

## Century of Panhandle accomplishments are reason to celebrate

The Panhandle Research and Extension Center at Scottsbluff was established in 1910 as a USDA research substation for one main objective: to conduct agricultural research on irrigated crops under local conditions.

One hundred years later, the center celebrated not only that goal, but dozens of others. The 2010 centennial celebration highlighted change and progress, showing how research and extension education have been integral in adopting modern farming methods in western Nebraska.

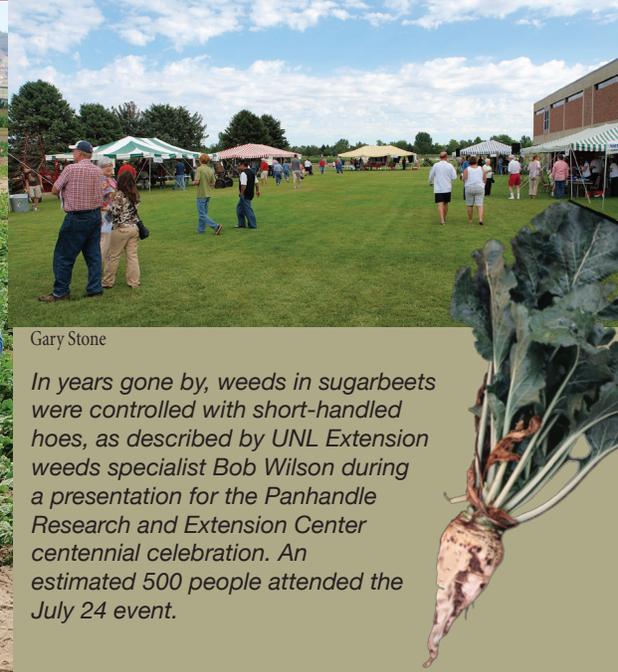
Early on center officials understood that the region's semiarid conditions differ from growing conditions in eastern Nebraska, said Linda Boeckner, center director.

"Early USDA researchers set up intensive dryland and irrigation experiments that have had an impact on the cultural practices around irrigation. UNL researchers still do that work today and will continue to do it," Boeckner said.

"Water resources are not going to get more plentiful," she said, adding that if anything, "they'll get more scarce."

Extension education has taught producers how to grow crops with less water, and still have good yields, she said.

The Panhandle center has 14 faculty members, most with research and extension appointments. Their expertise is in beef



Gary Stone

*In years gone by, weeds in sugarbeets were controlled with short-handled hoes, as described by UNL Extension weeds specialist Bob Wilson during a presentation for the Panhandle Research and Extension Center centennial celebration. An estimated 500 people attended the July 24 event.*

nutrition and feedlot management, cow/calf and range, entomology, weed science, irrigation management, machinery systems, plant pathology, soil and nutrient management, alternative crops breeding, dry bean breeding, potato production and crop physiology, hydrogeology, nutrition and wellness, business development and entrepreneurship, and dryland cropping systems.

An early milestone at the center was development of a winter-hardy, wilt-resistant alfalfa variety. The center also has been a leader in both dry edible bean and sugarbeet research and extension education.

"This work affects not only Nebraska, but all corners of the states we touch," Boeckner said. "This work has been essential in moving those industries ahead."

Years of strategic work at the High Plains Agricultural Laboratory near Sidney has yielded cutting-edge winter wheat and ecofallow research, Boeckner said.

The center annually hosts workshops for producers and works extensively with field and crop insurance representatives to help them better learn their jobs.

In the 21st century, plans for the center include further extension education in limited water resources, alternative crops and crop breeding, feedlot nutrition and management, dryland cropping systems and entrepreneurial practices for producers, Boeckner said.

The center also is exploring regions around the world similar to the High Plains semiarid climate.

"With the work we have done and things we know, we will continue to learn and grow, and have an opportunity to spread that to others who might need to learn from us, or we learn from them," Boeckner said.

— **Sandi Alswager Karstens**

Boeckner can be contacted at (308) 632-1254.

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## Dean's comments

When flooding hit our state in June, extension e-mails flew up and down the information highway.

Our University of Nebraska–Lincoln specialists and educators shared resources of use to those hit by floods. *Market Journal*, *CropWatch*, *IANR News* and more provided valuable knowledge people could put to immediate use in their lives. Topics ranged from making management decisions for flooded fields to dealing with mold and other issues in water-damaged homes.

