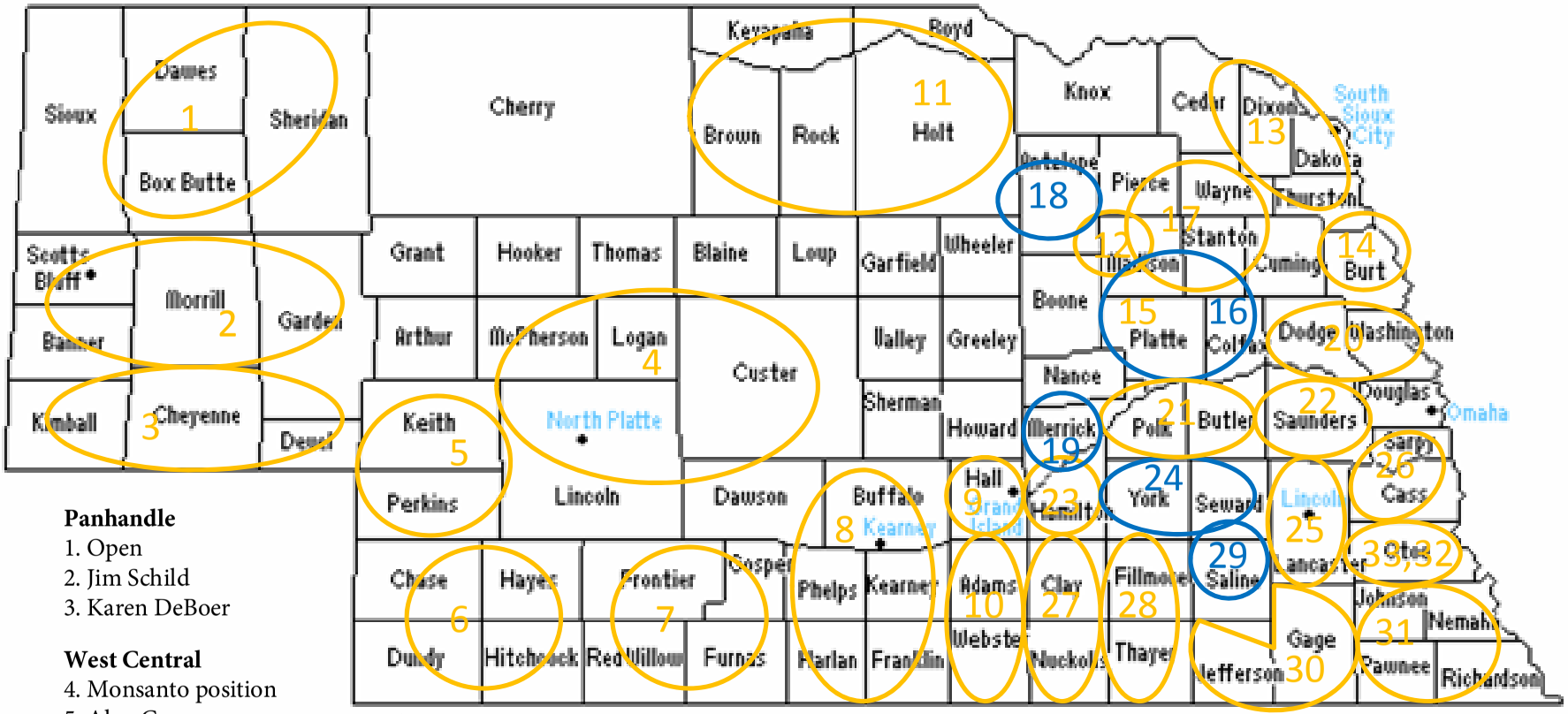
West Central
7. Randy Saner
8. Brian Strauch
9. Troy Walz
10. Bruce Treffer
11. Brent Plugge
12. Duane Lienemann

Northeast
13. Denny Bauer
14. Gary Stauffer
15. Steve Niemeyer
16. Heather DePra
17. Steve Prichard
18. Larry Howard

Southeast
19. Sara Ellicott
20. Steve Tonn
21. Jessica Jones
22. Lindsay Chichester
23. Darci McGee

University of Nebraska Lincoln EXTENSION

Crops For the Future (Farm Management)
Water, Climate and Environment - Crops



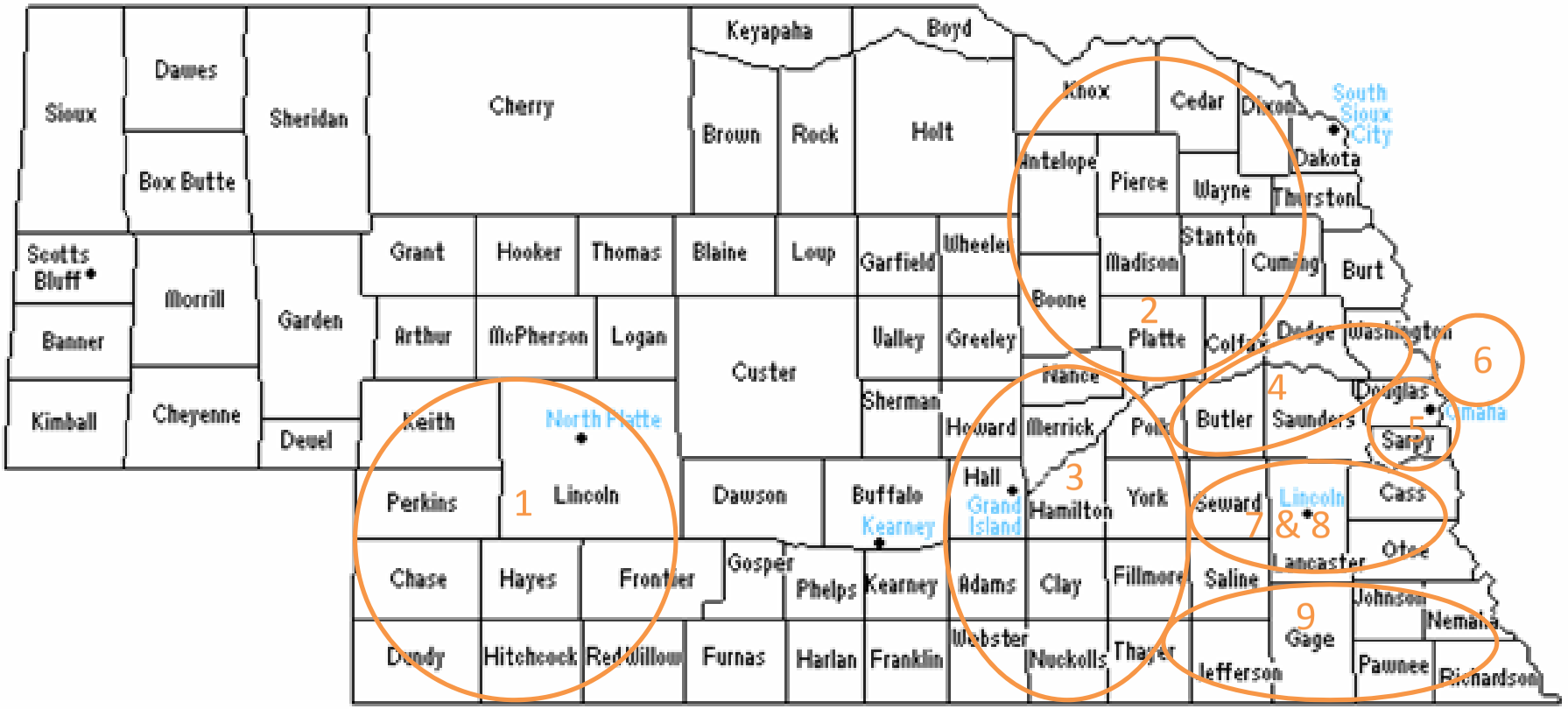
Panhandle
1. Open
2. Jim Schild
3. Karen DeBoer

West Central
4. Monsanto position
5. Alan Corr
6. Robert Tigner
7. Brian Strauch
8. Chuck Burr
9. Mark Hinze
10. Ron Seymour

Northeast
11. Amy Timmerman
12. Tim Lemmons
13. Keith Jarvi
14. John Wilson
15. Allan Vyhnalek
16. Aaron Nygren
17. Wayne Ohnesorg
18. Open

Southeast
19. Open
20. Open
21. Mike Rethwisch
22. Keith Glewen
23. Todd Whitney
24. Gary Zoubek
25. Tom Dorn
26. Joe Lemmons
27. Jennifer Rees
28. Brandy VanDeWalle
29. Randy Pryor
30. Paul Hay
31. Gary Lesoing
32. Vaughn Hammond
33. Monte Vandeveer

Water, Climate, & Environment - Community

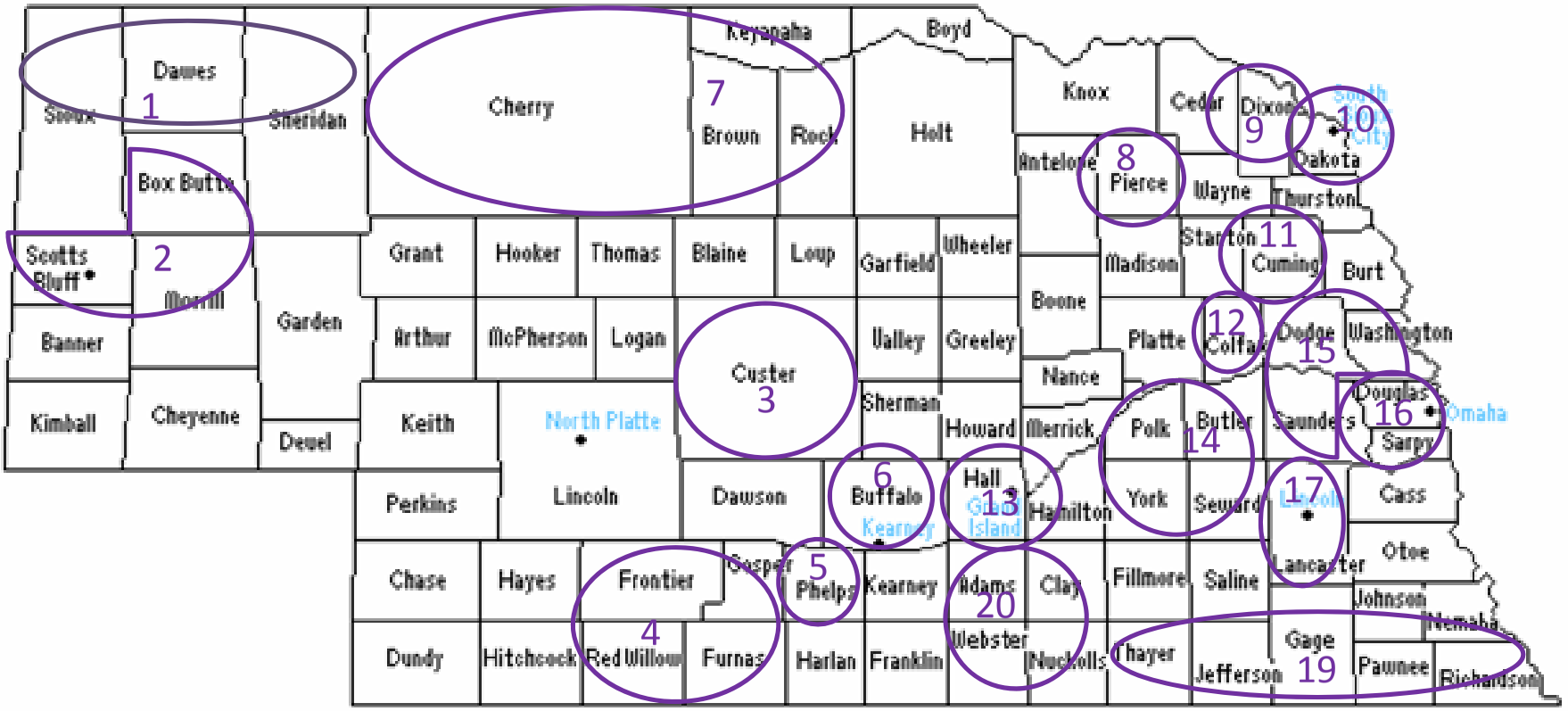


West Central
1. David Lott

Northeast
2. Kelly Feehan

Southeast
3. Elizabeth Killinger
4. Natalia Bjorklund
5. John Fech
6. Dennis Ferraro
7. Sarah Browning
8. Sharon Skipton
9. Nicole Stoner

