

Hands-on ranch practicum integrates livestock, forage, economics

Retired veterinarian Nancy Peterson of Gordon has a solid background in beef nutrition management, a big help in managing her family's Sandhills ranch. But when she took the University of Nebraska Cooperative Extension's Ranch Practicum, she said she learned "tons."

"(The practicum) is invaluable because it takes leading-edge knowledge about the grazing system and helps you put it into practical use," Peterson said.

The hands-on practicum hangs its hat on an integrated systems approach to beef management by incorporating facts on the beef herd, forage and economics, said Bud Stolzenburg, extension educator in Cherry County and a practicum coordinator. Instructors demonstrate ways to look beyond traditional feeding, production and culling practices for more profitable alternatives, he said, which often means producing more beef for less money.

"Oftentimes we deal with one piece at a time," Stolzenburg said. "This is total management. We're trying to encourage critical thinking skills."

The practicum covers two days in the classroom and five in the field at NU's 12,800-acre Gudmundsen Sandhills Laboratory near Whitman. Sessions are held over eight months, from June to January, so participants have time to see and better understand forage nutrient cycles and nutrient needs of the herd.

Sherry and Chris Vinton of Whitman took the practicum in 1999, the first year it was offered. It enabled them to better document and verify the benefits of their rotational grazing program, and expanded their knowledge of meadow grazing, Sherry Vinton said.

"It's probably the best time we could have spent," Chris Vinton added. "Every time we went we learned something different. Everybody who ranches should take it."

The Vintons and Peterson say they've saved on their feed bills since taking the practicum.

Because of the investments in a beef cow operation, typical producers can't afford to experiment with new ways to cut costs on their own, Peterson said. The practicum shows them.

"Over the long term it will help us be a much better-managed ranch," Peterson said, adding that even sage producers would be "a light year" ahead if they took the practicum.

The 1999 and 2000 practicums attracted 61 participants from Nebraska, Utah, Colorado and Wyoming. Those participants manage more than 1.5 million acres of range, crop and hay land, and more than 1.5 million head of cattle,



Cheryl Alberts

Bud Stolzenburg, NU Cooperative Extension educator in Cherry County, helps coordinate a ranch practicum for participants to look beyond traditional production practices for more profitable alternatives in their beef operations.

Stolzenburg said. He added participants from 2000 estimate the knowledge gained is worth nearly \$34 per head.

Instructors, bankers and sales representatives also have taken the course, offered for an optional three hours of graduate credit.

"There's so much to think about and do," Peterson said, adding the interaction with participants was invaluable for her 20-year-old son, who also took the course. "Everybody there really wants to learn; they're already top-notch producers," she said.

— Cheryl Alberts

Stolzenburg can be contacted at (800) 657-2188.

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Dean's comments

A new year, a new journey. I am honored to enter the new year guiding a Cooperative Extension that helps people with life skills, helps people in crisis and helps communities be open to new opportunities.

Certainly, times have been better. Our nation was experiencing an economic slowdown even before Sept. 11. Then, late last fall, the state of Nebraska faced a \$220 million revenue shortfall for fiscal years 2002-2003, prompting a special legislative session. The University of Nebraska's assigned share to compensate for this shortfall is approximately \$20 million over those two years. Subsequently, each University of Nebraska-Lincoln college and division was asked to prepare a 5 percent reduction scenario in their state-appropriated base budget. These proposed reductions are to be in the hands of UNL administration at this time.

Nebraska isn't alone in this budgetary situation. Several Midwestern states are facing similar situations – some more difficult. We will make the best of our situation at University of Nebraska Cooperative Extension, even though we will lose some programs and positions. Extension and its programming will move forward and onward with our educational mission. We will continue making differences in people's lives and documenting those differences.

Even so, it will not be business as usual at NU and for extension.