Technology has added to the ways extension delivers useful knowledge, and expanded upon the expertise we can deliver, with resources such as eXtension and the Extension Disaster Education Network.

But while methods may change, our purpose does not. We are here to provide Nebraska and Nebraskans education useful for life.

How we do that for youth is showcased in a special section of this *Connect*. The next four pages provide examples of how 4-H helps Nebraska youth develop knowledge and lifelong skills.

In Nebraska 135,000 youth — one in three of those age-eligible — take part in 4-H programming each year.

The importance of Positive Youth Development is seen in Nebraska 4-H, and confirmed in a study by researchers in the Institute for Applied Research in Youth Development at Tufts University that's titled, *Waves of the Future: The first five years of the 4-H study of positive youth development*.

Researchers found, "The results of the

4-H Study to date provide strong evidence that when the strengths of youth are aligned with the resources for healthy development in families, schools, and communities, youth thrive."

Our 4-H mission is to empower youth to reach their full potential, working and learning in partnership with caring adults. Helping Nebraska's — and our world's — future leaders be well equipped for that future is important both to them, and to the world for which they must be the next generations of thoughtful, competent, caring adults.

The Tufts University research, sponsored by the National 4-H Council, fol-

lows young people over a significant period of time. It records important changes in individual participants, as well as critical differences between participants at any given age, to see if involvement in specific out-of-school activities predicts positive growth and decreased risk during adolescence.

"From this study we have learned that youth programs cannot remain static; they must expand and change to address the diverse and changing needs and interests of adolescents and their families," researchers found.

A look through the next four pages shows some of the ways Nebraska 4-H does that. With commitment, innovation, and a strong heritage of education for now, and for the future.

**Elbert Dickey**  
*Dean and Director*  
*University of Nebraska–Lincoln Extension*



*Elbert Dickey*

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### Partners with Nebraska

Land-grant universities work with the people they serve. NU's Institute of Agriculture and Natural Resources does so in priority areas of food, agriculture, agribusiness, natural resources, people and communities. We teach, discover new knowledge through research, and extend that new, unbiased information across the state and beyond through extension.

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# 4-H and Youth Development



## 4-H empowers youth

Nebraska 4-H is about youth, helping them reach their full potential as they grow into responsible, productive citizens.

It's about education, providing youth knowledge to increase their life skills in such important areas as critical thinking, problem solving and managing change.

It's about caring adults who mentor and share knowledge, encouraging youth to grow.

As you read through these pages, you'll find examples of the diverse ways Nebraska 4-H empowers lives through its programming in extension's five areas of excellence, noted at the top of each story.

In a report titled *Waves of the Future: The first five years of the 4-H study of positive youth development*, Richard Lerner, who heads the Institute for Applied Research in Youth

Development at Tufts University, which is conducting the research, said, "The data

underscores that all of us — as individuals, family members, professionals, advocates for youth, or members of the nation's diverse communities — have it within our power to enhance the lives of all young people."

It is a pleasure to share these examples of how 4-H enhances lives in Nebraska.

### Beth Birnstihl

UNL Extension associate dean and associate director  
State 4-H program administrator

*"On the educational measures, the 4-H participants had better grades, were more behaviorally and emotionally engaged with school, and were more likely to see themselves going to college."*

— "Waves of the Future" report  
Tufts University 2009

## Youth and Development

# Newness abounds at Nebraska fair

4-H exhibitors thrilled to be the first to "break in" the new Nebraska State Fairgrounds at Grand Island have 108 years of University of Nebraska-Lincoln Extension tradition behind them.

"4-H has always been a huge part of the Nebraska State Fair," said Kathleen Lodl, assistant dean for extension. "While the state fair showcases 4-H projects, there's a lot of work prior to the actual fair.

"Not only do 4-H youth gain new knowledge through 4-H projects, they develop life skills to become contributing, productive, self-directed members of society," she said.

Today's 4-H offers more than 100 projects, including offerings in science, engineering and technology areas essential to the country in the 21st century.

State Fair Board President Sallie Atkins of Halsey said the board's partnership with extension is a "wonderful liaison for 4-H."

Many new aspects of the fair are the result of focus group discussions with 4-H youth, Atkins said, citing "first-class exhibit space," much of it climate controlled. Plenty of water, electricity and wash racks for exhibitor animals are amenities for the fair, as are state-of-the-art technology such as Facebook, blogs and big screens for live streaming.