Food, Nutrition and Health



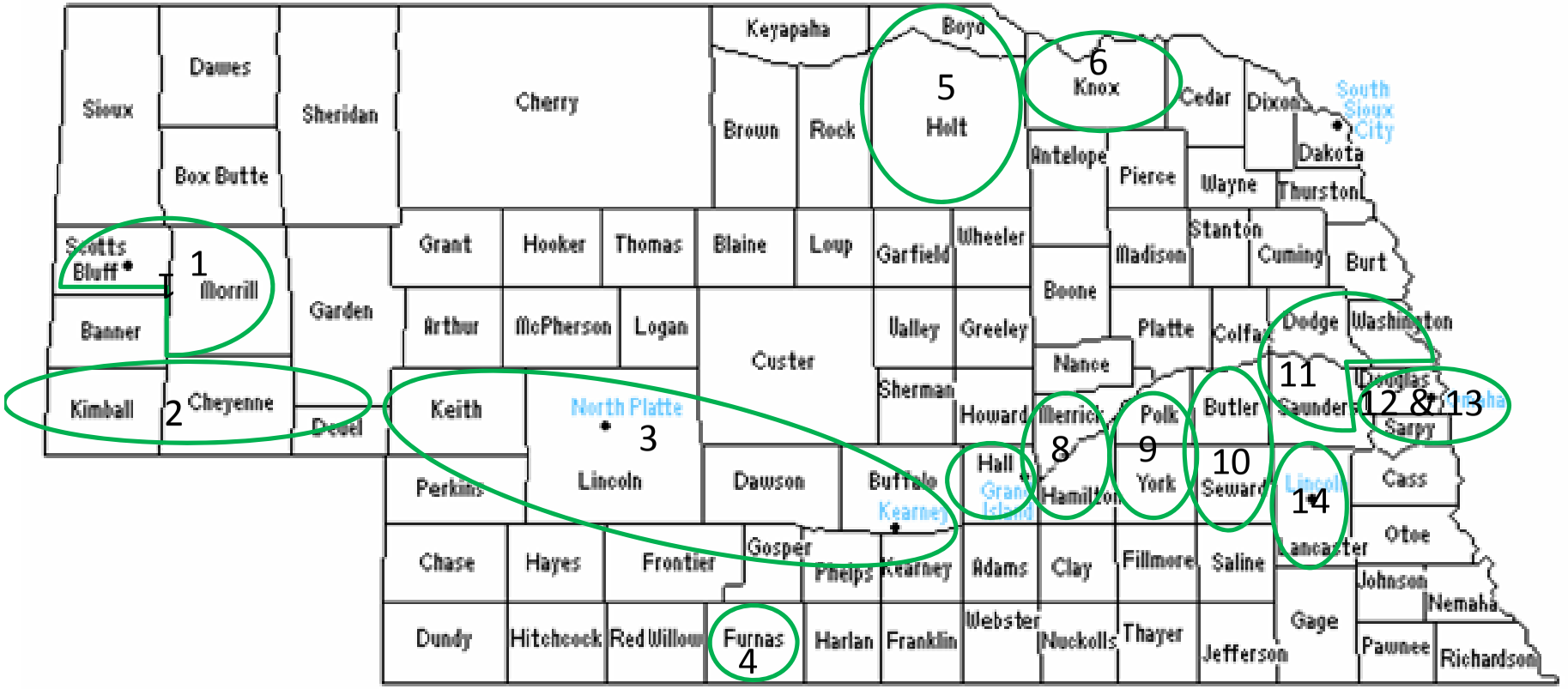
Panhandle
1. Jamie Goffena
2. Jeanne Murray

West Central
3. Nancy Frecks
4. Jessye Goertz
5. Carol Schwarz
6. Sharry Nielson
13. Cami Wells (.5)
20. Katie Tranel

Northeast
7. Pat Jones
8. Ann Fenton
9. Sandy Johnson
10. Carol Larvick
11. Deb Schroeder
12. Susan Hansen

Southeast
14. Amy Peterson
15. Rebecca Versch
16. Cindy Brison
17. Alice Henneman
19. Kayla Colgrove

Learning Child



Panhandle
1. Jackie Guzman
2. Open

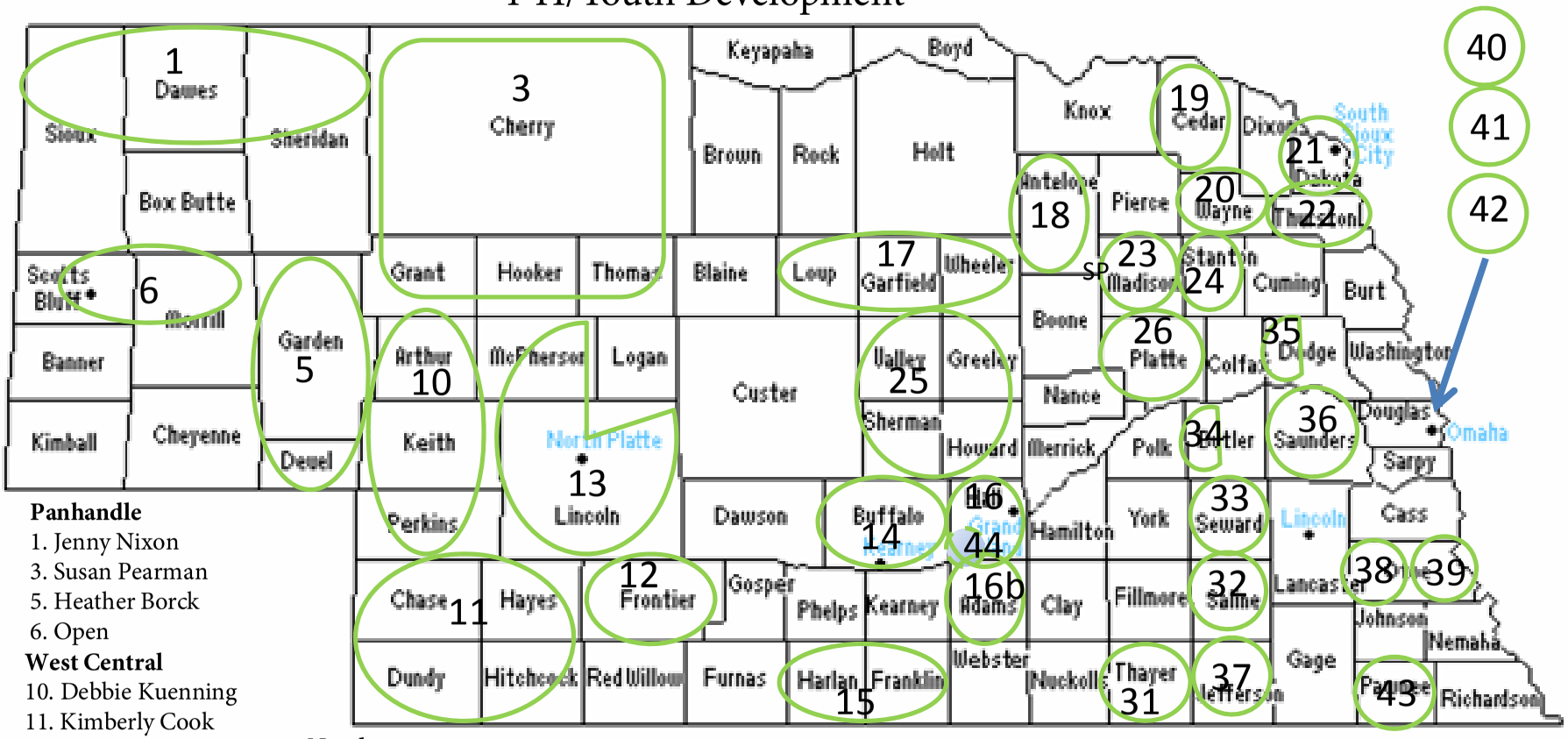
West Central
3. Leslie Crandall
4. Mary K Warner
7. Open

Northeast
5. Ladonna Werth
6. Ruth Vonderohe

Southeast
8. Jeanette Friesen
9. Eileen Krumbach
10. Gail Brand
11. Lisa Poppe
12. Mary Nelson
13. Deanna Vansickel
14. Maureen Burson

University of Nebraska Lincoln EXTENSION

4-H/Youth Development



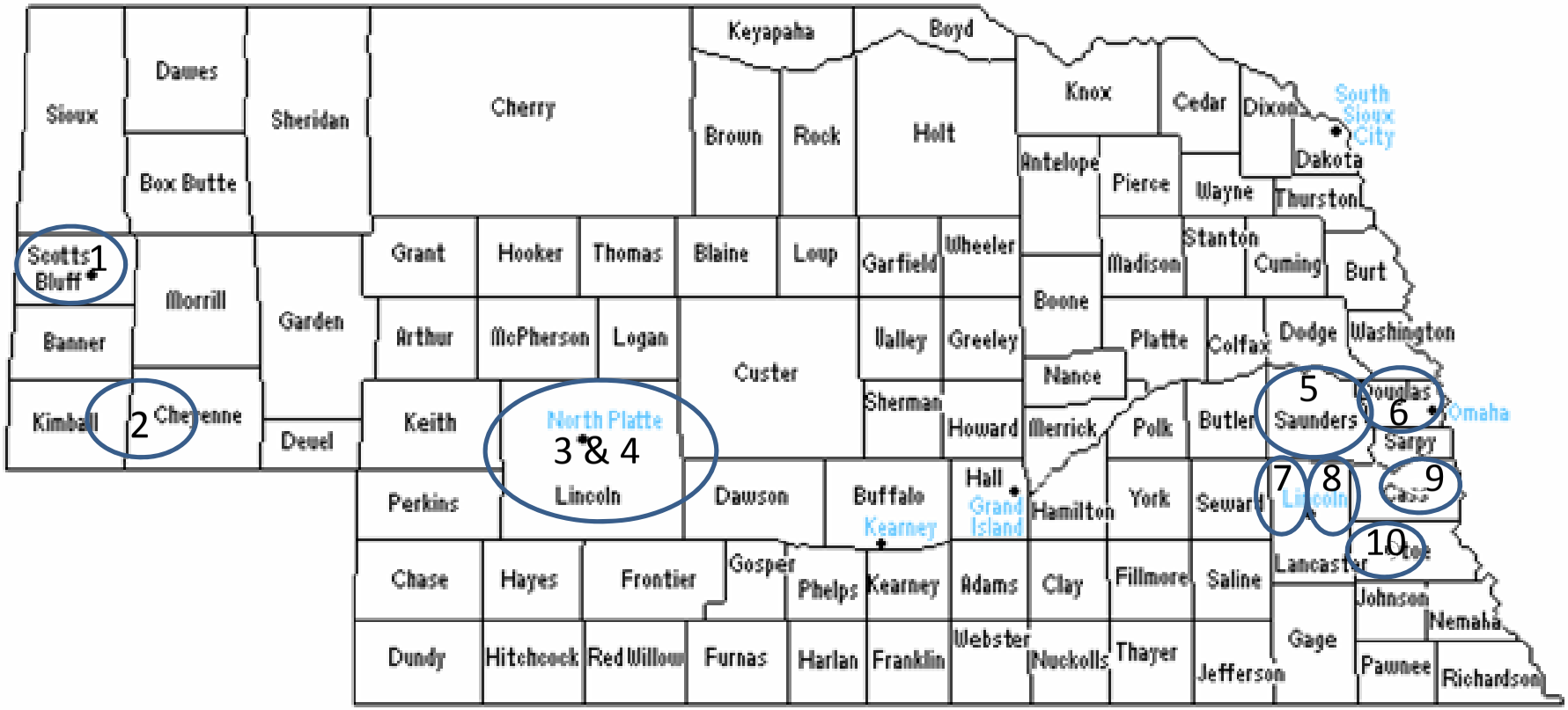
Panhandle
1. Jenny Nixon
3. Susan Pearman
5. Heather Borck
6. Open