More than ever, extension will need to focus on defined critical issues encompassed within extension's 11 action plans that focus on five primary educational areas:



Elbert Dickey

- agricultural profitability and sustainability
- children, youth and families
- community and leadership development
- food safety, health and wellness
- natural resources and environment

With reduced staffing, extension educators will need to target programming according to their expertise in a multi-county setting, rather than just within county lines. Constituents will still get the same solid, research-based information, but it may come from outside "their" county office.

I am grateful for each and every individual who helps extension meet its educational goals. I am grateful for partners and constituents who speak favorably on behalf of extension.

We need to be in closer contact now than ever before. Let us begin our new year, our new journey, in earnest.

Elbert Dickey
Dean and Director
University of Nebraska
Cooperative Extension

University of Nebraska Cooperative Extension
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Chancellor, University of Nebraska-Lincoln
Harvey Perlman

NU Vice President and Harlan Vice Chancellor,
Institute of Agriculture and Natural Resources
John C. Owens

Dean and Director, NU Cooperative Extension
Elbert Dickey

Editorial
Cheryl Alberts
Judy Nelson
Lori McGinnis
Barbara Rixstine

Designer
Renee Lanik

Photographers
Brett Hampton
Cheryl Alberts
Barbara Rixstine
Sandra Swanson
Jamie Donaldson
Gary Zoubek

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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Sandra Swanson

Schoolchildren test their strength trying to “pull” a tractor last year during NU Cooperative Extension’s Life on the Farm program in Columbus. Children learn the importance of agricultural products, and the people who produce them, with hands-on activities.

Children see ag benefits firsthand

Schoolchildren in eastern Nebraska who’ve held a baby goat or climbed into a combine learn some hands-on facts about the state’s No. 1 industry, thanks in part to University of Nebraska Cooperative Extension.

Second- and third-graders in Platte County, for example, learn about production agriculture through Life on the Farm, sponsored by extension’s 4-H school enrichment program.

“(Life on the Farm) really places the importance of agriculture in their minds,” said Lisa Kaslon, extension assistant in Platte County and program coordinator. Children also learn the importance of the people who put food on their plates, she said.

Public and parochial schoolchildren attend the half-day program, held each spring at Agricultural Park in Columbus. Area producers and representatives of the Nebraska corn and soybean boards describe crops, livestock and farm chores in nine 17-minute presentations.

Children sit on hay bales, pet and hold animals, watch sheep shearing and see and feel buckets of grain. They snack on orange drink made with corn syrup and popcorn popped with soybean oil. The children, most of whom do not live on a farm, are surprised to see items such as sweaters, footballs and ethanol have their origins on the farm, Kaslon said. Even farm children learn new things, she added.

Last year, 479 children and 110 teachers participated, Kaslon said, adding

5,000 children and teachers have participated since 1992.

Extension also collaborates with other organizations in similar educational programs for fourth-graders in other counties. A fall Ag Awareness Festival at NU’s Agricultural Research and Development Center near Mead hosts children in Douglas, Dodge, Sarpy and Saunders counties for a daylong program featuring beef, dairy and grain production and products. Lancaster County children learn about beef, dairy, swine and grain production and horticulture at the Lancaster Event Center in the spring. About 4,600 children from the five counties participated between 1996 and 2001.

“Our goal is that the youth participating understand the connection agriculture has in their daily lives,” said Tracy Behnken, extension educator in Dodge County and one of 15 members of an ag awareness coalition. “They learn that food and many of the products they use in their daily lives are derivatives of agriculture.”

Mary Hassenstab, who teaches second grade at St. Anthony School in Columbus, said her students enjoy participating in Life on the Farm.

“I think it’s wonderful and the children look forward to it each year,” she said. “It’s really a fun day for them.”

— **Lori McGinnis**

Kaslon can be contacted at (402) 563-4901; Behnken at (402) 727-2775.

Nebraskans taking first ‘Steps’ toward healthier living

Participants of University of Nebraska Cooperative Extension’s Steps for Health walking program this spring will take steps toward healthier living, said NU Nutrition Specialist Linda Boeckner.

The “Steps” program encourages Nebraskans to walk alone, with groups, with friends, neighbors, or business associates — but to just walk.