One of the six new buildings at the fairgrounds is the 70,000-square foot Grand Island Youth Building for 4-H and FFA exhibitions.

"Until you walk into these buildings, you can't imagine how nice and large they are," Atkins said.

Atkins, a former 4-H'er who

"took every project imaginable," is a 9-year member of the fair board who has served in other state leadership positions. She credits Elizabeth Birnstihl, extension associate dean and director and ex officio fair board member, for moving the state fair forward.

"She has taken the lead to enhance everything at the fair involving 4-H," Atkins said.

The fair runs Aug. 27- Sept. 6 at its new home near Fonner Park and Stolley Park roads in southeast Grand Island. The former fairgrounds in Lincoln will become UNL's Innovation Campus, a private/public-sector sustainable research campus.

The fair schedule is at <http://4h.unl.edu/pdf/2010Fairbook/Schedule2010.pdf>.

— Cheryl Alberts

Lodl can be contacted at (402) 472-9012.



IANR photo

*More than 100 4-H projects help youth develop life skills to become productive members of society.*



## Assuring quality

Nebraska 4-H'ers are learning more about the responsibilities of raising their animals to ensure meat safety and animal well-being through University of Nebraska–Lincoln Extension Quality Assurance education.

4-H youth learn about quality assurance before showing livestock at county fairs, the Nebraska State Fair and the Ak-Sar-Ben 4-H Livestock Exposition. The program focuses on swine, cattle, sheep, poultry, meat rabbits, dairy cows and dairy goats.

Quality assurance education helps youth understand the importance of following good production practices now and when they become adult livestock producers, said Bob Meduna, UNL extension educator and district 4-H youth program coordinator based at UNL's Agricultural Research and Development Center near Mead.

"This helps get good, research-based information to youth that goes along with producing meat, milk and fiber for consumers," Meduna said, adding the education helps youth producers learn current production and meat-quality recommendations, and the seriousness of these responsibilities.

Extension quality assurance education addresses specific current animal industry topics, such as animal care, proper withdrawal times for antibiotics and other medicines, and animal well-being, Meduna said.

Youth practice how to correctly inject medicine, how to read feed and medicine labels, how treatment affects meat tenderness, and about animal identification methods, herd behavior and low-stress handling.

All make for end products of the safest and highest quality, Meduna said.

Youth who show animals producing meat or milk for consumer consumption participate in the Nebraska Quality Assurance Training. Last year 2,700 youth went through this education program.

The youth program is patterned after similar adult producer programs for pork and beef quality assurance, and is updated every year to reflect current, research-based information and topics.

— **Sandi Alswager Karstens**

Meduna can be contacted at (402) 624-8064.

## There's science in those fields

Corn and soybeans are Nebraska's two top row crops, covering more than 13 million acres. Their value was more than \$8 billion last year, yet many Nebraskans know little about the crops, and the science behind them.

Brandy VanDeWalle, University of Nebraska–Lincoln Extension educator based in Geneva, works to change that. The Crop Science Investigation (CSI) workshop series she teaches to fourth through 12th graders helps them understand crop science. Students also explore related career possibilities such as farming, insurance, banking, research, and soil or water conservation.

"We learn basic science first, then apply it," VanDeWalle said of the monthly workshops offered March through September. CSI curricula originates from Iowa State University; VanDeWalle adapts it for her Nebraska audiences.

"CSI could attract youth to agricultural sciences to help replace retiring farmers, and supplement state and national extension efforts to promote science, engineering and technology," VanDeWalle said.

While most participants have taken 4-H



Brett Hampton

or FFA, two youth had little agricultural background and have "really had a strong interest," she said.

CSI has practical applications. At least one participant uses her CSI knowledge to monitor crop irrigation sensors and relay to her father how much irrigation water to apply and when, VanDeWalle said.

— **Cheryl Alberts**

VanDeWalle can be contacted at (402) 759-3712.

### Food, Nutrition, Health

## Nutrition knowledge begins early

People form lifelong nutritional habits in their youth, so it's important they learn early how to eat right. Sometimes, though, those lessons are hard to get across.