West Central
10. Debbie Kuenning
11. Kimberly Cook
12. Barb Scharf
13. Brenda Aufdenkamp
14. Brian Bosshamer
15. Rhonda Herrick
29. D'Ette Scholtz
30. Elizabeth Maricle

Northeast
17. Janet Hanna
18. Anita Hall
19. Jackie Steffen
20. Amy Topp
21. Angela Abts
22. Jennifer Hansen
23. Sherry Lee
24. Kim Bearnes
25.Kayla Hinrichs
26. Lisa Kaslon

Southeast
31. Phyllis Schoenholtz
32. LeanneManning
33. Dennis Kahl
34. Katie Larson (.5)
35. Tracy Behnken (.5)
36. Karna Dam
37. Barb Schmidt
38. Sarah Purcell
39. Deb Weitzenkamp
40. Carol McNulty
41. Monte Stauffer
42. Mark Simmons
43. Open

Special Assignments



Panhandle

1. Open, 0.4 (4-H Coordinator)
2. Connie Hancock (Entrepreneurship)

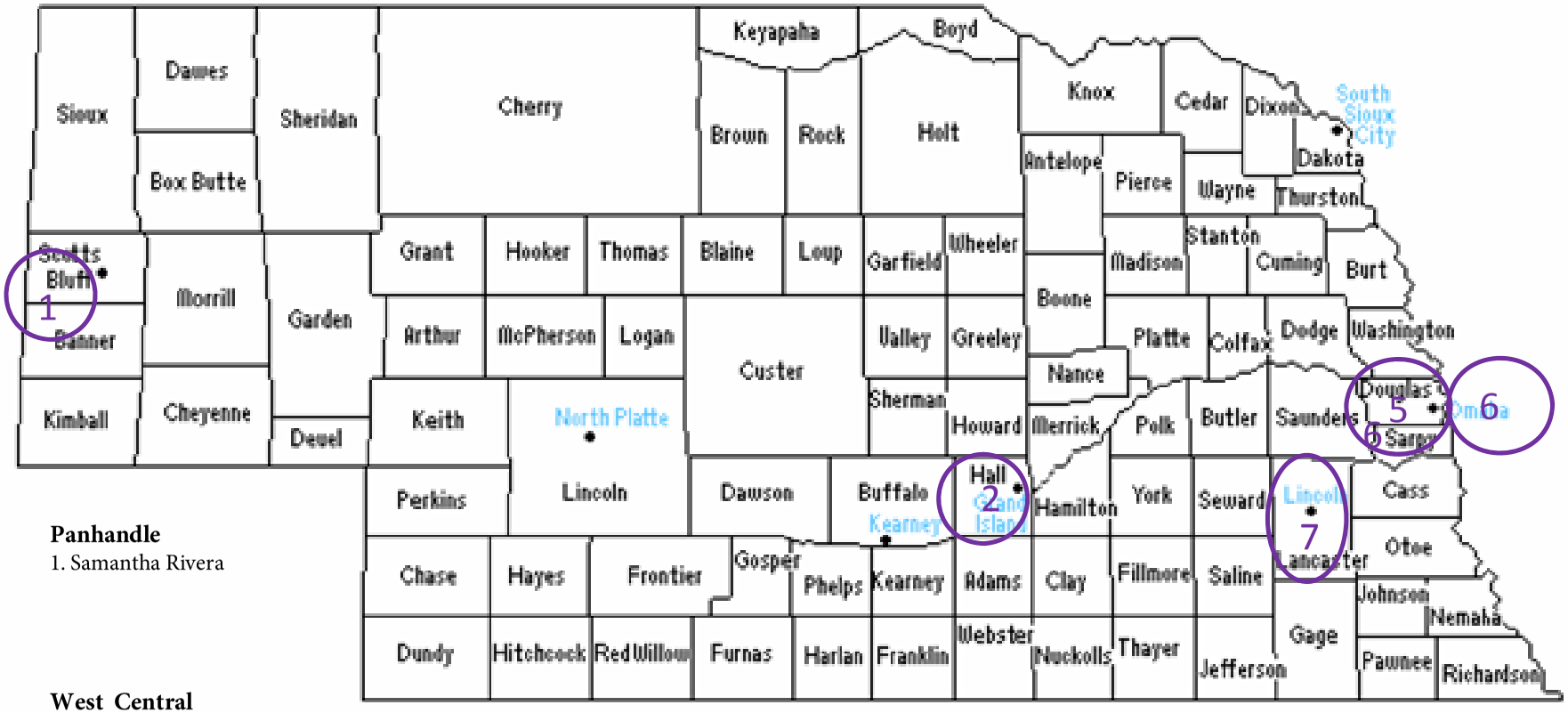
West Central

3. Shane Potter (4-H Coordinator)
4. David Boxler (Entomologist)

Southeast

5. Bob Meduna (District 4-H Coordinator)
6. Vernon Waldren (Urban Unit Leader)
7. Gary Bergman (Urban Unit Leader)
8. Jeff Hart (Native American)
9. Mary Ann Holland (MediCare)
10. Connie Riemers-Hild (Entrepreneurship)

Nutrition Education Program (Grant Funded)



Panhandle
1. Samantha Rivera

West Central
2. Cami Wells (.5)

Southeast
5. Carrie Schneider-Miller
6. Audra Losey (.5)
7. Karen Wobig

There are 24 NEP Assistants located in the SREC District

UNIVERSITY OF NEBRASKA
SOUTHEAST RESEARCH AND EXTENSION CENTER

Agricultural Research and Development Center (ARDC)
1071 County Road G Room D
Ithaca, NE 68033-2234
Phone: 402-624-8037
From Campus: 7-8037
Fax: 402-624-8010

Staff
Kay Klundt 402-624-8084
Kim Novotny……402-624-8037
Randy Cash (GNBC) 402-624-8018
Marnie Cihal (GNBC)..... 402-624-8036
William Duly (GNBC) 402-624-8086
Lisa Hastings (GNBC)..... 402-624-8039
Sarah Divis (GNBC)..... 402-624-8035
Cheryl Sheary (GNBC) 402-624-8002

Campus Calls dial 7-xxxx

Williams, Susan – Director 402-624-8063
Varner, David – Associate Director 402-624-8022
Meduna, Robert - Extension Educator, District 4-H Youth Program Coordinator 402-624-8064
Polak, Galen – Computer Systems Support 402-624-8051
Schultz, Karen – GNBC Assistant Business Manager 308-632-1259
Urban, Ruby – GNBC Business Manager 402-624-8009
Virgl Amy – Project Coordinator 402-624-8030

UNL East Campus

Hart, Jeff - Extension Educator, Special Projects (Rm. 107 MUSH, 68583-0714) 402-472-4743
Rasby, Rick - Beef Specialist (Rm. C204 Animal Science, 68583-0908) 402-472-6477
Skipton, Sharon - Water Quality Educator (105 MUSH, 68583-0714) 402-472-3662
Wortmann, Charles - Nutrient Management Specialist (58C Filley Hall, 68583-0951)..... 402-472-2909

Kimmel Education & Research Center

5985 G Road
Nebraska City, NE 68410
Phone: 402-873-3166
Fax: 402-873-3218

Staff
Deb Heidzig 402-873-3166

Reimers-Hild, Connie - Extension Educator, *Unit Leader* 402-873-3166
Hammond, Vaughn - Extension Educator 402-873-3166
Weitzenkamp, Deborah

Southeast Extension District

County	Educators	Managerial Professionals*	Support Staff
Butler 451 N. 5th Street David City, NE 68632-1666 Phone: 402-367-7410 Fax: 402-367-3329	**Rethwisch, Michael,** *Unit Leader* **Larson, Katelyn**		**Barlean, Barb** **Fuxa, Carol** **Lachance, Michael**
Cass 8400 144th Street, Suite 100 Weeping Water, NE 68463-1932 Phone: 402-267-2205 Fax: 402-267-5375	**Holland, Mary Ann**, *Unit Leader* **Lemmons, Joseph**	**Mayfield, Diane**	**Hlavac, Deborah** **Puls, Diana**
Clay 111 West Fairfield Clay Center, NE 68933-1499 Phone: 402-762-3644 Fax: 402-762-3600	**Rees, Jennifer ¶ ◆**, *Unit Leader* **Strasheim, Cynthia**	**Weber, Holli**	**Peshek, Deanna**

¶ Student Recruitment Contact Person
◆ Primary mailing address
* Includes County Youth Coordinators and Aides

County	Educators	Managerial Professionals*	Support Staff
Dodge 1206 W. 23rd Street Fremont, NE 68025-2504 Phone: 402-727-2775 Fax: 402-727-2777	**Poppe, Lisa**, *Unit Leader* **Behnken, Tracy** ¶ **Bjorklund, Natalia**	**Kneifl, Katherine**	**Lacy, Heidi** **Spath, Mary**
Douglas-Sarpy 8015 W. Center Road Omaha, NE 68124-3175 Phone: 402-444-7804 Fax: 402-444-6430 NEP Department: 402-444-3768	**Waldren, Vernon**, *Unit Leader* **Vansickel, Deanna,** *Unit Leader* **Brison, Cindy** **Fech, John** **Ferraro, Dennis** **Holm, Bobbi** **Losey, Audra** **McNulty, Carol** **Nelson, Mary** **Schneider-Miller, Carrie**	**Anderson, Mary Anna** **Carroll, Marci** **Cheever, Pam** **Cue, Kathleen** **Elbasheer, Amnia** **Fritz, Carol** **Jennings, Euwanda** **Johnson, Sarah** **Kilpatrick, John** **Larkin, Lisa** **Myer, Michele**	**Cue, Ken** **Dierks, Mary** **Dye, Linda** **Hubbard, Laurie** **Raber, Carmen** **Waldren, Cheri'** **Walker, Sonja**
South Office South, 501 Olson Dr., Suite 5 Papillion, NE 68046 Phone: 402-444-4237 Fax: 402-593-4353	**Simmons, Mark** ¶ **Stauffer, Monte**	**Raneri, Cathy** **Schultz, Cathy** **Sell, Catherine** **Urbanec, Nancy** **Wright, Rachel**	
5600 Kearney Avenue Lincoln, NE 68507 Phone: 402-440-9580		**Kaiser, Beth**	
Fillmore 972 G Street Geneva, NE 68361-2005 Phone: 402-759-3712 Fax: 402-759-3764	**VanDeWalle, Brandy** ¶, *Unit Leader*		**Brinkman, Mary**
Gage 1115 West Scott Beatrice, NE 68310-3514 Phone: 402-223-1384 Fax: 402-223-1370	**Hay, Paul** ¶, *Unit Leader* **Colgrove, Kayla** **Haxton, Nicole**	**Esau, Jane**	**Bellows, Sandra** **Lase, Patty**
Hamilton 1111 13th Street Ste 6 - Courthouse P.O. Box 308 Aurora, NE 68818-0308 Phone: 402-694-6174 Fax: 402-694-6175	**Friesen, Jeanette**, *Unit Leader* **Whitney, Todd** ◆	**Russell, Katherine(Kae)**	**Jones, RaeAnn**
Jefferson 517 F Street Fairbury, NE 68352-3487 Phone: 402-729-3487 Fax: 402-729-3078	**Schmidt, Barbara**, *Unit Leader*	Schwartz, Connie	**Kerwood, Joann**

¶ Student Recruitment Contact Person
◆ Primary mailing address
* Includes County Youth Coordinators and Aides

