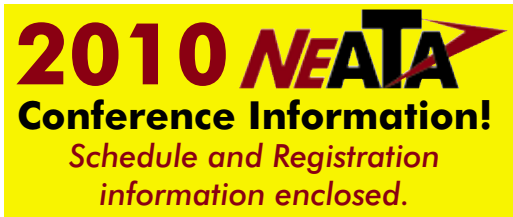


Nebraska Agricultural Technologies Association Conference
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Know how. Know now.

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 rancher, 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.



The Nebraska Agricultural Technologies Association NeATA is a membership network that provides a venue for members to share agricultural research experiences and related knowledge with each other. NeATA was founded in 2001 by innovative Nebraska farmers, ranchers, agribusiness representatives, and UNL Extension.

NeATA strives to identify and explore new technologies practical for agriculture with consideration to financial returns for producers. Identifying agronomic practices that reduce economic and environmental risks thus promoting the stewardship of land water resources are paramount to this effort.

NeATA is organized as a Nebraska Not-For-Profit Corporation and is operated exclusively for charitable, educational and scientific purposes.

PRE-CONFERENCE PROGRAM

**Optimizing Pivot Irrigation Management
Wednesday (9:00 a.m. - 4:00 p.m., 6 CCA credits)**

University of Nebraska-Lincoln Extension Irrigation Specialists and Educators

This program will help producers improve the efficiency of their irrigation systems while reducing application and pumping costs. Participants will learn to evaluate current center pivot irrigation systems from pumps to sprinkler heads. Emerging water management technologies and farming practices that optimize water use will also be addressed. The Center Pivot Water Conservation Project is a three year educational effort to help maximize the benefits of a constrained water supply and to help center pivot irrigators apply water more efficiently. The project is a joint effort between UNL Extension, The Environmental Trust Fund, Nebraska Department of Natural Resources and Nebraska's Center Pivot Manufacturers: Lindsay Corporation, Reinke Manufacturing, T-L Irrigation Co., and Valley Irrigation.

Social Media Applications in Agriculture (1:00 - 4:00)

Dennis Kahl, University of Nebraska-Lincoln Extension

Are you tuned into the ways that the food consumer of the future already gets their information? Learn how ag businesses or agriculture advocacy groups can target their audience using tools like Facebook, Twitter, Blogs, YouTube, etc. You can do it too! Bring your laptop or smart phone and create your business page in one of the social media applications. Computers will also be available for those who do not bring their own. Space is limited.

EVENING GENERAL SESSIONS

Precision Nutrient Management on Site-Specific Management Zones

Raj Khosla, Colorado State University

Management zones were formally introduced as a means to manage in-field spatial variability nearly a decade ago. Several methods of management zone delineation have been proposed and researched throughout the United States and elsewhere. In the Western Great Plains research conducted over the last seven years indicates that bare-soil management zones are agronomically effective and economically viable means of increase nitrogen-use efficiency. Findings and learning's from the research project will be presented.

Monitoring Irrigation Water Application with Computerized Controllers

Bill Kranz, University of Nebraska-Lincoln Extension

Center pivots operate on varying topography and often must deliver a range in water application depths to meet optimum plant growth conditions dictated by soil textures, field obstacles, and landscape position. New technologies allow producers to monitor system status, to change operation settings, and control water application depths to specific portions of the field on a real-time basis. Participants will learn about computerized controllers developed for use in monitoring and controlling center pivots and how these systems could be used in a site-specific irrigation system.

OPENING GENERAL SESSION

Adoption of Precision Agriculture by Australian Grain Growers

Sam Trengove, Australian Farmer

Adoption of PA technologies in Australia has steadily increased over the last 10 years. Yield mapping on combine harvesters was first, however a lack of support and lack of knowledge of how to use the information resulted in limited benefits to growers in the beginning. This is now changing, with more support for hardware and software and a better understanding of the agronomic decisions to be made. Autosteer and guidance systems have been rapidly adopted since the early 2000's, as they are easy to use and the benefits easy to identify. Growers are now also making use of soil mapping tools such as electromagnetic induction (EMI) and gamma radiometrics. Research continues into the use of crop sensing tools and the adoption of these is expected to increase over the next 5 years. How and why these PA technologies are being used will be discussed.

