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Thoughts for the New Year

by Daniel J Duncan, ARDC Director & IANR Ag Research Division Assistant Dean and Director

A few years ago, I put the following "Thoughts for New Year's Resolution" in this column. The words below are not mine; I wish I knew who to give credit.

Thoughts for New Year's Resolutions

* Promise yourself to be so strong that nothing can disturb your peace of mind.
* To talk health, happiness and prosperity to every person you meet.
* To make all your friends feel that there is something special in them.
* To look at the sunny side of everything and make your optimism come true.
* To think only of the best, to work only for the best and expect only the best.
* To be just as enthusiastic about the success of others as you are about your own.
* To forget the mistakes of the past and press on to greater achievements of the future.
* To wear a cheerful countenance at all times and give every living creature you meet a smile.
* To give so much time to the improvement of yourself that you have not the time to criticize others.
* To be too large for worry, too noble for anger, too strong for fear and too happy to permit the presence of trouble.

As we start the new year, I would like to thank everyone at the ARDC, throughout the University of Nebraska System and within the local community for an exciting year in 2005. I look forward to this coming year knowing we can turn the challenges we face into opportunities and grow stronger through the process.

Happy New Year!!!

Training Opportunities For Crop Producers

Now is the time to for those involved in crop production to review their educational needs for the upcoming year. The following provides details on upcoming training opportunities.

* Managing High Priced Nitrogen

Friday, January 13 * 1 p.m. - 4 p.m. Complimentary lunch at 12:00 Noon at the August N. Christenson Research and Education Building at the ARDC. This session also serves as training for the Lower Platte North NRD nitrogen management training requirements.

Managing High Price Nitrogen

With nitrogen prices on the rise, it is important to make cost-effective decisions. Topics include: nitrogen use for 2006, how optimal rates are affected by fertilizer N price, the N credit; discussion of other issues of fertilizer use, e.g. slow release products, manure nutrients; production of anhydrous ammonia - why the limited supply and high cost; are we moving to more dry and liquid nitrogen sources; trends in use of N fertilizer products, including anhydrous ammonia and slow release N fertilizer; Nitrogen needs for dryland and irrigated corn in 2006; Nitrogen management requirements.

Presenters include: Richard Ferguson, Extension Soil Fertility Specialist, and Charles Wortmann, Extension Nitrification Management Specialist of UNL's Department of Agronomy and Horticulture and Keith Glewen, UNL Extension Educator.

RSVP REQUESTED - please call or e-mail.
Contact UNL Extension at (402)624-8030, (800)529-8030 or e-mail Keith Glewen at kglewen1@unl.edu.

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Featured Unit

ARDC Feature Unit FARM OPERATIONS

Research

While ARDC Farm Operations does not conduct research, it provides land, equipment, labor, expertise, and services to departments when the resource is not available within the academic department or is cost prohibitive for the department to do so on its own. This allows the university to efficiently manage ARDC lands and provide large scale agricultural services to assist the researcher on a least cost basis. The farm provides a working laboratory using modern production practices and equipment sized to today's production agriculture.

Production services relieve the researcher of the burden of managing a crop and instead allowing them to concentrate on research implementation and data collection. Farm Operations manages the crop from planting through harvest and the researcher needs only to concern themselves with specialized applications and other research protocols within the field. Farm Operations works closely with the researcher to plan out every facet of the crop including research treatment layout (using the farm's 20 ft wide equipment), seed requirements (often changing within field by hybrid and rates), tillage (we hope not), pest control management (weed, insect, disease), application timing and rates, irrigation, harvest method (dry grain, high moisture 28-30%, silage, identity preserved segregation). Some practices may be withheld so as not to conflict with the study treatments. For example, not applying an insecticide to control corn rootworm in a corn rootworm efficacy trial.

In all cases the farm staff...
The Farm Operations staff use many forms of modern technology, such as this GPS-equipped combine. Researchers can access much of this information via the internet on the Agricultural Research Division’s website vastly improving information sharing within the university community.

**Tools of the Trade Used by Farm Operations**

**GPS- Global Position System** - Used to record yield or hybrid by location in a field every one or two seconds during travel (about every 7-10 feet). Used to locate field and plot boundaries and to calculate the size of any field or plot.

**Yield Monitor** - Used to determine the harvested bushels and grain moisture while the combine is on the go. Used with GPS and yield mapping software to create a yield map showing yield variation across the field and to document plot yields.