University of Nebraska–Lincoln Extension helps, making a difference through the Supplemental Nutrition Assistance Program-Education (SNAP-Ed) and the Expanded Food and Nutrition Education Program (EFNEP), which are collectively known as the Nutrition Education Program (NEP). The former is a partnership with Nebraska Health and Human Services, the latter is funded by USDA.

"We're trying to reach people who aren't necessarily getting good nutrition information," said Natalie Sehi, an extension educator based in Lincoln who helps coordinate the programs. "We're providing basic nutrition education and food management resource skills. Hopefully, they can move their families

and their lives in a positive direction."

In 2009, SNAP-Ed reached 17,278 youth in 41 counties at summer camp, preschools, daycare Head Start centers, eligible elementary and middle schools, and teen residential treatment programs. Before the program, 71 percent of youth could correctly identify a healthy snack; afterward, 94 percent could do so. Youth also learned about the MyPyramid recommendations, showing similar increases in knowledge.

EFNEP reached 5,278 youth in 2009. Since 1969, the program has reached over 91,100 low-income families in Nebraska.

Estimates are that SNAP-Ed saves up to \$2.88 in future health care costs for each \$1 spent. The estimated payback for EFNEP is even greater: \$8 in savings for each \$1 invested.

— **Daniel R. Moser**

Sehi can be contacted at (402) 472-6528.

## Camps stimulate ideas

Calligraphy cards, yarn jewelry, sheep milk soap, sports drinks, even feed bunks for small animals — all are examples of products conceived during EntrepreneurShip Investigation (ESI) camps for youth.

These ideas originate with participants as young as 10. They have four days to develop products, a business plan including logo, slogan and other promotions, and determine their target customer base.

“These young people, at this young age, have great ideas,” said Nancy Eberle, University of Nebraska–Lincoln Extension ESI consultant. “No one has told them ‘you can’t do that.’ They make their dreams real.”

The Gallup Organization is one of several ESI partners. Jim Krieger, Gallup vice chair and chief financial officer, said the nationally recognized ESI helps build intellectual property.

“We’ve learned that we need to start entrepreneur, economic and business education at a younger age, and it needs to be more sustained,” Krieger said. “We’ve learned that children who choose this form of education

are more engaged in their own education process.”

During camps, young entrepreneurs start by identifying and sharing their strengths, interests and hobbies, and deciding whether to work with others or by themselves. By Day 2 of camp they determine their product ideas and shop for supplies.

Campers build their businesses with \$50 startup money borrowed from a local foundation or economic development entity. They pay off the loan and other expenses, and keep the profits.

In 2010 there were more than 20 ESI camps throughout Nebraska. A more detailed extension ESI curriculum is offered through 4-H clubs, schools and after-school programs.

“There are some great ideas,” Eberle said. “Some of the youth have submitted their ideas for a patent.”

— Cheryl Alberts

Eberle can be contacted at (402) 472-2966.



## Water, Climate and Environment

## ‘Citizen scientists’ do amphibian survey

Thanks to 4-H’ers across Nebraska, scientists will be getting a better understanding of how amphibians are doing in the state.

It’s the latest step in a growing collaboration between University of Nebraska–Lincoln Extension 4-H and Omaha’s Henry Doorly Zoo.

The two first got together on 4-H’s Wildlife Conservation curriculum when 4-H curriculum specialist Patricia Fairchild sought outside feedback for the series. Elizabeth Mulkerrin, Omaha’s zoo education director, was impressed.

“When I told her that 4-H was in every county of the state and includes one out of three (age-eligible) Nebraska youth ... she got even more interested,” Fairchild said.

A recent collaboration is the curriculum Amphibians & You, which was begun by the zoo but completed by 4-H. The zoo conducted training for 4-H extension educators, who in

turn are helping 4-H’ers use the manual to survey amphibian populations in Nebraska.

About 200 people — extension educators and staff and others — have been trained.

These adult and youth “citizen scientists” are gathering data on amphibians — collecting water quality information, studying habitat, taking photos, even taking sample swabs from amphibians to be tested for the chytrid fungus, a serious threat to their survival.

“It has been a great partnership,” Mulkerrin said, adding further collaborations are planned and colleagues in South Dakota and Iowa are interested in a similar effort.

“It’s nice to see organizations come together with a common mission — working together to enlighten students to turn them on to science,” Mulkerrin said.

— Daniel R. Moser

Fairchild can be contacted at (402) 472-4067.