“Sedentary living is an issue for us across the state,” Boeckner said, adding that extension’s walking program is an effort to turn that around.

Thirty minutes of accumulated physical activity daily is a good minimum target for most everyone, Boeckner said, with walking being one of the best ways to achieve that. Walking is one activity that can be done at almost any age in a variety of settings.

“Walking can produce a feeling of vitality, help with stress reduction and lead to better sleep,” Boeckner said. “It can also improve high blood pressure levels and reduces the risk of chronic diseases such as Type 2 diabetes.”

“Steps” was piloted last year with extension staff statewide. Walkers recorded their daily steps of activity with the help of pedometers and log sheets. Of the 93 extension staff members who started the program, almost half finished its entire 15 weeks.

“Steps” is to be introduced by extension educators statewide in early 2002 through community kickoffs, service and community club programs and ongoing extension wellness programs.

“We’re just trying to put a good idea into a form that can be used within communities,” Boeckner said.

— **Barbara Rixstine**

Boeckner can be contacted at (308) 632-1256.

Producers participate in on-farm research

Producers often find answers to their questions in University of Nebraska Cooperative Extension's on-farm crop research.

Extension educators in York, Hamilton, Clay and Fillmore counties annually team with extension specialists and about 20 producers to conduct on-farm research and summarize results. Studies since 1998 have included planting populations for corn and soybeans, planting dates, speed of planting, pollen drift, late-season nitrogen application in relation to soybean yields, insecticide treatments and more.

Gary Zoubek, extension educator in York County, said these annual trials are based on producer questions and needs. Consistency and good replications are important factors in the research, Zoubek said.

"We can find out answers if several producers are doing it all the same way," Zoubek said.

Producers appreciate the networking and information exchange they get with each other, and with extension, to reinforce or better their production practices, he said.

"Some of (the research) is validating what has already been found," Zoubek said.

Wrote one cooperator in a summary interview: "I trust the data. This is unbiased data collected from some very good producers in a region."

— Cheryl Alberts

Zoubek can be contacted at (402) 362-5508.



Tracking harvest yields from this narrow-row York County soybean field was part of NU Cooperative Extension's on-farm research in fall 2001. About 20 producers in York, Hamilton, Clay and Fillmore counties annually team with extension to conduct the research.

Food Processing Center h

"Sue" always gets compliments on her homemade salsa. Friends and relatives tell her, "You really ought to sell this." Where would she start?

The University of Nebraska Food Processing Center is one good place, said Joan Scheel, NU Cooperative Extension lead food industry consultant.

Food processing is big business in Nebraska, Scheel said. Since the center opened in 1983, it has worked with entrepreneurs all over the Midwest to develop and market products that include jellies, honeys and salad dressings, as well as salsas. Since 1989, Scheel said Nebraska's food processing industry has grown from 220 businesses to nearly 400 today.

According to Scheel, the center has helped generate more than \$11 million of additional business for Nebraska processors, contributed to 11 plant expansions and helped relocate four plants.

Hopeful entrepreneurs need more than a product to make their business go; they'll also require some initial capital. Scheel estimated a typical Midwestern food company should plan to spend anywhere between \$10,000 and \$20,000 just to start a food processing business.

With information gleaned from the center, hopeful entrepreneurs start with the center's one-day Recipe to Reality workshop, which Scheel said provides an understanding of what business issues they must consider.

"We talk about a lot of issues including distribution, food safety, product availability, following up with store owners and what it means to be the CEO of your own business," she said.

Typically, 20 percent of workshop participants go on to the center's second phase of the entrepreneurs' program, From Product to Profit. Participants get one-on-one assistance, tailored to each company's individual need, for up to six months, Scheel said. After that, the center continues to be a resource for them.

Check out Cooperative Extension's
Web site at:
<http://extension.unl.edu>

Helps entrepreneurs develop and market Midwestern products

Besides helping potential entrepreneurs decide whether developing and marketing a food product can be profitable, Scheel said the center helps new or existing business owners with pilot production, label design, trademark searches, ingredient analysis and more.