County	Educators	Managerial Professionals*	Support Staff
Johnson 3rd & Broadway - Courthouse P.O. Box 779 Tecumseh, NE 68450-0779 Phone: 402-335-3669 Fax: 402-335-3684	**Jones, Jessica** ¶, *Unit Leader*		
Lancaster 444 Cherrycreek Road, Suite A Lincoln, NE 68528-1591 Phone: 402-441-7180 Fax: 402-441-7148	**Bergman, Gary** ¶, *Unit Leader* **Bartos, Lorene** **Browning, Sarah** **Burson, Maureen** **Dorn, Tom** **Henneman, Alice** **Ogg, Barbara** **Wobig, Karen**	**Abbott, Mary** **Anderson, Tracy** **Cochran, Soni** **Cruickshank, Marty** **Frogge, Mary Jane** **Hlava, Teri** **Jedlicka, Vicki** **Kowalski, Lisa** **Meador, Cole** **Meinke, Mardel** **Neth, Kristen** **Rasmussen, Julie** **Smith, David** **Wies, Jim** **Willeford, Dana**	**Branson, Pam** **Coffey, Kay** **Covault, Deanna** **Evasco, Karen** **Robertson, Konnie** **Wedding, Karen**
Merrick 1510 18th Street P.O. Box 27 Central City, NE 68826-0027 Phone: 308-946-3843 Fax: 308-946-2487	**Friesen, Jeanette**, *Unit Leader*	**Stuhr, Tammy,** *Regional*	**Hostler, Cindie** **Jefferson, Courtney**
Nemaha 1824 N Street, Suite 102 Auburn, NE 68305-2395 Phone: 402-274-4755 or 4756 Fax: 402-274-4756	**Lesoing, Gary**, *Unit Leader*	**Reich, Joyce** **Nutsch-Fulton, Kristie**	**Beasterfield, Beverly** **Durant, Debra**
Otoe 180 Chestnut P.O. Box 160 Syracuse, NE 68446-0160 Phone: 402-269-2301 Fax: 402-269-2062	**Purcell, Sarah** ¶, *Unit Leader* **Vandeveer, Monte**		**Griepenstroh, Kelsey** **Ortiz, Melinda**
Pawnee 625 6th Street - Courthouse P.O. Box 391 Pawnee City, NE 68420-0391 Phone: 402-852-2970 Fax: 402-852-2970			**Hinrichsen, Janet**
Polk 400 Hawkeye P.O. Box 215 Osceola, NE 68651-0215 Phone: 402-747-2321 Fax: 402-747-2124	**Peterson, Amy**, *Unit Leader*	**Pallas, Colleen**	**Langemeier, Karen**
Richardson 1700 Stone, Courthouse Falls City, NE 68355-2033 Phone: 402-245-4324 Fax: 402-245-4990	**Chichester, Lindsay**, *Unit Leader*	**Rutt, Jami**	**Fritz, Kerry**

¶ Student Recruitment Contact Person
◆ Primary mailing address
* Includes County Youth Coordinators and Aides

County	Educators	Managerial Professionals*	Support Staff
Saline 306 West Third P.O. Box 978 Wilber, NE 68465-0978 Phone: 402-821-2151 Fax: 402-821-3398	**Pryor, Randy**, *Unit Leader* **Manning, Leanne**	**Stehlik, Eric**	**Hajek, Lou** **Vales, Becky**
Saunders 1071 County Road G, Room B Ithaca, NE 68033-2234 Phone: 402-624-8030 Fax: 402-624-8010	**Dam, Karna ¶,** *Unit Leader* **Glewen, Keith** **Ellicott, Sara**	**Kneifl, Katherine**	**Ankersen, Sharron** **Dunbar, Cheryl** **Rojas, Alyssa**
Seward 216 S. 9th Street Seward, NE 68434-2424 Phone: 402-643-2981 Fax: 402-643-6574	**Brand, Gail**, *Unit Leader* **Kahl, Dennis** **Pekarek, Katie**		**Greckel, Nancy** **Hamling, Lori** **Koranda, Ginny**
Southern Plains Nuckolls 825 S. Main Nelson, NE 68961-8113 Phone: 402-225-2381 Fax: 402-225-2382	**Schoenholz, Phyllis,** *Unit Leader* **McGee, Darci ◆**	**Fangmeier, Crystal**	**Stichka, Jean**
Thayer 225 N 4th Room 104 Hebron, NE 68370-1598 Phone: 402-768-7212 Fax: 402-768-7213	**Schoenholz, Phyllis ◆,** *Unit Leader* **McGee, Darci**	**Fangmeier, Crystal ◆** **Mussman, Kaye**	**Kerns, Brenda**
Washington 597 Grant Street, Suite 200 Blair, NE 68008 Phone: 402-426-9455 Fax: 402-426-3577	**Versch, Rebecca,** *Unit Leader* **Tonn, Steve**	**Jensen, JoAnn** **Kneifl, Kathy** **Landon, Steve**	**Saville, Debbie** **Snow, Mary**
York 2345 Nebraska Avenue York, NE 68467-1104 Phone: 402-362-5508 Fax: 402-362-5509	**Zoubek, Gary ,** *Unit Leader* **Krumbach, Eileen**	**Peterson, Gerald**	**Stahr, Susan** **Stanley, Stephanie**

¶ Student Recruitment Contact Person
◆ Primary mailing address
***** Includes County Youth Coordinators and Aides

Engaging Our Clientele: Diversity
Accomplishments Since The 2006 Southeast District Review

For our 2006 review, the following factors of diversity were examined within the Southeast Extension District (SREC): age, race/ethnicity/culture, and socioeconomic statuses. The issue of diversity was viewed from an external and internal perspective and recommendations were made to assure we teach a diverse audience. In the past five years SREC staff has adapted their programming and established partnerships that have enabled them to reach more diverse audiences. The following is a snap shot of how SREC Staff are addressing diversity within their communities.

Programs address diversity:

- "The Culture of Poverty"
- "Leading Locally," teaches Global Innovation and Intergenerational Dialogue.
- "Working with Groups, Introduction to Community," where age, culture, and gender are discussed as it relates to leadership and community development.

- **Programs are adapted:**

- EARTH University Extension Interns developed and adapted programs that could be used with Hispanic populations in the Grand Island area.
- Parents Forever, added culturally sensitive language to their teaching materials.
- Teaching materials were developed and delivered to help native English speakers to understand the culture and language of native Spanish speakers.
- Pesticide trainings were moved in order for the program to be held at a handicapped accessible location.
- The Pork Quality Assurance programs now provide a Spanish text book.
- Horticulture programs were adapted for individuals who were only able to do container gardening due to disabilities.
- Facilities have been adapted to accommodate handicap youth at the fair.
- Countless teaching materials have been translated into Spanish.
- Programs are being delivered using translators.

- **Partnerships have been established with ….**

- People's Health Center to provide nutrition education for non-English speaking families.
- Farm Service Agency to reach all producers.
- Agribility to reach those with handicaps.
- The Golf Course Superintendents of America was established to distribute teaching materials that help native English speakers to understand the culture and language of native Spanish speakers.
- Center for People in Need to translate bed bug materials into Korean and other languages.
- Lincoln Public School (LPS) Bilingual Liaison Program, LSP social workers, and LPS school nurses.

Employee Engagement

The Southeast District Advisory Committee meets quarterly with the District Director to discuss issues important to the success of our educational programs and our work environment. Members represent the different geographic areas of the District and represent a balance of program interests, length of service, gender, age, rank and appointment type. In 2003 the committee began to use results of the Gallup self study to establish projects to enhance the growth and wellness and satisfaction of employees. In the 2006 review the committee discussed two key goals:

- Involve a wide variety of faculty and staff on important projects to complete the goals set out in the 5 year program review
- Provide regular communication towards our progress on these goals. Communication should be a mixture of written communication, large group meetings, regional meetings and one on one conversation.

During the winter of 2012 the Advisory Committee decided to survey the faculty and staff on several of the issues that were identified in the Gallup Study. They sent a series of quantitative and qualitative questions via email and discussed the written comments to develop an action plan. Feedback showed that most faculty feel appreciated and utilized for their subject matter expertise, however many of the respondents didn't feel their organization was fair and lacked trust in the immediate organization.

The Southeast District Advisory Committee made the following recommendations.

- District administration would be more accessible and more visible to district personnel through visits or on-campus availability.
- Provide more unit leader training to new unit leaders or other interested unit leaders looking for fresh ideas or ways to improve the unit.
- Provide opportunities for county support staff to visit campus and meet people who assist in answering questions. Provide training opportunities.
- Implement a recognition program that would help give some emphasis to assistants and office staff rather than predominately educators and specialists.

1. I know I can share confidential information with one or more of my colleagues.

#	Answer	Response	%
1	Strongly Disagree	4	5%
2	Disagree	7	8%
3	Neutral	14	16%
4	Agree	42	48%
5	Strongly Agree	20	23%
	Total	**87**	**100%**

Mean 3.77 Standard Deviation 1.04 and Variance 1.09

2. As an employee I feel that my immediate organization is fair and just to all.

#	Answer	Response	%
1	Strongly Disagree	4	5%
2	Disagree	23	26%
3	Neutral	22	25%
4	Agree	31	36%
5	Strongly Agree	7	8%
	Total	**87**	**100%**

Mean 3.16 Variance 1.11 Standard Deviation 1.06

3. I know my organization appreciates my contributions.

#	Answer	Response	%
1	Strongly Disagree	5	6%
2	Disagree	8	9%
3	Neutral	19	22%
4	Agree	38	44%
5	Strongly Agree	17	20%
	Total	**87**	**100%**

Mean 3.62 Variance 1.17 Standard Deviation 1.08

4. My supervisor or unit leader or direct report acknowledges and utilizes my strengths.

#	Answer	Response	%
1	Strongly Disagree	5	6%
2	Disagree	5	6%
3	Neutral	17	20%
4	Agree	37	43%
5	Strongly Agree	23	26%
	Total	**87**	**100%**

Mean 3.78 Variance 1.17 Standard Deviation 1.08

5. I am aware and engaged in the planning processes that affect my work environment and programming.

#	Answer	Response	%
1	Strongly Disagree	4	5%
2	Disagree	6	7%
3	Neutral	16	18%
4	Agree	47	54%
5	Strongly Agree	14	16%
	Total	**87**	**100%**

Mean 3.70 Variance 0.96 Standard Deviation 0.98

Southeast Research and Extension Grants

Grant activity has grown since 2001 from a low of 100,000 to a high of over 1 million dollars in FY' 11. Business center support for grant activities includes assistance with grant applications, grant budget management, hiring persons funded on grants and monitoring salary savings expenditures.
The following pages detail grant activity for the unit by faculty and project beginning 7/1/2005 through 6/30/2012. Educators are increasing their grant activity each year through partnerships with communities, agencies, industry, commodity groups and working with campus specialists from UNL and other land grant institutions.