## Robots teach science

It begins when two LEGO® pieces snap together. The GEAR-Tech-21 program builds LEGOs into robots, and youth discover science is fun.

GEAR-Tech-21 is based on the Nebraska Robotics and GPS/GIS in 4-H: Workforce Skills for the 21st Century program, funded by the National Science Foundation. The program has rapidly expanded from a few groups in Nebraska to clubs and camps across the United States.

*“4-H youth are more than twice as likely as other youth to be in the highest trajectories of contribution to their communities.”*

— “Waves of the Future” report  
Tufts University 2009

Through testing before and after GEAR-Tech-21 robotics experiences, Bradley Barker, University of Nebraska–Lincoln Extension 4-H science and technology specialist, and his project team studied the program’s effectiveness to impact youth attitudes toward science, technology, engineering and mathematics (STEM).

“We measured interest levels at the beginning of the program and again at the end using instruments developed and validated through the project,” said Barker. “For all STEM attitude and interest areas, the scores showed statistically significant differences from pre- to post-test.”

Impact of the Nebraska Robotics program expanded through partnerships with FIRST LEGO League and Time Warner Cable.

Time Warner Cable introduced Connect a Million Minds, a national program that encourages youth in STEM. Time Warner Cable joined Nebraska 4-H and FIRST to sponsor the Nebraska Robotics Expo at the Strategic Air and Space Museum near Ashland, creating a documentary, “Connect the Bots: An Examination of How Robotics Inspires Young People to Become the Problem Solvers of Tomorrow.”

“It’s a great partnership,” said Brandy Johnson, Time Warner Cable public affairs specialist. “We see how Connect a Million Minds, robotics and STEM work together with our youth.”

— Jan Jackson Cejka

Barker can be contacted at (402) 472-9008.

## OMK supports kids

“Families serve, too.”

Those three words describe the drive behind Operation Military Kids (OMK), said University of Nebraska–Lincoln Extension educator Mark Simmons, based in Omaha.

Children and siblings of men and women in the military can have a difficult time coping. Their loved ones are gone for long periods of time, sometimes in harm’s way. Even when they’re home there’s that nagging worry they may leave again.

“We want to make sure that during the entire deployment cycle, kids are recognized and supported,” said Simmons, who serves as 4-H’s military liaison with OMK in Nebraska.

Nebraska efforts focus on family members of the reserves and National Guard. Because they’re geographically dispersed statewide, kids may lack a built-in community support system, Simmons said.

One focus of OMK is training community leaders to deal with residents’ deployments and how they affect kids.

Recent efforts include encouraging 4-H clubs and other community groups to “adopt” military units. Volunteers then attend monthly OMK meetings to participate in activities with children or siblings of the soldiers. Also, new grant funding is supporting seven camps across the state this year, including one in June at Omaha’s Henry Doorly Zoo.

Approximately 11,000 Nebraska youth have a parent or sibling in the military.

“It’s a pretty cool chance to get to serve the nation in Nebraska and a way to make sure these heroes in our own backyard are supported,” Simmons said.

— Daniel R. Moser

Simmons can be contacted at (402) 444-4237.



Extension is a Division of the Institute of Agriculture and Natural Resources at the University of Nebraska–Lincoln cooperating with the Counties and the United States Department of Agriculture.

The 4-H Youth Development program abides with the nondiscrimination policies of the University of Nebraska–Lincoln and the United States Department of Agriculture.

## 4-H investment in the future

Nine years of organizing University of Nebraska–Lincoln Extension 4-H record books means Lexington High School senior Cicely Batie now is breezing through applications for college.

“Everything that any scholarship application asks for is in her 4-H career portfolio,” said her mother, Barb Batie. Besides that, Cicely said 4-H has been fun while allowing her to learn about food, animals and photography, and meet new people.

Elder sister Juliana’s decade of 4-H developed her organization and speaking skills, and interest in citizenship. That, her mother said, helped Juliana land a summer internship at National Corn Growers in Washington, D.C.

While the Baties participate in traditional 4-H clubs and camps, today 135,000 Nebraska youth also participate in 4-H through school enrichment, after-school groups, independent memberships and online experiences.

That’s because 4-H continually adapts to meet needs of today’s youth, including ways of learning and ways of meeting their schedules, said Tracy Pracheil, 4-H educator for multime-

dia learning.