Seventy percent of the entrepreneurs who've participated in the program still are in business, Scheel added, which she sees as a testimonial to the center's success.

"We're like our customers in many ways," Scheel said. "We have lots of good ideas that we'd like to see grow into actuality. By continuing to serve Nebraskans, we help them grow and they, in turn, help us grow."

— **Barbara Rixstine**

Scheel can be contacted at (402) 472-8852.



Barbara Rixstine

NU Food Processing Center consultants Joan Scheel (left) and Les Vavak look at some foods the center has helped put into production. Many of these products are displayed in NU's Dairy Store on East Campus.

Omahan finds FPC an 'incredible resource'

Take-home sales of Mama Malara's Salad Dressing prompted Omahan Ron Benak to thinking about a sideline food business. Many of Benak's Malara's Italian Restaurant customers bought the dressing to take home, which caused him to wonder if wider distribution would be profitable. But he needed help to analyze the question and determine how to start a food processing business.

"I really had no idea what to do except put it in a bottle," Benak said.

That's where the University of Nebraska Food Processing Center helped. Benak found out about the center while working to develop his idea and said he found it to be an incredible resource.

"They helped with all kinds of stuff," Benak said, adding center staff assisted him as he did market research, matched the recipe to product availability and scaled up the recipe to meet production demands. The project was successful: Benak said Mama Malara's Salad Dressing now is in 50 grocery stores in Lincoln, Omaha, Hastings and Council Bluffs, Iowa.

"It all worked," he said. "I got it bottled, got it in the grocery stores and it's selling. The only thing they *didn't* do was go with me to the grocery store."

— **Barbara Rixstine**

NU's Food Processing Center has helped entrepreneurs such as Ron Benak of Omaha research and market their food products.



Barbara Rixstine

Bioenvironmental engineer co-leads national curriculum effort

Livestock and poultry producers in Nebraska and elsewhere often need specifics about new environmental regulations and stewardship issues caused by manure production and storage. Having ready answers to these questions hasn't always been easy, said Rick Koelsch, a University of Nebraska Cooperative Extension bioenvironmental engineer.

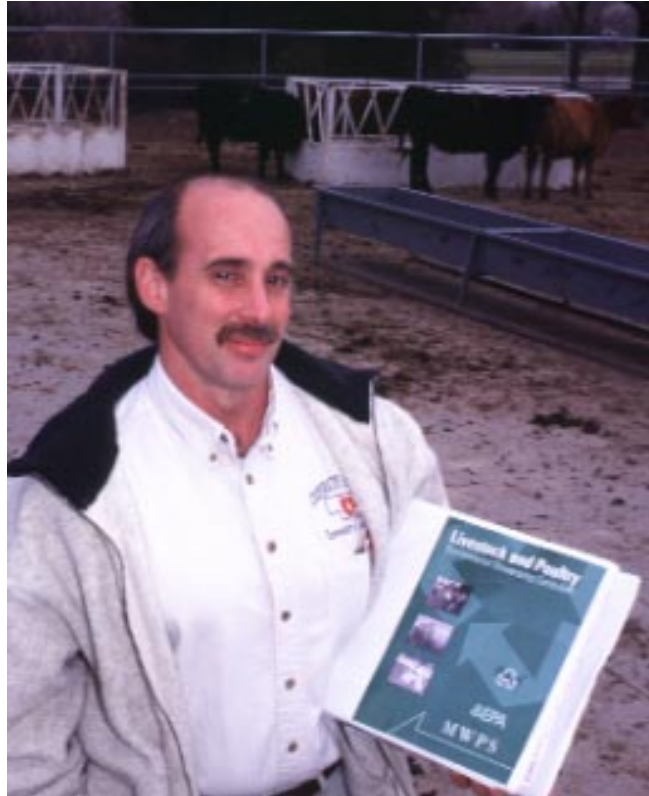
"With increasing regulations, producers have new (local) rules. New federal rules are being proposed," Koelsch said, adding government officials are "raising the bar under which livestock and poultry producers have to produce. Also, producers have increasing scrutiny (of their environmental stewardship) by their neighbors."