**GIS - Geographic Information System** - Software which records and displays the information captured with GPS, yield monitors, planters, and sprayers. Used to create field plans showing crop and associated production parameters including seed, soil types, fertility, field boundaries, names, and area size. Keeps record of manure applications. Displays site specific yield, pesticide, and seed applications. Useful for planning plots by creating the plot boundaries on the computer dimensionally prior to application in the field. Shows land use, roads, buried utilities, irrigation system pivot tracks and end-gun coverage areas, wells, aerial photos, or anything you want to tie a location to.

**In Remembrance**

Kent Thomson passed away in 2004. We remember Kent in this issue as he was an AgTech II with Farm Operations for many years providing vehicle maintenance and field services.
* Nebraska No-Till Conference  * Wednesday, February 8 at the August N. Christenson Research and Education Building at the ARDC. The conference will also be held on February 7 at the Ag Center in Holdrege. Registration begins at 9 a.m. with conference from 9:25 a.m. - 4 p.m. 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.

Dr. Jill Clapperton of Alberta, Canada’s Agriculture and Agri-Food Canada’s Lethbridge Research Centre is the featured speaker at both locations. She will speak on research findings and will discuss how soil biology and ecology interact with cropping and soil management systems to facilitate long-term soil quality and productivity. Clapperton is an internationally respected lecturer.

Other topics/speakers/locations include: no-till - making it work in southwest Iowa - David Dukes, grain and livestock producer, Bedford Iowa (ARDC only); water infiltration study in no-till and tilled Nebraska fields - Paul Hay, UNL Extension Educator (both locations); residue management, - Paul Jasa, UNL Extension Engineer (Holdrege only); payments for sequestering carbon in Nebraska - Randy Pryor, UNL Extension Educator (both locations); ten years experience no-tilling in irrigated crop production, - Mark Watson, grain producer, Alliance, NE (Holdrege only); and the value of no-till education Mike Kuceera's State Resource Conservationist (ARDC) and Dan Gillespie, No-Till Specialist (Holdrege).

Registration is due February 1. For more information or to register at the ARDC location, call (402)624-8030 or (800)529-8030 or e-mail at kglewen1@unl.edu. For more information or to register at the Holdrege location, call (308) 995-4222 or e-mail cthurl@unl.edu. Online registration available at http://ardc.unl.edu/notoll.htm.

The free event is sponsored by UNL Extension in the university’s Institute of Agriculture and Natural Resources, Nebraska Soybean Board, Sustainable Agriculture and Education (SARE), Lower Platte North Natural Resources District, Tri-Basin Natural Resources District, Central Nebraska Public Power and Irrigation District, USDA Natural Resources Conservation Service, Farm Credit Services of America and John Deere Risk Protection.

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* Pesticide Applicator Training * For private pesticide applicators with expiring certification and those seeking first-time certification. Training will be held at the August N. Christenson Research and Education Building at the ARDC on the following dates and times.

Wednesday, January 18 - 1:00-4:00 pm
Thursday, January 19 - 9:00-12:00
Wednesday, January 18 - 6:30-9:30 pm
Saturday, January 21 - 9:00-12:00

* Marketing Workshops * Two marketing will be offered at the ARDC in February. Grain Marketing Basics with Roy Smith will be held on February 14 and Winning the Game will be held on February 15. Watch for more details!

* Nitrogen Management Training * Thursday, January 19 at 1 p.m. and Wednesday, February 15 at 6 p.m. at the August N. Christenson Research and Education Building at the ARDC. All producers using fertilizer in the LPN-NRD must attend nitrogen certification at least once every four years.

* NSFPP Update * You are invited to attend the Nebraska Soybean and Feed Grains Profitability Project (NSFPPG) meeting on Thursday, March 9 at the August N. Christenson Research and Education Building at the ARDC. Obtain valuable crop production-related information from on-farm research projects conducted on area farms.

* Crop Management Winter Programs * Start off the new year by enhancing your knowledge with University of Nebraska-Lincoln Extension Crop Management Winter Programs. Registration for the training sessions begins at 9:30 a.m. followed by the workshops from 9 a.m. to 5 p.m. The workshops offer in-depth information from university specialists and private industry representatives. Continuing education credits for the Certified Crop Advisor program also are available. Fees include lunch, refreshment breaks, and workshop materials. Participants can attend one or both sessions.

Program titles, date, location, cost and topics include:


For more information or to register call (402) 624-8000, e-mail kglewen1@unl.edu or visit the web at http://ardc.unl.edu/training.htm.

