Extended Visions Newsletter of ARDC

2-2009

Extended Visions, January/February 2009

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BEEF PROGRAMS - Cont. on P. 2

Beef Satellite Short Courses

UNL Extension’s Beef Satellite Short Course continues in January. The sessions will look at issues currently facing Nebraska’s beef producers. The Beef Short Course will present the latest research-based information on herd health and profitability.

The sessions will be held on Monday evenings, beginning at 7:00 p.m. at the Saunders County Extension Office. The Extension office is located at the August N. Christenson Research & Education Building at the ARDC.

The satellite programs will also be broadcast at the ARDC on January 12. Recessive Genes in Beef Cattle Production will be presented by Matt Spangler, UNL Beef Specialist and on January 19, Production Tips to Increase Profit Potential in the Cow/Calf Enterprise will be presented by Rick Rasby, UNL Beef Specialist.

There is no fee for this program, but pre-registration is requested.

Improving the Profitability of Fertilizer and Manure Use

Jan. 16 (9:00-11:30)

Jan. 16 (1:00-4:00) and Mar. 19 (7:00-10:00 p.m.)

All producers using fertilizer in the LPN-NRD must attend nitrogen certification at least once every four years.

Pesticide Applicator Training

Feb. 3 (1:00-4:00); Feb. 4 (6:30-9:30). Feb. 5 (9:00-12:00), and Mar. 31 (1:00-4:00)

* Certification as a private applicator allows farmers to purchase and use restricted use pesticides in their farming operations. Private pesticide applicators with expiring certification and those seeking first-time certification will need to attend a certification training session in 2009. UNL Extension provides the educational program, while the state ag department is responsible for certification. The training cost is $30 per person.

Nebraska No-Till Conference

Feb. 10 - ARDC and Feb. 11 - Holdrege (9:00-1:00)

* UNL Extension will give corn and soybean producers information on how to be successful with minimum and no-till at the Nebraska No-Till Conference. Producers will learn the benefits of no-till and how it can work for them. Speakers include no-till farmers, university specialists and industry representatives.

In Memory of August N. Christenson

by Dan Duncan, Assistant Dean and Director

UNL Agricultural Research Division

The research and Education Building at the ARDC is named in honor of August N. Christenson for his outstanding loyalty and commitment to the students, faculty and programs of the University of Nebraska-Lincoln.

We were sad to say good-bye to our friend “Augie” recently. He passed away on Friday, November 28, 2008 at his home in Omaha. Augie was born on October 11, 1923 in Wahos. He was 85 at the time of his passing.

August “Augie” Christenson grew up on his family’s farm near Colon, Nebraska, in Saunders County. He graduated from the University of Nebraska-Lincoln College of Business Administration in 1945 and was member of Delta Upsilon fraternity.

He dedicated his career to the Standard Chemical Manufacturing Company, a livestock feed and supply firm in Omaha, and retired as the senior vice president and treasurer.

A member of the University of Nebraska-Lincoln Chancellor’s Club with Distinction and the University of Nebraska President’s Club, Augie was a loyal supporter of the university who had given annually since the 1950s.

On August 23, 2004, he contributed a substantial planned gift to the University of Nebraska Foundation to provide perpetual support for the College of Business Administration and the Agricultural Research and Development Center near Mead.

Augie’s memory will reside in the hearts and minds of those who knew him. However, his name and story will not perish with us. It will live on for generations within the August N. Christenson Research and Education Building.

A tribute slide show and downloadable file can be found on the ARDC website at http://ardc.unl.edu/christensontribute.shtml.

Programs for Crop Producers

At the Saunders County Extension Office located at the ARDC August N. Christenson Research & Education Building unless otherwise noted...