A new Livestock and Poultry Environmental Stewardship Curriculum now is available to better teach good stewardship principles of managing manure, Koelsch said. He co-leads a collaborative effort of 15 land-grant universities, the Midwest Plan Service, the Environmental Protection Agency's Agricultural Assistance Center, and the U.S. Department of Agriculture in developing the 26-lesson curriculum.

Koelsch draws upon his expertise in manure management, whole farm nutrient management and livestock systems odor control in heading the 30-member team.

"We've tried to pull together the most knowledgeable people and the latest science about these issues," Koelsch said.

The national curriculum is an educational tool for U.S. livestock and poultry advisers and producers that provides a sound understanding of environmental stewardship, Koelsch said. The curriculum consists of an adaptable six-module lesson plan available on CD and in standard paper format. After



Brett Hampton

A new national Livestock and Poultry Environmental Stewardship Curriculum summarizes the current science in environmental quality issues for producers. Rick Koelsch, NU Cooperative Extension bioenvironmental engineer, was instrumental in developing the curriculum.

completing workshop training, Koelsch said advisers can help local producers with manure management issues including odor control, nutrient management, on-farm risk assessments, feeding programs to reduce excretion and odor, and storage construction and operation issues.

Koelsch said individual producers

also can use it as a reference for needs ranging from building a lagoon liner to more efficient use of odor-causing nutrients. The searchable CD can provide producers with quick access to the latest science on a wide range of manure management issues.

The curriculum has received positive responses from pilot reviews in six states, Koelsch said, adding "people feel that access to the science has been helpful."

EPA has provided approximately \$500,000 for the project, which extension oversees. Forty-four states are sending teams to participate in workshops offered throughout the country. Nebraska team members will include public- and private-sector representatives, including Nebraska commodity groups, Koelsch said.

Training workshops began in October and will continue through April. Information on

the curriculum is available on the Livestock and Poultry Environmental Stewardship Curriculum Web site, www.lpes.org, or from local extension educators.

— **Barbara Rixstine**

Koelsch can be contacted at (402) 472-4051.

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Yards, acreages beautified with horticultural paradise tips

Homeowners can gain beautification tips for their yards and acreages when they participate in University of Nebraska Cooperative Extension's Creating a Horticultural Paradise workshops.

The 12-week workshops are coordinated by Jim Peterson and Sarah Browning, extension educators in Washington and Dodge counties, respectively. The two-hour afternoon and evening workshops begin in January and are offered annually in Washington, Dodge, Burt and Cuming counties.

This year's focus is on landscaping, Browning said. Past workshops have addressed pruning, turf, wildlife habitat and more.

Peterson started the program in 1992 to provide horticulture education that participants could use in their home landscapes. Workshops also provide information needed for Master Gardener

recertification.

During 2001, 109 people participated in the Dodge County workshops, Browning said, with 80 percent of participants saying classes were very educational. Additionally, 270 participants attended workshops in Washington, Cuming and Burt counties, she said.

"(Participants) learn something that they can apply to their own landscape," Browning said. Browning developed a Web site for extension called Horticulture Paradise, <http://hortparadise.unl.edu>,



Brett Hampton

Sarah Browning, NU Cooperative Extension educator in Dodge County, helps coordinate Creating a Horticultural Paradise workshops for homeowners. The 12-week workshops begin annually in January. This year's focus is on landscaping.

which centralizes links to various horticulture Web sites and has received national extension recognition.

— **Lori McGinnis**

Browning can be contacted at (402) 727-2775; Peterson at (402) 426-9455.

Sugar beet team discoveries help boost acres planted, yields

Sugar beet growers in western Nebraska and elsewhere can anticipate stronger yields because of studies done by the University of Nebraska Cooperative Extension's Sugar Beet Development Team, a team member said.