And, Pracheil said, Nebraska’s 12,000 volunteers like Barb Batie help youth learn from more than 100 4-H projects, while teaching lifelong confidence and commitment.

“4-H is an investment in the future as it prepares young people for leadership roles,” Pracheil said. “It’s more than just the actual project of building a robot or constructing a garment — it’s developing skills that will be used for a lifetime.”

— Cheryl Alberts

Pracheil can be contacted at (402) 472-9016.



Barb Batie

Cicely Batie’s country scene photograph was selected to be in the set of 2009 Nebraska 4-H Foundation notecards.

## Volunteering expands, as do interests

4-H volunteers are rewarded by knowing many youth who benefit from their guidance will someday volunteer to help others, a survey shows.

Nebraska’s 12,000 4-H volunteers help make it possible for the state’s 135,000 4-H’ers to learn respect, responsibility and commitment, said Doug Swanson, University of Nebraska–Lincoln Extension educator, now serving a year as USDA’s national coordinator for volunteer and professional development at 4-H national headquarters.

The 2009 4-H Volunteer Impact Study Swanson did showed 41 percent of respondents have been volunteers between 11 and 26 or more years, averaging one to five hours per month.

Eighty-five percent of Nebraska 4-H volunteer survey respondents were female, nearly half ages 42-51. Forty-five percent live on a farm or ranch. Thirty-eight percent have

bachelor’s degrees.

“Our tradition is strong in agriculture and family and consumer sciences, and we still have a base in rural America, but we need to broaden to minority, urban and suburban audiences,” Swanson said.

In addition, he said, more volunteers are needed as 4-H expands into areas like science, engineering and math.

“We want to find those people, especially those who align with 4-H values, have leadership abilities and can accept young people where they’re at,” Swanson said.

“My 4-H’ers help me to understand what is going on in their world,” wrote one volunteer.

Wrote another, “My life has grown with every year I volunteer. I have learned as much from (youth) as they have learned from me.”

— Cheryl Alberts

The Nebraska State 4-H office can be contacted at (402) 472-2805.

# High Plains no-till plots show yield increases

# Rural entrepreneurship



For more than 40 years, test plots at the High Plains Agricultural Laboratory near Sidney have been devoted to dryland crops and pastures.

The long-term tillage plots, initiated by Charles Fenster in 1969, were established to study wheat response to summer fallow management and educate growers about using less tillage during summer fallow.

In 1990, Drew Lyon, University of Nebraska–Lincoln Extension dryland crops specialist and the first Fenster Professor of Dryland Agriculture, was hired to lead the dryland cropping systems program on the 2,410-acre lab.

“It was fairly practical work looking at water storage, soil nitrogen and crop response,” Lyon said. “However in the late 1980s and early 1990s, there was a real shift to study soil organic matter, soil quality and climate change.”

The plots give wheat growers “a better understanding of how tillage affects soil quality,” Lyon said.

He found wheat fallow doesn’t really improve soil quality, although under the plow soil degrades quicker than with stubble-mulch or no-till.

Extension specialists found reducing tillage saves not only time and fuel, but water, typically produces better yields, and allows

growers to intensify and diversify cropping systems.

“These applied research and extension field plots have played a role in the reduction of tillage during summer fallow most likely by 20 to 30 percent,” Lyon said.

Lyon estimates no-till fallow saves around 3 to 4 inches of water per year compared to conventional tillage. If 1 extra inch of moisture translates into 5 additional bushels of wheat, he said, this means the potential of 15 to 20 more bushels of wheat per acre. This potential is not always met in winter wheat fallow rotations, he said, which is why rotation intensification is important.

Lyon said these plots are important not only to Nebraskans, but to farmers nationwide.

“It is really important that Charlie Fenster started something like this and that the plots can be maintained for later generations,” Lyon said. “A lot of long-term plots in other states are disappearing as there is no continuous source for funding them.”

A new long-term tillage plot study will assess occasional tillage over another 40-year period. All treatments will be converted to no-till except for one plowing every six years.

— **Sandi Alswager Karstens**

*Lyon can be contacted at (308) 632-1266.*



Courtesy photo

Former UNL extension dryland crops specialist Charles Fenster helped develop this no-till drill used for decades in long-term tillage plots, which he established in 1969. Fenster, who retired in 1982, continues to promote conservation tillage as seen at a 2005 field day.