FY' 06	**$ 491,045**
FY' 08	**$ 895,397**
FY' 09	**$ 542.756**
FY' 10	**$ 904,010**
FY' 11	**$1,252,347**
FY' 12	**$ 686,030**

University of Nebraska - Lincoln
Details of all Proposals, Grants, Contracts and Gifts Awarded

Awards received in the period of 07/01/2005 - 06/30/2006

Submitted through Southeast Research and Extension Center

Title/PI	Budget Period/Award %	Agency Name	Awarded Amount	Cat
IANR-Cooperative Extension				
Southeast Research and Extension Center				
Solid Waste Education	07/01/2005 - 06/30/2006	City of Lincoln		
Gary Bergman	100%		$11,990	PL
Lincoln Housing Authority Nutrition Educ...	09/01/2005 - 08/31/2006	Lincoln Housing Authority		
Maureen Burson	100%		$10,519	PL
Lincoln Action Program Early Head Start/...	02/01/2006 - 01/31/2007	Lincoln Action Program		
Maureen Burson	100%		$20,485	PL
Urban Lead & Water Quality Protection	05/25/2004 - 06/30/2007	Ne Environmental Trust		
John Fech	25%		$5,583	PS
Urban Lead & Water Quality Protection En...	12/27/2004 - 12/31/2006	Ne Dept Environmental Quality		
John Fech	25%		$3,625	PS
Urban Lead & Water Qual Protection	07/01/2005 - 06/30/2006	Papio-Missouri River NRD		
John Fech	25%		$3,750	PL
Nebraska No-Till Conference 2006	10/01/2005 - 09/30/2006	Ne Soybean Board		
Keith Glewen	100%		$7,000	PI
2005 Nebraska Soybean Day & Machinery Ex...	10/01/2005 - 09/30/2006	Ne Soybean Board		
Keith Glewen	100%		$5,000	PI
Soybean Solution Days 2006	10/01/2005 - 09/30/2006	Ne Soybean Board		
Keith Glewen	100%		$17,000	PI
Soybean Management Field Days 2006	10/01/2005 - 09/30/2006	Ne Soybean Board		
Keith Glewen	75%		$58,447	PI
Project Morning Star - Capacity Subgrant...	08/01/2005 - 07/31/2006	Nebraska Indian Community College		
Jeffrey Hart	100%		$20,355	PV
University of Nebraska-Lincoln Multicult...	12/15/2005 - 12/14/2010	Dept of Agriculture-CSREES		
Jeffrey Hart	10%		$12,000	SF
Diverse Youth-Adult Partnerships in Rura...	01/01/2006 - 06/30/2007	National 4-H Council		
Jeffrey Hart	100%		$25,000	PA
Farmers and Ranchers College	07/01/2005 - 06/30/2006	Ne Dept Agriculture		
Terence Hejny	100%		$7,500	PS
ARDC Agro-Environmental Trail	07/01/2004 - 09/30/2005	Natl Fish & Wildlife Foundation		
Donald Levis	100%		$10,000	PA
Urban Lead & Water Quality Protection	05/25/2004 - 06/30/2007	Ne Environmental Trust		
Carrie Schneider-Miller	25%		$5,583	PS
Urban Lead & Water Quality Protection En...	12/27/2004 - 12/31/2006	Ne Dept Environmental Quality		
Carrie Schneider-Miller	25%		$3,625	PS
Urban Lead & Water Qual Protection	07/01/2005 - 06/30/2006	Papio-Missouri River NRD		
Carrie Schneider-Miller	25%		$3,750	PL
Nebraska 4-H Military Clubs	10/01/2003 - 11/30/2006	Kansas State University		
Mark Simmons	100%		$30,000	PV
Operation: Military Kids	10/01/2005 - 09/30/2006	Kansas State University		
Mark Simmons	100%		$50,000	PV

Urban Lead & Water Quality Protection	05/25/2004 - 06/30/2007	Ne Environmental Trust		
Sharon Skipton	25%		$5,583	PS
Urban Lead & Water Quality Protection En...	12/27/2004 - 12/31/2006	Ne Dept Environmental Quality		
Sharon Skipton	25%		$3,625	PS
Urban Lead & Water Qual Protection	07/01/2005 - 06/30/2006	Papio-Missouri River NRD		
Sharon Skipton	25%		$3,750	PL
Omaha Lakes Extension Coordinator	03/06/2006 - 12/31/2008	Ne Dept Environmental Quality		
Steven Tonn	100%		$80,000	PS
Urban Lead & Water Quality Protection	05/25/2004 - 06/30/2007	Ne Environmental Trust		
Vernon Waldren	25%		$5,583	PS
Urban Lead & Water Quality Protection En...	12/27/2004 - 12/31/2006	Ne Dept Environmental Quality		
Vernon Waldren	25%		$3,625	PS
Urban Lead & Water Qual Protection	07/01/2005 - 06/30/2006	Papio-Missouri River NRD		
Vernon Waldren	25%		$3,750	PL
Second-Chance Walk Project	02/01/2006 - 07/30/2006	Saint Francis Medical Center		
Cami Wells	100%		$2,491	PO
Alpha Upsilon Chapter/Epsilon Sigma Phi...	07/01/2005 - 06/30/2006	NU Foundation		
Susan Williams	100%		$500	PU
Adams County Miscellaneous Programs	07/01/2005 - 06/30/2006	Dow AgroSciences		
Susan Williams	100%		$2,500	PI
Kimmel Foundation Extension Education Su...	04/01/2006 - 06/30/2006	NU Foundation		
Susan Williams	100%		$225	PU
Kimmel Foundation Extension Technologist...	05/01/2006 - 06/30/2007	NU Foundation		
Susan Williams	100%		$68,200	PU
		Totals for Southeast Research and Extension Center:	$491,045	
		Totals for IANR-Cooperative Extension:	$491,045	
		Grand Total:	$491,045	

University of Nebraska - Lincoln
Details of all Proposals, Grants, Contracts and Gifts Awarded

Awards received in the period of 07/01/2006 - 06/30/2007

Submitted through Southeast Research and Extension Center

Title/PI	Budget Period/Award %	Agency Name	Awarded Amount	Cat
IANR-Cooperative Extension				
Southeast Research and Extension Center				
Solid Waste Education	07/01/2006 - 06/30/2007	City of Lincoln		
Gary Bergman	50%		$12,378	PL
Urban Lead & Water Quality Protection En...	12/27/2004 - 12/31/2007	Ne Dept Environmental Quality		
John Fech	25%		$3,875	PS
Urban Lead & Water Qual Protection	07/01/2006 - 06/30/2007	Papio-Missouri River NRD		
John Fech	25%		$3,750	PL
MUD Public Water Conservation Demo	02/01/2007 - 01/31/2008	Metropolitan Utilities District		
John Fech	34%		$4,824	PI
Survive Strive Thrive Project	07/01/2006 - 06/30/2007	NU Foundation		
Marilyn Fox	100%		$3,183	PU
Health Rocks-Healthy Life Curr Dev	06/01/2007 - 10/31/2009	National 4-H Council		
Marilyn Fox	0%		$0	PA
Growing Corn Responsibly In-Field Traini...	07/01/2006 - 06/30/2007	Ne Corn Board		
Keith Glewen	100%		$17,000	PS
Nebraska No-Till Conference 2007	10/01/2006 - 09/30/2007	Ne Soybean Board		
Keith Glewen	100%		$7,000	PI
Ne Soybean Day & Machinery Expo 06	10/01/2006 - 09/30/2007	Ne Soybean Board		
Keith Glewen	100%		$5,000	PI
Soybean Management Field Days 2007	10/01/2006 - 09/30/2007	Ne Soybean Board		
Keith Glewen	100%		$77,929	PI
Soybean Solution Days 2007	10/01/2006 - 09/30/2007	Ne Soybean Board		
Keith Glewen	100%		$17,000	PI
Project Morning Star - Capacity	08/01/2006 - 07/31/2007	Nebraska Indian Community College		
Jeffrey Hart	100%		$20,355	PV
Tri-County WIB Youth Resource Map	10/01/2006 - 09/30/2007	Ne Dept Labor		
Jeffrey Hart	50%		$11,516	PS
Youth Resource Map & Website Dev	01/01/2007 - 12/31/2008	Ne Dept Labor		
Jeffrey Hart	50%		$9,203	PS
Diverse Youth-Adult Partnerships 07	01/01/2007 - 12/31/2007	National 4-H Council		
Jeffrey Hart	100%		$25,000	PA
Farmers and Ranchers College	07/01/2006 - 06/30/2007	Ne Dept Agriculture		
Terence Hejny	100%		$5,000	PS
Solid Waste Education	07/01/2006 - 06/30/2007	City of Lincoln		
Donald Janssen	50%		$12,378	PL
Extension Programming Needs for Butler C...	07/01/2006 - 06/30/2007	Agrimar Corporation		
Michael Rethwisch	100%		$5,500	PI
Douglas Co Club Possible	07/01/2006 - 08/31/2007	Douglas Co Health Department		
Joan Sather	100%		$8,800	PL
Urban Lead & Water Quality Protection En...	12/27/2004 - 12/31/2007	Ne Dept Environmental Quality		
Carrie Schneider-Miller	25%		$3,875	PS

Urban Lead & Water Qual Protection	07/01/2006 - 06/30/2007	Papio-Missouri River NRD		
Carrie Schneider-Miller	25%		$3,750	PL
Basic e-Govt & Access e-Govt Train	01/16/2007 - 01/16/2008	Ne State Records Board		
Phyllis Schoenholz	100%		$24,541	PS
Nebraska 4-H Military Clubs	12/01/2006 - 09/30/2007	Kansas State University		
Mark Simmons	100%		$70,000	PV
Operation Military Kids	03/01/2007 - 09/30/2007	Kansas State University		
Mark Simmons	100%		$50,197	PV
Urban Lead & Water Quality Protection En...	12/27/2004 - 12/31/2007	Ne Dept Environmental Quality		
Sharon Skipton	25%		$3,875	PS
Urban Lead & Water Qual Protection	07/01/2006 - 06/30/2007	Papio-Missouri River NRD		
Sharon Skipton	25%		$3,750	PL
Advancing Onsite Wastewater Treatment In...	09/27/2006 - 06/30/2010	Ne Dept Environmental Quality		
Sharon Skipton	15%		$38,961	PS
MUD Public Water Conservation Demo	02/01/2007 - 01/31/2008	Metropolitan Utilities District		
Sharon Skipton	33%		$4,682	PI
Extension Watershed Coordinator	03/01/2007 - 04/30/2008	Ne Dept Environmental Quality		
Steven Tonn	100%		$80,000	PS
Radon, Biologicals, Mold NE Homes	01/01/2007 - 05/30/2007	Ne Dept Health & Human Serv		
Rebecca Versch	50%		$2,000	PS
Urban Lead & Water Quality Protection En...	12/27/2004 - 12/31/2007	Ne Dept Environmental Quality		
Vernon Waldren	25%		$3,875	PS
Urban Lead & Water Qual Protection	07/01/2006 - 06/30/2007	Papio-Missouri River NRD		
Vernon Waldren	25%		$3,750	PL
HUD Omaha Lead Site	11/01/2006 - 10/31/2008	Dept of Housing & Urban Devel		
Vernon Waldren	100%		$300,000	PF
MUD Public Water Conservation Demo	02/01/2007 - 01/31/2008	Metropolitan Utilities District		
Vernon Waldren	33%		$4,682	PI
Hall County Expanded Food & Nutrition Ed...	10/01/2005 - 09/30/2006	Central District Health Department		
Cami Wells	100%		$3,750	PL
Alpha Upsilon Chapter/Epsilon Sigma Phi...	07/01/2006 - 06/30/2007	NU Foundation		
Susan Williams	100%		$800	PU
Lincoln Housing Authority Nutrition	09/01/2006 - 08/31/2007	Lincoln Housing Authority		
Karen Wobig	100%		$10,519	PL
		Totals for Southeast Research and Extension Center:	$862,697	
		Totals for IANR-Cooperative Extension:	$862,697	

IANR-Research

NE Ag Water Management Demo Net	07/24/2006 - 10/31/2010	Dept of Agriculture-NRCS		
Andrew Christiansen	0%		$0	RF
NE Ag Water Management Demo Net	07/24/2006 - 10/31/2010	Dept of Agriculture-NRCS		
Jennifer Rees	0%		$0	RF
NE Ag Water Management Demo Net	07/24/2006 - 10/31/2010	Dept of Agriculture-NRCS		
Brandy VanDeWalle	0%		$0	RF
NE Ag Water Management Demo Net	07/24/2006 - 10/31/2010	Dept of Agriculture-NRCS		
Gary Zoubek	50%		$32,700	RF
		Totals for Southeast Research and Extension Center:	$32,700	
		Totals for IANR-Research:	$32,700	
		Grand Total:	$895,397	

University of Nebraska - Lincoln
Details of all Proposals, Grants, Contracts and Gifts Awarded