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- Extension Provides Programs for Beef Producers
- In Memory of August N. Christenson
- Master Gardener Training for Local Gardeners
- Meat Market School - Leadership Students
- Programs for Crop Producers
- The Clover Corner 4-H
- Tree Diseases/Insects
- Bag worm
- Pine Wilt

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CROP PROGRAMS - Cont. on P. 3
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BEEF PROGRAMS - Cont. from P.1

Beef Profitability Workshops

How a beef operation is managed can make a significant difference in how profitable it is. With so many variables to consider, such as feed and fuel costs and up-and-down markets, monitoring and maintaining a healthy bottom line can present an ongoing challenge.

UNL Extension will offer beef profitability workshops in January and February to help producers meet these challenges.

The sessions will be held at two different locations on each workshop date. Afternoon sessions will be held at the Washington County Extension Office, 597 Grant St., Blair, NE. Afternoon workshops will be from 1:00 p.m. – 3:00 p.m. with a 12:30 p.m. registration.

Evening sessions will be held at the Saunders County Extension Office at 300 St. Christian Research & Education Building at the ARDC. The workshops run from 7:00 p.m. – 9:00 p.m. with a 6:30 p.m. registration.

The first workshop will be held on January 26. Rick Rasby, UNL Beef Specialist will cover Cow-Calf Producer Profit Tips. Topics will include: cow/calf management systems to attack feed costs; testing forages for quality can save dollars and makes “cents” when designing feeding programs, understanding a forage analysis and purchasing protein supplements after comparing options on a cost per pound of protein basis.

February 17, Dr. Darrell Mark, UNL Livestock Marketing Specialist will present “The Economics of Calving & Backgrounding Systems: Break-even, Overall, and Co-Product Feeding.” Topics include: calculating breakeven and its role in making, backgrounding and yearling systems; calf feeding versus background and yearling finishing systems; and the economics of feeding and storing ethanol co-products.

Pre-registration is encouraged by phone, fax, e-mail or mail one week in advance – discounts apply. Cost is $10 for registrations received one week in advance (by Jan. 20 for the first session and by Feb. 10 for the second workshop). After that, the fee is $15.

Fees include reference materials and refreshments. Make checks payable to: UNL Extension in Saunders County and mail to 1071 County Road G, Room B, Ithaca, NE 68033-2234.

The workshops are sponsored by UNL Extension in Douglas/Sarpy, Saunders, and Washington Counties.

Pine Wilt

Most Nebraskans have heard of the new problem facing our pines: pine wilt, which is caused by the microscopic pine wood nematode. This nematode is unusual, spreading the disease. Once the pinesawyer beetle introduces the biological systems engineering

BIOLOGICAL SYSTEMS ENGINEERING - Cont. from P. 1

Biotechnology, in processing GMO soybeans (including oil extraction and biodiesel production).

Dr. Dean Eisenhauer teaches UNL’s Mechanized Systems Management 452 class, Irrigation Management. The class visits the ARDC to evaluate and compare efficiencies of center pivots and linear move systems, as well as to learn about the computer controlled systems of center pivots at the ARDC.

Dr. Slava Adamchak teaches UNL’s Site-Specific Crop Management (Agronomy, Mechanized Systems Management and Agricultural Engineering). The class visits the ARDC to attain hands-on experience with combine yield monitors. The students will ride in an ARDC combine and observe yield monitors in use and then examine the maps created from the monitors. They also learn about Veris mapping fields. The Veris electrical conductivity mapping unit records electrodensity of the soil at different depths to identify different soil types. And the class performs soil sampling while at ARDC.

The department is also involved in the Carbon Sequestration Project. The project involves research on how to best to store carbon in soil, improve crop production efficiency in the Western Corn Belt and protect the environment. Dr. Derrel Martin is involved with the tillage effects and water management components.

Biological Systems Engineering faculty are also often involved in Extension programs at the ARDC. They specialize in areas such as irrigation, precision agriculture and reduced/no-tillage practices and share their experience and studies via programs such as the Crop Management Diagnostic Clinics and others.

Faculty, staff and specialists present information at Extension programs such as the Crop Management Diagnostic Clinics and other training sessions.