Mark Gustafson is excited at the synergy that lies ahead between University of Nebraska–Lincoln Extension and the new Engler Agribusiness Entrepreneurship Program.

Gustafson recently was named director of the program, which is funded by a \$20 million gift from the Paul F. and Virginia J. Engler Foundation. Paul Engler is a University of Nebraska alumnus and Texas cattleman.

The Engler program will fund new student scholarships and an endowed chair in agribusiness entrepreneurship, to which Gustafson also was named. Engler’s dream is to encourage rural Nebraskans to develop and grow businesses within their communities.

For many years, rural economic development has focused on attracting outside businesses, but Gustafson said thousands of communities are competing for very few companies searching for a new location.

“Greater success will come from encouraging individuals to develop and grow entrepreneurial businesses within their communities. The Engler program does that by giving students the skills and experience they will need to succeed in agribusiness in Nebraska. That’s not only going to benefit those students, but also the community and the state as a whole,” Gustafson said.

As it happens, Engler’s vision fits nicely with extension’s, Gustafson said, adding “It’s an especially good fit with 4-H’s EntrepreneurShip Investigation program.”

ESI gives 4-H’ers a chance to explore the potential of starting businesses in their own communities, with the hope that it “will expose them to the possibility of staying in rural Nebraska and being entrepreneurs,” Gustafson said. Another collaboration between the Engler program and extension will occur with extension’s Big Red Academic Camps, which bring high school students to campus during summer for a variety of learning experiences and to explore possible careers. Gustafson plans to develop an entrepreneurship camp, possibly as early as next summer.

“With that, we can provide kids with an intensive entrepreneurship experience,” he said. “We want students to see they can do something they enjoy in rural Nebraska.”

— **Daniel R. Moser**

*Gustafson can be contacted at (402) 472-7252.*

Through a network of 83 offices serving all 93 Nebraska counties, extension is your front door to the University of Nebraska–Lincoln — no matter where you live or what you do. Your local extension educator, extension specialists and university researchers work together to bring unbiased, relevant and empowering information to families, farmers and ranchers, business and industry, communities, homeowners and young people across the entire state. Discoveries and findings rapidly make their way into the hands and minds of the people who need them — so you can apply this knowledge to answer your questions, make better decisions, achieve your objectives or improve your life in some way.

Extension is committed to helping Nebraskans know how — and know **now**.

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## Nebraska extension tradition is strong

It's "coming home."

That's how Ronnie Green, University of Nebraska vice president and Harlan vice chancellor, Institute of Agriculture and Natural Resources, refers to his new position.

Green holds three degrees in animal science — his doctorate from the University of Nebraska–Lincoln, earned in 1988, his bachelor's degree from Virginia Polytechnic Institute and State University, and his master's from Colorado State University.

During Green's first week on the job in July, he was part of an IANR group that visited towns across the state, to meet and listen to people.

"I am committed to further building the great UNL Extension effort so that UNL and IANR can be even more at work for Nebraska than ever before," Green said.

"Nebraska has one of the strongest traditions of extension excellence in the nation," he added. "Today's great challenges dealing with crops, animals, water, natural resources, renewable energy, nutrition, youth and family development, and sustaining and building rural communities make this a time when we need to become even better and stronger."

Throughout his career Green has held a variety of cattle and beef-related positions nationwide, including USDA national program leader for food animal production. Most recently he was senior director, animal genetics global technical services for Pfizer Animal Health, based in Sutton.

John Owens, who was NU vice president and Harlan vice chancellor, IANR, since 2001, stepped down June 30. He now is a UNL extension faculty member.

Extension's 83 offices serving all 93 Nebraska counties help strengthen the state's resources, Green said, adding, "Many states have a small fraction of that — Nebraska should be proud."

The state's land-grant university exists to serve people, Green said, and IANR is well-positioned to do that with connections and partnerships with federal agencies and other institutions, and the state's "living laboratory" of natural resources, growing conditions and crops from east to west.



Gary Stone

*Ronnie Green, NU vice president and Harlan vice chancellor, IANR, talks about beef issues with Karla Jenkins, UNL Extension cow-calf and range management specialist, July 24 during the Panhandle Research and Extension Center centennial celebration.*

"It's all about food, fuel, water and people — with the emphasis on people," Green said.

— **Cheryl Alberts**

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