MORNING GENERAL SESSION

Broadband: Who Needs It?

Sandra Scofield, Director, Nebraska Rural Initiative, Carol Farnham, Owner, Signa Solutions, Tom Shoemaker, VP Regulatory Affairs and Business Development, Pinpoint Communications, Ben Pankonin, Director of Business Development, Five Nines Technology Group

While the federal government is still developing a comprehensive broadband plan, other countries have committed funding towards infrastructure so consumers can have access to the Internet at speeds of 100Mbps or more. Is that enough? Universities and federal labs are testing 100 Gbps networks. This session is a panel and audience discussion about broadband applications, the current status of broadband in Nebraska and where we need to be to position agricultural Nebraska for the future.

LUNCHEON SPEAKER

Mapping EvapoTranspiration with High Resolution and Internalized Calibration (METRIC)

Gary Hergert, University of Nebraska-Lincoln Extension

The goal of this project is to accurately quantify net Consumptive Water Use (CWU) for different crops, range land and riparian areas by processing Landsat images and air-borne remote sensing data for the NE panhandle and areas of the North Platte River valley. A physical surface energy balance model, METRIC (Mapping EvapoTranspiration with high Resolution with Internalized Calibration) was used. The CWU maps will estimate net water use by irrigated crops during the 1997, 2002 and 2005 growing seasons. The 1997 estimate is a base year for LB962 for fully and over-appropriated areas that must be met through efforts in the Integrated Management Plan. These CWU maps were developed jointly by the University of Idaho and UNL to produce usable products for planning, managing and regulating groundwater resources for the North and South Platte.

CLOSING GENERAL SESSION

Global Perspectives of Site-specific Weed Management

Sam Trengove, Australian Farmer

Weeds are patchy, yet in most cases weeds are managed with uniform treatments. Site-specific weed management (SSWM) has three requisites; that the weeds can be mapped, that an appropriate control measure for the weeds can be determined and that the control can be targeted at the weed or weed patch. Research into techniques for site-specific management of weeds has been conducted for 20 years or more, yet adoption of SSWM is limited. Where is SSWM up to and what we can expect in the future will be discussed.



**Nebraska Agricultural
Technologies Association
Conference and
Trade Show**

January 27-28, 2010

Midtown Holiday Inn
Grand Island, NE

**Exploring Emerging
Agricultural Technologies**

UNIVERSITY OF
Nebraska
Lincoln
Extension

A Division of the Institute of Agriculture & Natural Resources



Conference Schedule

WEDNESDAY – JANUARY 27

8:30 a.m.	Pre-Conference Workshop Registration
9:00 a.m. – 4:00 p.m.	Optimizing Pivot Irrigation Management – University of Nebraska-Lincoln Extension Irrigation Specialists and Educators
1:00 – 4:00 p.m.	Social Media Applications in Agriculture, Dennis Kahl, University of Nebraska-Lincoln Extension
4:00 – 5:00 p.m.	NeATA Board of Directors Meeting
5:00 – 6:00 p.m.	Conference Registration – Exhibits Open
6:00 p.m.	Dinner
7:00 p.m. 8:00 p.m. 9:00 p.m. - 10:00 p.m.	Precision Nutrient Management on Site-Specific Management Zones, Raj Khosla, Colorado State University Monitoring Irrigation Water Application with Computerized Controllers, Bill Kranz, University of Nebraska-Lincoln Extension Break – View Exhibits – Networking with other conference participants – Roundtable discussions
10:00 p.m.	Exhibits Close

THURSDAY - JANUARY 28

7:00 a.m.	Breakfast - Registration – Exhibits Open
8:00 a.m.	Adoption of Precision Agriculture by Australian Grain Growers - Sam Trengove, Australian Farmer