Awards received in the period of 07/01/2007 - 06/30/2008

Submitted through Southeast Research and Extension Center

Title/PI	Budget Period/Award %	Agency Name	Awarded Amount	Cat
IANR				
Southeast Research and Extension Center				
Grass-Fed Beef	09/01/2007 - 08/31/2011	Iowa State University		
Gary Lesoing	100%		$44,563	PV
		Totals for Southeast Research and Extension Center:	$44,563	
		Totals for IANR:	$44,563	
IANR-Cooperative Extension				
City of Lincoln Solid Waste FY 08	07/01/2007 - 06/30/2008	City of Lincoln		
Gary Bergman	100%		$16,810	PL
Safe Food - Omaha	01/01/2008 - 12/31/2008	Pacific Mutual Charitable Fdn/Pacific Life		
Cindy Brison	50%		$5,000	PA
Urban Lead & Water Qual Protection	07/01/2007 - 06/30/2008	Papio-Missouri River NRD		
John Fech	25%		$4,384	PL
Douglas Co Health Dept Soil Lead Ed	07/01/2007 - 06/30/2008	Douglas Co Health Department		
John Fech	25%		$9,438	PL
Wildlife Damage Mgt Training	08/01/2007 - 08/14/2008	Michigan State University		
Dennis Ferraro	20%		$2,000	PV
Growing Corn Responsibly In-Field	07/01/2007 - 06/30/2008	Ne Corn Board		
Keith Glewen	50%		$9,250	PS
Growing Corn FY 08 Wnt/Smr Fld Days	07/01/2007 - 06/30/2008	Ne Corn Board		
Keith Glewen	75%		$22,500	PS
Nebraska No-Till Conference 2008	10/01/2007 - 09/30/2008	Ne Soybean Board		
Keith Glewen	100%		$7,000	PI
Ne Soybean Day & Machinery Expo 07	10/01/2007 - 09/30/2008	Ne Soybean Board		
Keith Glewen	100%		$5,000	PI
Soybean Management Field Days 2008	10/01/2007 - 09/30/2008	Ne Soybean Board		
Keith Glewen	100%		$80,270	PI
Project Morning Star - Capacity	08/01/2006 - 07/31/2008	Nebraska Indian Community College		
Jeffrey Hart	100%		$20,355	PV
Diverse Youth-Adult Partnerships 08	01/01/2008 - 06/30/2009	National 4-H Council		
Jeffrey Hart	100%		$25,000	PA
Radon Awareness In SoE Nebraska	10/01/2007 - 05/30/2008	Ne Dept Health & Human Serv		
Paul Hay	50%		$1,198	PS
Ne HHS Radon Awareness FY 08	10/01/2007 - 05/30/2008	Ne Dept Health & Human Serv		
Sarah Heidzig-Kraeger	100%		$2,473	PS
Farmers and Ranchers College	07/01/2007 - 06/30/2008	Ne Dept Agriculture		
Terence Hejny	100%		$5,000	PS
Grape Cluster Thinning Research	07/01/2007 - 06/30/2008	Ne Dept Agriculture-Grape & Winery Bd		
James Hruskocl	100%		$1,133	PS
Radon Educ Prog Johnson & Pawnee Co	10/01/2007 - 05/30/2008	Ne Dept Health & Human Serv		
Jessica Jones	100%		$1,010	PS

NE HHS Radon Risk Nemaha FY08	10/01/2007 - 05/30/2008	Ne Dept Health & Human Serv		
Gary Lesoing	100%		$2,935	PS
Radon Educ Prog Saline County	10/01/2007 - 05/30/2008	Ne Dept Health & Human Serv		
Leanne Manning	25%		$478	PS
4-H Activities to Area Youth 2008	01/01/2008 - 04/30/2009	Becker Residual Charitable Trust		
Carol McNulty	100%		$13,282	PA
4-H ASI ATV Rider Course 2008	03/21/2008 - 12/01/2008	National 4-H Council		
Robert Meduna	100%		$13,300	PA
Radon Educ Prog Saline County	10/01/2007 - 05/30/2008	Ne Dept Health & Human Serv		
Randy Pryor	75%		$1,433	PS
2008 Wheat Production Conferences	07/01/2007 - 06/30/2008	Ne Wheat Board		
Jennifer Rees	40%		$2,000	PS
Quantifying Evaporation	04/04/2008 - 06/30/2011	Ne Dept Natural Resources		
Jennifer Rees	5%		$33,958	RS
Production Agriculture Field Experimenta...	07/01/2007 - 06/30/2008	Stoller Enterprises		
Michael Rethwisch	100%		$12,000	PI
Production Agriculture Field Experimenta...	07/01/2007 - 06/30/2008	Emerald Bio Agriculture Corp		
Michael Rethwisch	100%		$3,500	PI
Extension Programming Needs for Butler C...	07/01/2007 - 06/30/2008	Agrimar Corporation		
Michael Rethwisch	100%		$1,200	PI
Douglas Co Club Possible FY 08	07/01/2007 - 09/30/2008	Douglas Co Health Department		
Joan Sather	100%		$8,800	PL
Douglas Co Health Dept Soil Lead Ed	07/01/2007 - 06/30/2008	Douglas Co Health Department		
Carrie Schneider-Miller	25%		$9,438	PL
Urban Lead & Water Qual Protection	07/01/2007 - 06/30/2008	Papio-Missouri River NRD		
Carrie Schneider-Miller	25%		$4,384	PL
Quantifying Evaporation	04/04/2008 - 06/30/2011	Ne Dept Natural Resources		
Darrel Siekman	5%		$33,958	RS
Nebraska 4-H Military Clubs	10/01/2007 - 09/30/2008	Kansas State University		
Mark Simmons	100%		$30,000	PV
Operation: Military Kids	10/01/2007 - 09/30/2008	Kansas State University		
Mark Simmons	100%		$50,000	PV
Operation Military Kids	01/01/2008 - 09/30/2008	Kansas State University		
Mark Simmons	100%		$50,000	PV
Urban Lead & Water Qual Protection	07/01/2007 - 06/30/2008	Papio-Missouri River NRD		
Sharon Skipton	25%		$4,384	PL
Douglas Co Health Dept Soil Lead Ed	07/01/2007 - 06/30/2008	Douglas Co Health Department		
Sharon Skipton	25%		$9,438	PL
Radon Awareness In SoE Nebraska	10/01/2007 - 05/30/2008	Ne Dept Health & Human Serv		
Dianne Swanson	50%		$1,198	PS
Quantifying Evaporation	04/04/2008 - 06/30/2011	Ne Dept Natural Resources		
Brandy VanDeWalle	5%		$33,958	RS
Douglas Co Health Dept Soil Lead Ed	07/01/2007 - 06/30/2008	Douglas Co Health Department		
Vernon Waldren	25%		$9,438	PL
Urban Lead & Water Qual Protection	07/01/2007 - 06/30/2008	Papio-Missouri River NRD		
Vernon Waldren	25%		$4,384	PL
Safe Food - Omaha	01/01/2008 - 12/31/2008	Pacific Mutual Charitable Fdn/Pacific Life		
Vernon Waldren	50%		$5,000	PA

Extension Watershed Coordinator	06/01/2008 - 06/30/2010	Ne Dept Environmental Quality		
Vernon Waldren	100%		$62,648	PS
Hall Co Expand Fd & Nutrition Prog	10/01/2006 - 09/30/2007	Central District Health Department		
Caml Wells	100%		$3,750	PL
Hall Co Expand Fd & Nutrition Prog	10/01/2007 - 09/30/2008	Central District Health Department		
Caml Wells	100%		$3,750	PL
Kimmel Foundation Extension Technologist...	07/01/2007 - 06/30/2008	NU Foundation		
Susan Williams	100%		$59,800	PU
Lincoln Housing Authority NEP FY 08	09/01/2007 - 08/31/2008	Lincoln Housing Authority		
Karen Wobig	100%		$10,519	PL
Growing Corn FY 08 Wnt/Smr Fld Days	07/01/2007 - 06/30/2008	Ne Corn Board		
Gary Zoubek	25%		$7,500	PS
Quantifying Evaporation	04/04/2008 - 06/30/2011	Ne Dept Natural Resources		
Gary Zoubek	5%		$33,958	RS
		Totals for Southeast Research and Extension Center:	$738,209	
		Totals for IANR-Cooperative Extension:	$738,209	
		Grand Total:	$762,772	

University of Nebraska - Lincoln
Details of all Proposals, Grants, Contracts and Gifts Awarded

Awards received in the period of 07/01/2008 - 06/30/2009

Submitted through Southeast Research and Extension Center

IANR-Cooperative Extension

Southeast Research and Extension Center

Title/PI	Budget Period/Award %	Agency Name	Awarded Amount	Cat
City of Lincoln Solid Waste FY 09	07/01/2008 - 06/30/2009	City of Lincoln		
Gary Bergman	100%		$12,505	PL
2009 Hispanic Food Safety Training	01/01/2009 - 05/31/2010	Pacific Mutual Charitable Fdn/Pacific Life		
Cindy Brison	80%		$8,000	PA
FY 2008 Ne Pesticide Safety Educ	10/01/2008 - 09/30/2009	Dept of Agriculture-CSREES		
Thomas Dorn	0%		$0	PF
4-H Health Rocks 2009 Evaluation	03/16/2009 - 03/31/2010	National 4-H Council		
Marilyn Fox	10%		$6,966	PA
Soybean Solution Days 2008	10/01/2007 - 09/30/2008	Ne Soybean Board		
Keith Glewen	100%		$17,000	PI
Growing Corn Responsibly FY 2009	07/01/2008 - 06/30/2009	Ne Corn Board		
Keith Glewen	75%		$23,175	PS
2008 NE Soybean Day & MachineryExpo	10/01/2008 - 09/30/2009	Ne Soybean Board		
Keith Glewen	100%		$5,000	PI
Nebraska No-Till Conference 2009	10/01/2008 - 09/30/2009	Ne Soybean Board		
Keith Glewen	100%		$7,000	PI
Soybean Management Field Days 2009	10/01/2008 - 09/30/2009	Ne Soybean Board		
Keith Glewen	100%		$82,678	PI
Solution Days 2009	10/01/2008 - 09/30/2009	Ne Soybean Board		
Keith Glewen	100%		$18,000	PI
Saunders Co Unrestricted Donations	05/20/2009 - 06/30/2010	Monsanto Co		
Keith Glewen	100%		$7,500	PI
Saskatoon Berry Production Study	03/15/2009 - 03/15/2012	Ne Dept Agriculture		
Vaughn Hammond	5%		$417	RS
Project Morning Star 2006-09	08/01/2006 - 07/31/2009	Nebraska Indian Community College		
Jeffrey Hart	100%		$20,355	PV
Diverse Youth-Adult Partnerships 09	07/01/2008 - 06/30/2009	National 4-H Council		
Jeffrey Hart	100%		$15,000	PA
Natl 4-H MetLife Fdn	10/01/2008 - 07/01/2009	National 4-H Council		
Jeffrey Hart	100%		$1,500	PA
Diverse Youth-Adult Partnerships 09	01/01/2009 - 12/31/2009	National 4-H Council		
Jeffrey Hart	100%		$25,000	PA
FY 2008 Ne Pesticide Safety Educ	10/01/2008 - 09/30/2009	Dept of Agriculture-CSREES		
Paul Hay	0%		$0	PF
Sorghum & Celiac's Disease Aware	07/01/2008 - 06/30/2009	Ne Grain Sorghum Board		
Alice Henneman	33%		$1,155	PS
Grape Cluster Thinning Research	07/01/2008 - 06/30/2009	Ne Dept Agriculture-Grape & Winery Bd		
James Hruskocl	100%		$2,301	PS
New Grape Grower Instructional DVD	03/15/2009 - 12/30/2010	Ne Dept Agriculture		
James Hruskocl	100%		$8,250	PS