The team of five extension specialists at NU's Panhandle Research and Extension Center in Scottsbluff developed and conducted large-scale trials after sugar beet production declined in the mid-1990s. Bob Harveson, a center plant pathologist, said the decline occurred partly because growers unknowingly planted varieties susceptible to regional diseases and insects.

In-depth trials covered sugar beet field emergence and variety response to irrigation, herbicide injury, insects and diseases. The trials were conducted during 1997-2000 at 21 sites in Nebraska,

Colorado and Wyoming.

"This taught not only us but the industry in this area that regardless of the production problems someone has, that these things can often be dealt with by selecting the right variety," Harveson said.

To disseminate results, the team held grower meetings and field days in Nebraska, Colorado, Wyoming and Montana. The team has distributed about 3,000 booklets that summarized the data and included information on new discoveries, such as the disease *Aphanomyces* root rot and damaging effects of the sugar beet root aphid.

One direct result of the trials is that the majority of sugar beet varieties planted last year were resistant to root aphid, he said. Another is that sugar beet yields have increased an average of 3 tons

per acre and increased the amount of beet sugar that can be processed into refined sugar. The higher the sugar content, the more money growers get for their beets, Harveson said. Plus, 8,000 Nebraska acres have been put back into sugar beet production and the results have influenced the way growers select varieties, Harveson said.

One grower estimated information from the study would enhance his profitability by at least \$100 per acre, Harveson said.

— **Lori McGinnis**

Harveson can be contacted at (308) 632-1239.

First-ever 4-H Cyber Fair celebrates youth, technology

Advancing technology across the state is a goal of University of Nebraska Cooperative Extension 4-H, which kicked off its plans with the first 4-H Cyber Fair at the 2001 Nebraska State Fair.

One vision of 4-H and extension is to use and demonstrate advanced technology to enhance Nebraska's economic development opportunities, particularly in rural areas, and provide entrepreneurial and technical skills to youth, said Patricia Fairchild, 4-H curriculum design specialist.

The inaugural Cyber Fair helped launch that goal. Gateway Co. Inc., loaned 30 computers to 4-H for the event, which Fairchild said allowed 17,000 adults and children to explore the Internet, play interactive games and see the latest in technology, such as wireless laptop computers.

Cyber Fair visitors heard presentations on digital photography, developing and searching Web pages, e-mail and more. Veterans learned how to search for their military friends on the Web. U.S. Rep. Tom Osborne spoke about improving technology and its subsequent economic opportunities for youth in rural Nebraska.

"Cyber Fair is a celebration of 4-H and technology," said Fairchild, who coordinated the event. "It is using technology advances and integrating them as an educational tool into our 4-H programs."

Robert Krakow of Hebron, a math and computer science teacher at Thayer Central High School, visited Cyber Fair with his 14-year-old son, Levi.

"I think anytime you can get kids to see something hands-on, it's just a super experience," he said.

Levi said he enjoyed playing a game building cyber rockets.

"The games were pretty fun," he said. "I hope they have it again."

The fair was believed to be the first of its kind for a state fair in the United States, and Gateway plans to use it as a

pilot project to replicate in other states, Fairchild said.

4-H plans for Cyber Fair to be an annual event at the state fair, she said. In

addition, Gateway is loaning 15 to 20 computers for 4-H to recreate smaller cyber fairs in Knox, Madison, Dodge, Thayer and Richardson counties in early 2002, Fairchild said. 4-H's ultimate goal is to obtain a cyber mobile – a computer-equipped and Internet-connected vehicle that will travel the state to teach more



Jamie Donaldson

Levi Krakow of Hebron plays an interactive computer game at the first NU Cooperative Extension 4-H Cyber Fair. The Cyber Fair, a celebration of youth and technology, took place during the 2001 Nebraska State Fair.

about technology, she added. Fairchild believes it would be the first 4-H cyber mobile in the country.

– **Lori McGinnis**

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

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