	AMBASSADOR ROOM	EXECUTIVE ROOM	GOVERNOR ROOM	ISLANDER ROOM
9:00 a.m.	Farm Bill 2008: Expectations, Outcomes, and the Future of the Program <i>Tim Lemmons, University of Nebraska-Lincoln Extension</i> <ul style="list-style-type: none"> Learn how the farm bill worked for you in 2009 and may still work for you in 2010. Learn how alternative options may or may not have stacked up against the Farm Bill in 2009 and future program years. Learn how some farm management strategies coupled with the Farm Bill may reduce the risk exposure of your operation 	Evaluation of Ground-based Active Remote Sensors of Nitrogen Management in Irrigated Corn <i>Tim Shaver, University of Nebraska-Lincoln Extension</i> <ul style="list-style-type: none"> Learn how environmental conditions and management practices impacted GreenSeeker and Crop Circle active remote sensor NDVI Wind speed, corn row spacing and sensor movement speed were simulated and their effects on sensor NDVI evaluated. Progress towards N application algorithms for the GreenSeeker™ and Crop Circle™ sensors. 	Crop Water Sensors – Users’ Perspectives <i>Nick Lammers, Fontanelle Hybrids; Nick Emanuel, Pinnacle Ag Technologies</i> <ul style="list-style-type: none"> Comparing and contrasting two popular water sensing technologies based on field experience Learn how to use these technologies effectively. See the impact these technologies had on farmer irrigation practices 	Ag. Energy Towers. A Solar and Wind Powered Pivot <i>Scott Usher, UHRM Enterprises</i> <ul style="list-style-type: none"> Our Wind Generators Towers and Solar Panels The invertors and your increases in profit per acre
9:50 a.m.	Broadband: Who Needs It?— Sandra Scofield, Director, Nebraska Rural Initiative, Carol Farnham, Owner, Signa Solutions, Tom Shoemaker, VP Regulatory Affairs and Business Development, Pinpoint Communications, Ben Pankonin, Director of Business Development, Five Nines Technology Group			

10:40 a.m.	Break – View Exhibits
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11:10 a.m.	Irrigation Costs & Pumping Plant Costs <i>Tom Dorn, University of Nebraska-Lincoln Extension</i> <ul style="list-style-type: none"> Use Excel to model ownership as well as operating costs for irrigation systems Determine an equitable charge to irrigate your neighbor’s land with a center pivot Estimate the performance of your pumping plants using your records of water pumped, water pressure, lift and energy consumed 	The A-B-C’s of GNSS Networking <i>Wendy Watson, Director, Engineering Solutions Product Management, Leica Geosystems</i> <ul style="list-style-type: none"> Learn the science behind GNSS Networks Nebraska network: Present and future How will the network benefits to agriculture? 	Deployment of a Wireless Sensor Network to Optimize Irrigation Management <i>Luan Pan, UNL Graduate Student</i> <ul style="list-style-type: none"> Wireless technology is used to monitor soil matrix potential in different field locations at four depths Spatial soil variability is used to define sensor installation sites Estimated soil water depletion is used to optimize irrigation management 	Using Social Media Networks to Further Agriculture <i>Dennis Kahl, University of Nebraska-Lincoln Extension</i> <ul style="list-style-type: none"> Making sense of community networks including Facebook, Twitter, etc. Learn simple steps to using these valuable technologies for personal and business applications Join the NeATA network!
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12:00 p.m.	Lunch
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12:45 p.m.	NeATA business meeting – Lon Bohn, NeATA President
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1:00 p.m.	Mapping Evapotranspiration with High Resolution and Internalized Calibration (METRIC) - Gary Hergert, University of Nebraska-Lincoln Extension
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1:45 p.m.	Break – View Exhibits
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2:10 p.m.	Using Advanced Excel Skills and Topics to Solve Agricultural Problems <i>Tim Lemmons, University of Nebraska-Lincoln Extension</i> <ul style="list-style-type: none"> Introduction to more advanced Excel skills and topics Learn to frame agricultural problems from the perspective of Excel Receive hands-on practice using Excel to solve real world problems 	How Do I Use CORS in Agriculture? <i>Darin Sothers and Jim Sidwell, Leica Geosystem— Agriculture</i> <ul style="list-style-type: none"> Integrating CORS into your farming operation Is CORS compatible with my existing equipment? MojoRTK/C-Bridge 	Precision Manure Management Across Site-Specific Management Zones <i>Raj Khosla, Colorado State University</i> <ul style="list-style-type: none"> Precision manure management is a relatively new concept. It converges the best manure management practices along with precision agricultural techniques, such as management zones Recent study suggests that variable rate application of manure has potential to be used an alternative to or in conjunction with synthetic N fertilizer for improving soil quality and maintaining or improving yields 	Taming the Paperless Tiger: Productivity Tips for Smartphones <i>Presenters: Dennis Kahl, University of Nebraska-Lincoln; Brandon Hunnicutt, farmer; Bonnie Schulz, Northeast Community College</i> <ul style="list-style-type: none"> Smartphone Tips & Tricks to increase productivity (Blackberry, iPhone, DROID, etc.) Social Media(Twitter, Facebook, etc.) & Smartphones (Applications?) Smartphones in Agriculture (Using it for advocating for Agriculture?)
3:00 p.m.	Global Perspectives of Site-specific Weed Management, Sam Trengove, Australian Farmer			
3:50 p.m.	Conference Wrap-up – Door Prizes			
4:00 p.m.	Have a Safe Trip Home!			