Saskatoon Berry Production Study	03/15/2009 - 03/15/2012	Ne Dept Agriculture		
James Hruskocl	85%		$7,081	RS
Ne Sustain Ag Plan of Work FY 2008	01/11/2008 - 01/10/2011	Univ of Minnesota-SARE		
Gary Lesoing	100%		$49,809	PV
Sorghum & Celiac's Disease Aware	07/01/2008 - 06/30/2009	Ne Grain Sorghum Board		
Gary Lesoing	33%		$1,155	PS
4-H Activities to Area Youth 2009	01/01/2009 - 12/31/2009	Becker Residual Charitable Trust		
Carol McNulty	100%		$14,368	PA
4-H ASI ATV Rider Course 2009	04/01/2009 - 12/01/2009	National 4-H Council		
Robert Meduna	100%		$10,000	PA
Sorghum & Celiac's Disease Aware	07/01/2008 - 06/30/2009	Ne Grain Sorghum Board		
Jennifer Rees	34%		$1,190	PS
Crop Water Use Comparison	07/01/2008 - 06/30/2009	Ne Grain Sorghum Board		
Jennifer Rees	100%		$6,481	PS
Fruit and Vegetable Education	09/01/2008 - 08/31/2009	Southeast District Health Department		
Joyce Reich	100%		$600	PL
Nebraska 4-H Military Clubs	10/01/2007 - 09/30/2009	Kansas State University		
Mark Simmons	100%		$30,000	PV
Operation Military Kids	10/01/2007 - 09/30/2009	Kansas State University		
Mark Simmons	100%		$67,211	PV
Farmers & Ranchers College FY 09	07/01/2008 - 06/30/2009	Ne Dept Agriculture		
Brandy VanDeWalle	100%		$5,000	PS
2009 Hispanic Food Safety Training	01/01/2009 - 05/31/2010	Pacific Mutual Charitable Fdn/Pacific Life		
Vernon Waldren	20%		$2,000	PA
Kimmel Foundation Extension Technologist...	07/01/2008 - 06/30/2009	NU Foundation		
Susan Williams	100%		$64,725	PU
Lincoln Housing Authority NEP FY 09	09/01/2008 - 08/31/2009	Lincoln Housing Authority		
Karen Wobig	100%		$10,519	PL
Growing Corn Responsibly FY 2009	07/01/2008 - 06/30/2009	Ne Corn Board		
Gary Zoubek	25%		$7,725	PS
Chemigation Training on Internet	03/15/2009 - 03/31/2011	Ne Dept Environmental Quality		
Gary Zoubek	5%		$3,091	PS
		Totals for Southeast Research and Extension Center:	$542,756	
		Totals for IANR-Cooperative Extension:	$542,756	
		Grand Total:	$542,756	

University of Nebraska - Lincoln
Details of all Proposals, Grants, Contracts and Gifts Awarded

Awards received in the period of 07/01/2009 - 06/30/2010

Submitted through Southeast Research and Extension Center

Title/PI	Budget Period/Award %	Agency Name	Awarded Amount	Cat
IANR-Cooperative Extension				
Southeast Research and Extension Center				
City of Lincoln Solid Waste FY 10	07/01/2009 - 06/30/2010	City of Lincoln		
Gary Bergman	100%		$16,250	PL
FY 2009 Ne Pesticide Safety Educ	10/01/2009 - 09/30/2010	Dept of Agriculture-CSREES		
Thomas Dorn	0%		$0	PF
7th Youth Beef Leadership Symposium	10/01/2009 - 09/30/2010	Ne Beef Council		
Sara Ellicott	50%		$1,250	PI
4-H Health Rocks Grantee Train 2010	03/16/2009 - 02/28/2011	National 4-H Council		
Marilyn Fox	0%		$0	PA
4-H Health Rocks 2010 Evaluation	03/16/2009 - 02/28/2011	National 4-H Council		
Marilyn Fox	10%		$10,483	PA
Growing Corn Responsibly FY 2010	07/01/2009 - 06/30/2010	Ne Corn Board		
Keith Glewen	75%		$23,250	PS
Nebraska No-Till Conference 2010	10/01/2009 - 09/30/2010	Ne Soybean Board		
Keith Glewen	75%		$5,250	PA
Ne Soybean Day & MachineryExpo2010	10/01/2009 - 09/30/2010	Ne Soybean Board		
Keith Glewen	100%		$5,000	PA
Soybean Management Field Days 2010	10/01/2009 - 09/30/2010	Ne Soybean Board		
Keith Glewen	100%		$82,678	PA
Solution Days 2010	10/01/2009 - 09/30/2010	Ne Soybean Board		
Keith Glewen	50%		$9,000	PA
Ne Ag Water Demonstration Network	01/01/2010 - 12/31/2012	Lower Platte North NRD		
Keith Glewen	20%		$4,284	PL
Project Morning Star 2006-10	08/01/2006 - 07/31/2011	Nebraska Indian Community College		
Jeffrey Hart	100%		$20,355	PV
Diverse Youth-Adult Partnerships 10	01/01/2010 - 02/28/2011	National 4-H Council		
Jeffrey Hart	100%		$25,000	PA
Ne Dept Insurance SHIIP 2010	01/01/2010 - 12/31/2010	Ne Dept Insurance		
Mary Holland	50%		$5,000	PS
Grape Cluster Thinning ResearchFY10	07/01/2009 - 06/30/2010	Ne Dept Agriculture-Grape & Winery Bd		
James Hruskocl	100%		$1,900	PS
Ne Sustain Ag Plan of Work FY 2009	01/02/2009 - 12/31/2012	Univ of Minnesota-SARE		
Gary Lesoing	100%		$51,739	PV
Ne Sustain Ag Plan of Work FY 2010	01/01/2010 - 12/31/2012	Univ of Minnesota-SARE		
Gary Lesoing	100%		$48,000	PV
4-H Activities to Area Youth 2010	02/01/2010 - 12/31/2010	Becker Residual Charitable Trust		
Carol McNulty	100%		$13,468	PA
4-H ASI ATV Rider Course 2010	03/15/2010 - 12/31/2010	National 4-H Council		
Robert Meduna	100%		$16,250	PA
Manage Sorghum Product E Grt Pins	02/13/2009 - 12/31/2009	Kansas State University		
Randy Pryor	100%		$3,000	PV

Crop Water Use Comparison FY 10	07/01/2009 - 06/30/2010	Ne Grain Sorghum Board		
Jennifer Rees	100%		$1,988	PS
Production Agriculture Field Experimenta...	07/01/2009 - 06/30/2010	Valent USA		
Michael Rethwisch	100%		$5,000	PI
Evaluation of Growrth Enhancement	10/01/2009 - 09/30/2010	Ne Soybean Board		
Michael Rethwisch	100%		$37,520	PA
Ne Ag Water Demonstration Network	01/01/2010 - 12/31/2012	Lower Platte North NRD		
Michael Rethwisch	20%		$4,284	PL
Douglas Co CDC Comm Prev to Work	04/01/2010 - 03/18/2012	Douglas Co Health Department		
Carrie Schneider-Miller	100%		$96,412	PL
Operation Military Kids	10/01/2007 - 09/30/2010	Kansas State University		
Mark Simmons	100%		$100,000	PV
Nebraska 4-H Military Clubs	10/01/2009 - 09/30/2010	Kansas State University		
Mark Simmons	100%		$30,000	PV
Operation Military Kids Camp	04/01/2010 - 09/30/2010	Kansas State University		
Mark Simmons	100%		$50,000	PV
Farmers & Ranchers College FY 10	07/01/2009 - 06/30/2010	Ne Dept Agriculture		
Brandy VanDeWalle	100%		$5,000	PS
Ne Ag Water Demonstration Network	01/01/2010 - 12/31/2012	Lower Platte North NRD		
David Varner	20%		$4,284	PL
Extension Watershed Coordinator	04/01/2010 - 06/30/2013	Ne Dept Environmental Quality		
Vernon Waldren	100%		$124,537	PS
Hall Co Expand Fd/Nutrition Prog 09	10/01/2008 - 09/30/2009	Central District Health Department		
Carni Wells	100%		$3,750	PL
Kimmel Foundation Extension Technologist...	07/01/2009 - 06/30/2010	NU Foundation		
Susan Williams	100%		$67,525	PU
Lincoln Housing Authority NEP FY 10	09/01/2009 - 08/31/2010	Lincoln Housing Authority		
Karen Wobig	100%		$10,519	PL
Growing Corn Responsibly FY 2010	07/01/2009 - 06/30/2010	Ne Corn Board		
Gary Zoubek	25%		$7,750	PS
Solution Days 2010	10/01/2009 - 09/30/2010	Ne Soybean Board		
Gary Zoubek	50%		$9,000	PA
Ne Ag Water Demonstration Network	01/01/2010 - 12/31/2012	Lower Platte North NRD		
Gary Zoubek	20%		$4,284	PL
		Totals for Southeast Research and Extension Center:	$904,010	
		Totals for IANR-Cooperative Extension:	$904,010	
		Grand Total:	$904,010	

University of Nebraska - Lincoln
Details of all Proposals, Grants, Contracts and Gifts Awarded

Awards received in the period of 07/01/2010 - 06/30/2011

Submitted through Southeast Research and Extension Center

Title/PI	Budget Period/Award %	Agency Name	Awarded Amount	Cat
IANR-Cooperative Extension				
Southeast Research and Extension Center				
City of Lincoln Solid Waste FY 11	07/01/2010 - 06/30/2011	City of Lincoln		
Gary Bergman	100%		$16,250	PL
Embryology Project: 3rd Grade LPS	11/09/2010 - 06/30/2011	Ne Dept Agriculture-Poultry/Egg		
Gary Bergman	100%		$12,875	PS
Growing Healthy Kids	02/01/2011 - 01/31/2016	Dept of Agriculture-AFRI		
Gary Bergman	50%		$473,547	PF
Radon Campaign Southeast Ne	09/15/2010 - 05/30/2011	Ne Dept Health & Human Serv		
Lindsay Chichester	40%		$1,200	PS
Real Colors Personality Preferences	04/01/2011 - 04/30/2011	Ne Dept Health & Human Serv		
Leslie Crandall	10%		$180	PS
Ne Youth Beef Symposium	07/01/2010 - 06/30/2011	Ne Corn Board		
Sara Ellicott	75%		$1,875	PS
8th Annual Ne Youth Beef Symposium	10/01/2010 - 09/30/2011	Ne Beef Council		
Sara Ellicott	100%		$2,500	PI
4-H Health Rocks Grantee Train 2012	03/16/2009 - 03/31/2012	National 4-H Council		
Marilyn Fox	33%		$48,997	PA
Nebraska No-Till Conference 2011	10/01/2010 - 09/30/2011	Ne Soybean Board		
Keith Glewen	75%		$5,250	PA
Ne Soybean Day & MachineryExpo2011	10/01/2010 - 09/30/2011	Ne Soybean Board		
Keith Glewen	100%		$5,000	PA
Soybean Management Field Days 2011	10/01/2010 - 09/30/2011	Ne Soybean Board		
Keith Glewen	100%		$82,678	PA
Soybean Mgmt Field Days 2011: Supp	01/14/2011 - 09/30/2011	Ne Soybean Board		
Keith Glewen	100%		$29,290	PA
SoyWater Field Days	01/14/2011 - 09/30/2011	Ne Soybean Board		
Keith Glewen	50%		$17,924	PA
Project New Dawn 2010-2014	09/01/2010 - 08/31/2011	Nebraska Indian Community College		
Jeffrey Hart	100%		$20,780	PV
Growing Corn Responsibly FY 11	08/01/2010 - 06/30/2011	Ne Corn Board		
Mark Hinze	25%		$8,032	PS
Radon Campaign Southeast Ne	09/15/2010 - 05/30/2011	Ne Dept Health & Human Serv		
Jessica Jones	15%		$450	PS
Real Colors Personality Preferences	04/01/2011 - 04/30/2011	Ne Dept Health & Human Serv		
Eileen Krumbach	10%		$180	PS
Farm Beginnings Collaborative	09/01/2009 - 08/31/2012	Land Stewardship Project		
Gary Lesoing	100%		$22,635	PA
Radon Campaign Southeast Ne	09/15/2010 - 05/30/2011	Ne Dept Health & Human Serv		
Gary Lesoing	15%		$450	PS
Ne Network/Begin Farmers & Ranchers	09/15/2010 - 09/14/2013	Center for Rural Affairs		
Gary Lesoing	60%		$121,438	PA