Rogers Memorial Farm

The Rogers Memorial Farm also plays an ongoing role in research, extension and academic programs provided by Biological Systems Engineering. Dr. Paul Jasa, the Rogers Memorial Farm is a no-till research farm owned by the University of Nebraska-Lincoln and is operated by Biological Systems Engineering in cooperation with several other University departments and USDA agencies. Rogers Memorial Farm is a living outdoor laboratory for real life situations and experiences.

The Rogers Memorial Farm has dedicated the farm to soil and water conservation activities, evaluating and demonstrating both cultural and structural practices. Crops are raised using a 100% no-till cropping system with various rotations of corn, soybeans, grain sorghum, and wheat, from single year to multiple year rotations using two to all four crops in the rotations. With crop rotation, hybrid seeds from different suppliers and different agriculture pesticides are rotated for control of weeds and diseases in crops. Acres are distributed as follows: corn (40), soybeans (130), grain sorghum (30) and wheat (40).

In 1947, the Rogers Memorial Farm was bequeathed to the University of Nebraska as a memorial to Edward Rogers for the purpose of teaching University students and research of conservation farming. Rogers was a UNL graduate who died in service during World War II.

Cattle breeding experiments were conducted at the farm from 1947 to 1966. Biological Systems Engineering (formerly known as Agricultural Engineering) began management of the farm in 1966. In 1985, the University’s Institute for Agriculture and Natural Resources and the Board of Regents entered into an agreement with the U.S. Soil Conservation Service (now known as the Natural Resources Conservation Service) which designated the Rogers Memorial Farm as the “Conservation Demonstration Farm.” Today, the Rogers Memorial Farm stands not only as a living memorial, but also as a center for soil and water conservation research and educational programs.

Research is centered around 100% no-till farming and ranging from no-till intercropping and relay cropping to side by side. The Rogers Memorial Farm was fully converted to no-till crop production in 1991. Today, the no-till soil conditions make possible infiltration and runoff studies applicable to modern long-term no-till agriculture. The long-term no-till soil conditions and the rolling and terraced terrain make this a unique research site for rain-fed agriculture in the U.S.

In 1966, Dr. Howard Wittmuss established four sub-watersheds with runoff stations for monitoring runoff and soil loss. These sub-watershed range in size from 12 to 40 acres. Three stations are currently being refurbished with modern monitoring equipment. Field and runoff studies are planned by Dean Eisenhauer under his ARDC Project, “Improved prediction of infiltration and overland runoff in Nebraska’s watersheds.”

Long-term tillage plots were established by Paul Jasa and Elbert Diecky in 1981. Numerous projects have been conducted on these plots, with infiltration studies conducted every 5 years as part of the Nebraska Environmental Trust project titled “Coupling field measurements and remote sensing/satellite data to quantify crop evapotranspiration, evaporation, and water balance of tiled and untiled fields.” This project is

Participants in the Rural Septic Waste Water Training learn how different soil profiles affect the efficiency of lateral waste water systems from Kaela, UNL Soil and Water Natural Resources.

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Irrigation and Energy Conservation Workshop for Corn Growers

Febr. 17 - Curtis; Febr. 18 - Alliance; Febr. 19 - Ord; and Febr. 20 - Columbus

* Nebraska corn growers are constantly challenged to grow corn responsibly using proven best-management practices. Surface and subsurface water irrigation management is on the top of the list. The workshop is brought to you by the Nebraska Corn Board and the Nebraska Corn Growers Association in partnership with University of Nebraska-Lincoln Extension. This special training session will provide you with valuable information on irrigation management that will help you save water and money.

Nebraska Soybean and Feed Grains Profitability Project (NSF/GP)

On-Farm Research Update - March 4

* Producers will obtain valuable crop production-related information from on-farm research projects conducted on Nebraska farms by Nebraska farmers. The program runs from 9 a.m.-3 p.m. NSF/GP is an on-farm research project designed to provide farm operators with an understanding of how to conduct crop research on their farms and using their own machinery. Comparisons are scientifically designed, statistically analyzed and conducted for three years to assure reliable, useful information. Registration is $25 for non-NSF/GP members and includes a copy of the annual on-farm research report, refreshments and noon luncheon. Pre-registration is encouraged by Feb. 25.