CERTIFIED CROP ADVISOR (CCA) CREDITS REQUESTED
 NeATA Conference – 8.0 CCA Credits

Exhibitor Information
Location: Exhibitors are located in the same area where all general sessions, meals and breaks will be served.
Accommodations: Skirted table, approximate space size is 10 feet wide by 8 feet deep
Cost: \$200 per space
 ONE individual registration included
Reservations: Exhibitor space must be reserved by January 22, 2010

To Reserve Exhibitor Space, Contact:
 Dave Varner
 1206 W 23rd Street
 Fremont NE 68025-2504
 Phone: 402-727-2775
 Fax: 402-727-2777
 E-mail: dvarner1@unl.edu

Conference Fee
 Conference registration fees are for all or part of the conference. Program materials, NeATA dues, breakfast, dinner, lunch, and break refreshments are included in the fee.

Registration Form
 Nebraska Agricultural Technologies Association Conference & Trade Show
 January 27 & 28, 2010
 Midtown Holiday Inn • Grand Island NE
 Registration must be postmarked by January 22, 2010 to take advantage of the advanced registration rate.

Name: _____

Spouse Name (if registered): _____

Farm/Business Name: _____

Address: _____

Town: _____ State: _____ Zip: _____

Phone: _____

E-Mail: _____

Pre-Conference Workshop Registration
 Space is limited. Register early to assure enrollment

Workshop 1: Optimizing Pivot Irrigation Management (9:00 - 4:00)

NeATA Members(includes lunch)	x \$30 =
Non-NeATA Members(includes lunch)	x \$35 =

Workshop 2: Social Media Applications in Agriculture (1:00 - 4:00)
 (One person per computer. Add \$10 for an additional participant at your computer)

NeATA Members	x \$20 =
Non-NeATA Members	x \$25 =

Conference Registration

NeATA Members: (Includes program materials, dinner, breakfast, lunch & refreshments)	
Advanced Registration:	x \$95 =
Registration postmarked after January 22, 2010 or at-the-door	x \$120 =
Spouses:	x \$45 =
Students (full-time, under age 24)	x \$45 =
Non-NeATA Members: (Includes program materials, dinner, breakfast, lunch & refreshments)	
Advanced Registration:	x \$120 =
Registrations postmarked after January 22, 2010 or at-the-door	x \$145 =
Spouses:	x \$45 =
Students (full-time, under age 24)	x \$45 =
TOTAL \$	

(Registration refunds granted through January 22, 2010)

Mail your completed registration form and check to:
Nebraska Agricultural Technologies Association (NeATA), Inc.
 1206 W 23rd Street
 Fremont NE 68025-2504

Room Reservations 1-800-548-5542
 Midtown Holiday Inn Hotel and Convention Center
 2503 South Locust Street • Grand Island NE 68801

NeATA Room Rate
 \$70.00/1-4 occupants plus 14.28% room tax
 Check-in: 4:00 p.m. • Check-out: 12:00 noon
 Rooms are held until 6 p.m. unless guaranteed for late arrival with a major credit card.
 Room rates valid through January 12, 2010
 Listen to KRVN 880 AM or KTIC 840 AM radio for weather related announcements