Ne Sustain Ag Plan of Work FY 2011	01/03/2011 - 01/02/2014	Univ of Minnesota-SARE		
Gary Lesoing	100%		$51,000	PV
4-H Activities to Area Youth 2011	03/01/2011 - 06/30/2012	Becker Residual Charitable Trust		
Carol McNulty	100%		$13,273	PA
4-H ASI ATV Rider Course 2011	03/01/2011 - 12/19/2011	National 4-H Council		
Robert Meduna	100%		$5,500	PA
Crop Water Use Comparison FY 10	07/01/2010 - 12/31/2010	Ne Grain Sorghum Board		
Jennifer Rees	100%		$994	PS
Water Source Reduction & Research	12/01/2010 - 02/28/2012	Environmental Protection Agency		
Jennifer Rees	2%		$1,920	PF
Water Source Reduction & Research	12/01/2010 - 08/31/2012	Environmental Protection Agency		
Jennifer Rees	2%		$638	PF
Nutrition Educ Prog School Kits	07/01/2010 - 06/30/2011	Southeast District Health Department		
Joyce Reich	100%		$1,650	PL
Extension Field Research	07/01/2010 - 06/30/2011	EMD Crop BioScience		
Michael Rethwisch	100%		$6,000	PI
Eval of Growth Enhancement Yr 2	10/01/2010 - 09/30/2011	Ne Soybean Board		
Michael Rethwisch	100%		$42,160	PA
Real Colors Personality Preferences	04/01/2011 - 04/30/2011	Ne Dept Health & Human Serv		
Barbara Schmidt	10%		$180	PS
Real Colors Personality Preferences	04/01/2011 - 04/30/2011	Ne Dept Health & Human Serv		
Phyllis Schoenholz	40%		$720	PS
Real Colors Personality Preferences	04/01/2011 - 04/30/2011	Ne Dept Health & Human Serv		
D'Ette Scholtz	10%		$180	PS
Operation Military Kids	10/01/2007 - 08/31/2011	Kansas State University		
Mark Simmons	100%		$92,000	PV
Nebraska 4-H Military Clubs	10/01/2010 - 09/30/2011	Kansas State University		
Mark Simmons	100%		$30,000	PV
Operation Military Kids Camp 2011	02/01/2011 - 08/31/2011	Kansas State University		
Mark Simmons	100%		$49,500	PV
Consum Info: Manage Private Water	08/01/2010 - 07/30/2012	Ne Well Drillers Association		
Sharon Skipton	60%		$14,400	PA
Real Colors Personality Preferences	04/01/2011 - 04/30/2011	Ne Dept Health & Human Serv		
Cynthia Strasheim	10%		$180	PS
Farmers & Ranchers College FY 11	07/01/2010 - 06/30/2011	Ne Dept Agriculture		
Brandy VanDeWalle	100%		$5,000	PS
Water Source Reduction & Research	12/01/2010 - 02/28/2012	Environmental Protection Agency		
Brandy VanDeWalle	2%		$1,920	PF
Water Source Reduction & Research	12/01/2010 - 08/31/2012	Environmental Protection Agency		
Brandy VanDeWalle	2%		$638	PF
Radon Campaign Southeast Ne	09/15/2010 - 05/30/2011	Ne Dept Health & Human Serv		
Rebecca Versch	15%		$450	PS
Healthy Homes - Lead Ed Program	01/01/2011 - 12/31/2013	City of Omaha		
Vernon Waldren	100%		$19,950	PL
Radon Campaign Southeast Ne	09/15/2010 - 05/30/2011	Ne Dept Health & Human Serv		
Deborah Weitzenkamp	15%		$450	PS
Hall Co EF-NEP FY 10	10/01/2009 - 09/30/2010	Central District Health Department		
Cami Wells	100%		$3,750	PL

Hall Co EF-NEP FY 11	10/01/2010 - 09/30/2011	Central District Health Department		
Cami Wells	100%		$3,750	PL
Lincoln Housing Authority NEP FY 11	09/01/2010 - 08/31/2011	Lincoln Housing Authority		
Karen Wobig	100%		$10,519	PL
Growing Corn Responsibly FY 11	08/01/2010 - 06/30/2011	Ne Corn Board		
Gary Zoubek	75%		$24,096	PS
		Totals for Southeast Research and Extension Center:	$1,252,347	
		Totals for IANR-Cooperative Extension:	$1,252,347	
		Grand Total:	$1,252,347	

University of Nebraska - Lincoln
Details of all Proposals, Grants, Contracts and Gifts Awarded

Awards received in the period of 07/01/2011 - 06/30/2012

Submitted through Southeast Research and Extension Center

Title/PI	Budget Period/Award %	Agency Name	Awarded Amount	Cat
IANR				
Southeast Research and Extension Center				
City of Lincoln Solid Waste FY 12	07/01/2011 - 06/30/2012	City of Lincoln		
Gary Bergman	100%		$17,000	PL
UNL Extension-Douglas Sarpy County	07/01/2011 - 06/30/2012	Alegent Health Commun Benefit Trust		
Cindy Brison	100%		$4,000	PA
Ne Youth Beef Symposium 9th Annual	07/01/2011 - 06/30/2012	Ne Corn Board		
Sara Ellicott	75%		$1,875	PS
SoyWater Field Days	10/01/2011 - 09/30/2012	Ne Soybean Board		
Keith Glewen	50%		$21,687	PA
Nebr On-Farm Research-Corn Growers	03/22/2012 - 06/30/2012	Ne Corn Board		
Keith Glewen	75%		$8,289	PS
Glyphosate Resis Weeds Field Day	04/01/2012 - 09/30/2012	Ne Soybean Board		
Keith Glewen	5%		$2,410	PA
100 Bushel Soybean Production	04/01/2012 - 09/30/2012	Ne Soybean Board		
Keith Glewen	30%		$9,735	RA
Saunders Co Unrestricted Donations	05/14/2012 - 06/30/2013	Monsanto Co		
Keith Glewen	100%		$5,000	PI
Project New Dawn 2010-2014	09/01/2010 - 08/31/2014	Nebraska Indian Community College		
Jeffrey Hart	100%		$20,780	PV
Native Food Safety Prep & Nutrition	09/01/2011 - 11/30/2012	Nebraska Indian Community College		
Jeffrey Hart	80%		$9,600	PV
Econ Improve Coop Business Rural Ne	01/01/2012 - 01/01/2013	Dept of Agriculture-Rural Development		
Alice Henneman	5%		$11,250	PF
Landowner/Tenant Farmland Lease Mtg	10/01/2011 - 09/30/2012	Ne Soybean Board		
Jessica Jones	25%		$3,210	PA
Flooded Soils Agronomy	05/15/2012 - 04/30/2013	Howard G. Buffett Foundation		
Gary Lesoing	10%		$4,964	RA
4-H Activities to Area Youth 2012	03/01/2012 - 02/28/2013	Becker Residual Charitable Trust		
Carol McNulty	100%		$11,678	PA
4-H Activities to Area Youth 2013	01/01/2013 - 12/31/2016	Becker Residual Charitable Trust		
Carol McNulty	100%		$33,000	PA
Safety Leader Guide Activity Kit	11/29/2011 - 12/31/2011	National 4-H Council		
Robert Meduna	100%		$1,000	PA
4-H ASI ATV Rider Course 2012	03/06/2012 - 12/17/2012	Oklahoma State University		
Robert Meduna	100%		$5,260	PV
Crop Water Use Comparison 2011	07/01/2011 - 06/30/2012	Ne Grain Sorghum Board		
Jennifer Rees	100%		$2,684	PS
Extension Field Research	07/01/2011 - 06/30/2012	Plant BioTech Inc		
Michael Rethwisch	100%		$3,000	PI
Extension Field Research	03/26/2012 - 06/30/2013	Novozymes		
Michael Rethwisch	100%		$2,500	PI

Glyphosate Resis Weeds Field Day	04/01/2012 - 09/30/2012	Ne Soybean Board		
Michael Rethwisch	10%		$4,820	PA
Extension Field Research	05/30/2012 - 06/30/2013	Emerald Bio Agricultural Corp		
Michael Rethwisch	100%		$3,000	PI
Healthy Neighborhood Stores	04/01/2012 - 09/29/2012	Douglas Co Health Department		
Carrie Schneider-Miller	100%		$18,530	PL
OMK RSN: Tri Cities Region	09/01/2011 - 08/31/2012	Kansas State University		
Mark Simmons	85%		$17,000	PV
OMK Regional Support: Northeast	09/01/2011 - 08/31/2012	Kansas State University		
Mark Simmons	85%		$17,000	PV
OMK RSN: Norfolk/Columbus	09/01/2011 - 08/31/2012	Kansas State University		
Mark Simmons	85%		$17,000	PV
Operation Military Kids Camp 2012	02/01/2012 - 08/31/2012	Kansas State University		
Mark Simmons	100%		$31,900	PV
Well Construction Model Development	11/28/2011 - 05/31/2012	Ne Dept Health & Human Serv		
Sharon Skipton	34%		$5,100	RS
Model for Well Const./Decomm.	05/08/2012 - 08/31/2012	Ne Dept Health & Human Serv		
Sharon Skipton	28%		$3,371	RS
Kimmel Foundation Extension Technologist...	07/01/2011 - 06/30/2012	NU Foundation		
Susan Williams	100%		$27,000	PU
Kimmel Foundation Extension Technologist...	07/01/2011 - 06/30/2012	NU Foundation		
Susan Williams	100%		$27,000	PU
Lincoln Housing Authority NEP FY 12	09/01/2011 - 08/31/2012	Lincoln Housing Authority		
Karen Wobig	100%		$10,519	PL
Nebr On-Farm Research-Corn Growers	03/22/2012 - 06/30/2012	Ne Corn Board		
Gary Zoubek	25%		$2,763	PS
Model for Well Const./Decomm.	05/08/2012 - 08/31/2012	Ne Dept Health & Human Serv		
Gary Zoubek	20%		$2,408	RS
		Totals for Southeast Research and Extension Center:	$366,331	
		Totals for IANR:	$366,331	

IANR-Cooperative Extension

Radon Campaign Southeast Ne 2011	09/01/2011 - 05/31/2012	Ne Dept Health & Human Serv		
Lindsay Chichester	40%		$1,200	PS
9th Annual Ne Youth Beef Symposium	10/01/2011 - 09/30/2012	Ne Beef Council		
Sara Ellicott	50%		$1,250	PI
Agro-Ecosystem Biofuels Project	08/01/2011 - 07/31/2012	Iowa State University		
Keith Glewen	15%		$54,201	PV
Nebraska No-Till Conference 2012	10/01/2011 - 09/30/2012	Ne Soybean Board		
Keith Glewen	75%		$6,000	PA
Ne Soybean Day & MachineryExpo2012	10/01/2011 - 09/30/2012	Ne Soybean Board		
Keith Glewen	100%		$6,000	PA
Soybean Management Field Days 2012	12/01/2011 - 09/30/2012	Ne Soybean Board		
Keith Glewen	100%		$111,968	PA
Radon Campaign Southeast Ne 2011	09/01/2011 - 05/31/2012	Ne Dept Health & Human Serv		
Jessica Jones	15%		$450	PS
Radon Campaign Southeast Ne 2011	09/01/2011 - 05/31/2012	Ne Dept Health & Human Serv		
Gary Lesoing	15%		$450	PS

Resource Conservation: Water	10/01/2011 - 09/30/2012	Environmental Protection Agency		
Jennifer Rees	20%		$8,948	PF
Operation Military Kids	09/01/2011 - 09/30/2012	Kansas State University		
Mark Simmons	100%		$83,633	PV
Nebraska 4-H Military Clubs FY 2012	10/01/2011 - 09/30/2012	Kansas State University		
Mark Simmons	100%		$25,000	PV
Farmers & Ranchers College FY 12	07/01/2011 - 06/30/2012	Ne Dept Agriculture		
Brandy VanDeWalle	100%		$5,000	PS
On-Farm Research Youth 4-H & FFA	07/01/2011 - 06/30/2012	Ne Corn Board		
Brandy VanDeWalle	50%		$5,750	PS
Resource Conservation: Water	10/01/2011 - 09/30/2012	Environmental Protection Agency		
Brandy VanDeWalle	20%		$8,948	PF
Radon Campaign Southeast Ne 2011	09/01/2011 - 05/31/2012	Ne Dept Health & Human Serv		
Rebecca Versch	15%		$450	PS
Radon Campaign Southeast Ne 2011	09/01/2011 - 05/31/2012	Ne Dept Health & Human Serv		
Deborah Weitzenkamp	15%		$450	PS
		Totals for Southeast Research and Extension Center:	$319,699	
		Totals for IANR-Cooperative Extension:	$319,699	
		Grand Total:	$686,030	

University of Nebraska–Lincoln

Southeast Research & Extension District

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