Field Scout Training for Pest Managers - March 16 - Call for details.

Dr. Dean Eisenhauer shows a runoff-sampling station located on field edge and riparian buffer strip to group from Argentina.

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Beef Satellite Short Course 6:30-9:00 pm

February

12 Organic Crop Improvement Association 8:00-5:00
12 Beef Satellite Short Course 6:30-9:00
16 Improving the Profitability of Fertilizer and Manure Use 9:00-12:00
16 Nitrogen Management Training 1:00-4:00
16 Beef Satellite Short Course 6:30-9:00
20 Saunders County Extension Board 7:00-9:30
26 Beef Profitability Workshop 6:00-9:30

March

4 Organic Crop Improvement Association 8:00-5:00
4 Private Pesticide Applicator Training 1:00-4:00
4 Nitrogen Management Training 6:30-9:30
4 Private Pesticide Applicator Training 9:00-12:00
4 Nebraska No-Till Conference 8:00-5:00
17 Beef Profitability Workshop 7:00-9:00

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The Clover Corner

4-H Reaches BEYOND
by Kara Dam, UNL Extension Educator

4-H is finding a place in the after-school program at the Raymond Central Elementary schools in Valparaiso and Ceresco. Once a month, Kara Dam, Extension Educator, provides an educational and fun experience for students who participate in the BEYOND After-School program.

In 2006, four Mission Mandates were identified by National 4-H Council as priorities for the next five years. Those mission mandates included: Healthy Lifestyles where youth will strengthen their nutritional and physical well-being by improving their physical, mental and emotional health and safety; Science, Engineering and Technology (SET) to help youth build an interest and identify opportunities for them to pursue the field of science and technology; Life-Skill Development would help to develop and utilize positive character traits, positive decision making, communication skills, citizenship, community service and leadership; and Career Development to help teach opportunity, connectivity and develop the skills necessary for acting on those opportunities.

In an effort to build the 2008-2009 REYOJOV series around these mission mandates, a special series of programming has been developed to expose youth to each mandate. In October, Fun With Food was presented for the Kindergarten through third grade students. Students learned how to make a variety of snack foods that are age appropriate for their skill level: Apple Smile, Carrot Curls, Sparkling Juice and Monster Sandwiches were just a few of the creative ideas that the students were able to make. Each snack was also related to its place on the food pyramid.

The November program linked directly to the Science, Engineering and Technology mandate. SET is a strong focus area in Nebraska. Helping youth identify opportunities related to science is exciting. Fun With Physics was a program that did just that. Teaching the scientific process and providing five Physics Challenges gave each student an opportunity to learn about matter, energy, reaction time and momentum.

The December program again followed the SET mandate. Quilt Quest is a newly designed 4-H project and is gaining in popularity. Quilts have been used for centuries to log history. Learning the skills of piecing, design and color are only part of quilting. Students in 4th - 6th grade had the opportunity to make paper quilts and learn the skills necessary to design other quilt creations. For the younger students, they will have their opportunity on January 20 in Valparaiso and January 22 in Ceresco when Quilt Quest will be presented again for them.

If you would like 4-H to be a part of your classroom or after-school program, please contact UNL Extension in Saunders County at (402)624-8030, or (800)529-8030.

D o you love working in the garden? Would you like to learn more about plant culture, insect and disease problems? Then why not consider becoming a Master Gardener?

Anyone with an interest in plants or gardening is welcome. Master Gardener Training for Saunders and surrounding counties starts on January 31 at the UNL Extension office in Dodge County at 1206 W. 23rd Street in Fremont. The fee for Master Gardener training is $150. Request more information below, contact Sarah Browning at (800) 830-4855 or apply online at: http://extensionhorticulture.unl.edu/MG.shtml.