FEATURE UNIT - FARM OPERATIONS - Cont. from P. 1

* of an intended track. Planting can be done without markers and allows the operator to skip passes and return to fill impact when planting multiple seed hybrids across the field in a repeating pattern. Research statistics require random and multiple placement of treatments across a field. For example, if we want to compare the yield between two hybrids, we cannot just plant one side of the field to one hybrid and the second hybrid on the remaining side. We must plant strips randomly across the field. With a conventional marker system, the seed would have to be changed out each pass before starting the next pass. Now we can keep the same seed in the planter, skip passes and continue planting each of the required strips for the same hybrid across the field. When done with the first hybrid, the next hybrid can now be planted in between the first hybrid, maintaining uniformly spaced planter passes across the field.

Survey - The same RTK GPS equipment can be used to survey land features at sub inch accuracy. This is useful in laying out and recording plots, utilities, buildings, irrigation systems, soil and plant sampling locations, and field boundaries.

Remote Control Irrigation - Center pivots can be controlled and monitored remotely by using radio and the internet from a home or office computer. This saves many hours and trips to each of our 13 pivots and improves the timeliness of irrigation events. Each pivot reports its position in the field and its operating conditions such as water application rate, pressure, travel speed, direction of travel, and end-gun status. Each irrigation event is recorded to aid with irrigation scheduling and research reporting.

Research Project and Siting Assistance

In this issue of Extended Visions, we have taken a closer look at the general duties of the Farm Operations unit and the staff. But to give you a better idea of the types of research projects that Farm Operations is involved with, the following is a list of projects that Farm Operations provided assistance with since 2004.

- Carbon Sequestration Project
- IP Harvest and Segregation of P33B51 for Corn Processing Trial
- Fuscidial Soybean Treatment Plots
- Transgenic Soybean Regulated Production Site
- Impact of Insecticide Treatment Timing on Soybean Leaf Beetle
- Mosaic Virus Vector
- Comparison of Legume Overseeded and Commercial Nitrogen Pasture
- Insecticide Resistant CRW Larval Migration
- Soybean Rust Treatment Application Method Trials
Opportunities to Learn and “Grow”

It’s not too soon to start thinking about lawn, garden and acreage plans for next year. Check out these late winter/early spring horticulture programs!

Creating A Horticulture Paradise’ Series
Time: 7-9 p.m.  
Cost: Free  
Location: UNL Extension in Dodge County, 1206 W. 23rd Street, Fremont  
Contact: Sarah Browning, (402) 727-2775, sbrowning2@unl.edu

February 21  
Success With Seeds  
Joan Steffensmeier, West Point Garden Center

February 28  
Run For The Roses  
Kim Todd, UNL Landscape Horticulture Specialist

March 7  
Rain Gardens: Putting Rainwater to Work in Your Landscape Beds  
Kelly Freehan, UNL Extension Educator

March 14  
Pollinating Insects In Your Garden  
Nick Aliano, UNL Department of Entomology

March 21  
Rethinking Shelterbelts  
Justin Everson, Nebraska Statewide Arboretum

Master Gardener Training
March 2-30  
Time: 9:00 a.m.-4:00 p.m.  
Cost: $150.00  
Location: UNL Extension in Dodge County, 1206 W. 23rd Street, Fremont  
Contact: Sarah Browning, (402) 727-2775, sbrowning2@unl.edu

Acreage Insights- Rural Living Clinics
January 14  
Wildlife Enhancement  
February 18  
Growing Fruit Trees: Culture, Training & Pruning  
March 18  
Vegetable Gardening in Nebraska  
April 15  
Horse Nutrition and Management

Time: 9-11 a.m.  
Cost: preregistration $10.00/person, at door $15.00/person  
Location: Location: UNL Extension in Dodge County, 1206 W. 23rd Street, Fremont  
Contact: Sarah Browning, (402) 727-2775, sbrowning2@unl.edu

Registration form: http://acreage.unl.edu

Selecting the Right Horse for You & Conducting A Profitable Horse-Related Business
Date: February 23  
Time: 7-8 p.m.  
Cost: $30.00/person  
Location: At home presentation, via participants computer. Must have a separate phone and computer line to participate. Registration form: http://cit.webex.com

Commercial Pesticide Applicator Training
Dates: Initial: February 7, categories Ag Plant, O&T, R-O-W, Seed Trt  
Recertification training for those who have current licenses will be February 9.  
Categories covered include O&T, ROW, Structural, and Wood Destroying Organisms.  
Time: 9:00 a.m.  
Cost: $30.00 Contact: UNL Pesticide Education (402) 472-3574.

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