The Nebraska Agricultural Technologies Association (NeATA) and University of Nebraska-Lincoln Extension are proud to bring you the Midwest’s premier agriculture technology conference.

NeATA’s purpose is educational advancement of farmers, ranchers, private industry, agricultural agency representatives, and others interested in emerging agricultural technologies. Innovative Nebraska farmers and agribusiness representatives who share a common desire to stay abreast of emerging agricultural technologies partnered with UNL Extension in 2001 to establish NeATA.

NeATA and UNL Extension identify and explore new technologies practical for agriculture with consideration to financial returns for producers. Agronomic practices that reduce economic and environmental risks thus promoting the stewardship of land and water resources are paramount to this effort. NeATA serves as a membership network that provides agronomic practices that reduce economic and environmental risks due to the climate change. Management systems must be introduced fast and worldwide. The question is how? ProGIS has developed a GIS platform called WingGIS with applications for rural area management and is the only provider worldwide of an integrated ICT-based software technology for rural area management. With the ProGIS software, farmers can optimize their logistics, compare their farm business with other farms anonymously, buy or sell within groups to get better prices, and traceability documents e.g. Global-GAP, run optional precision farming tools, provide business plans or other required data to banks and insurance companies, do tasks for land consolidation, ecology evaluation or risk management. The ProGIS software provides modern land management tools which cover biodiversity, sustainability, multipurpose land use and its economic benefit, and evaluate land use potentials and carrying capacities based on reliable data.

Connecting Technologies of Today and Tomorrow

The way we communicate and the way we access information has been changing so rapidly. Our future employees that are now in high school and college consider email to be snail mail. So how will information be accessed in the future? How do we do some of the Web 2.0 tools like podcasts, live streaming, wikis, blogging, youtube, You Tube, Flickr, Facebook, LinkedIn, cell phone and Skype? In this workshop we’ll take a look at and demonstrate some of these tools and let you determine how one or more of these tools would be applied on the farm or in your business.

MORNING GENERAL SESSION

Precision Agriculture Trends and Projections
Paul Schopp, CropLife Media Group/Preсious Earth

It was 25 years ago that agricultural technology had the equivalent of man’s first steps on the moon. A handful of big thinkers in Minnesota worked to merge imagery taken by airplanes to a then primitive personal computer and some land-based radio towers to create SoTie, the first execution of automated, map-based variable rate application. Since then, the innovation and imagination has never stopped, as agricultural manufacturers, consultants, retailers, and growers continue to find new and better ways to employ the wide array of currently available technology. Come back in time and experience where we’ve been with agricultural technology, where we are today, and what the future of ag technology could bring to precision practitioners.

LUNCHEON SPEAKER

Using Airborne Geophysical Methods to Map Hydrogeologic Frameworks for Groundwater-Surface Water Interaction
Jim Cannia, U.S. Geological Survey

Heliborne Electromagnetic (HEM) surveys were performed as a pilot project mapping the potential of groundwater with surface water interaction and ground water aquifers within the glacial deposits in eastern Nebraska and selected aquifers in the North Platte River Basin and the Cedar Creek Basin in the panhandle. HEM data collected included land surface elevation, magnetic and apparent resistivity. This information will be used to map the extent of groundwater connectivity with surface water which in turn will be used for water management purposes. Surface water and ground water exist in the project areas and consideration for water quality will be used in the mapping process. Comparison of the resistivity maps to aquifer properties is also a product of this work.

CLOSING GENERAL SESSION

Do You See What I See: The Wide World of Remote Sensing Data
Josh Koecker, Kansas Applied Remote Sensing Program

Remote sensing data come in many flavors and serve many purposes. In this talk, we touch on topics such as vegetation monitoring, crop yield estimation, land cover mapping, post disaster assessment, agricultural intensification, elevation data, and hydrologic modeling. We will look at a wide variety of data associated with acronyms such as AVIRIS, MODIS, NAF, NED, and LiDar. The focus will be on databases that are widely available and accessible.
WEDNESDAY – JANUARY 28

8:30 a.m. Workshop Registration

9:00 a.m. – 12:00 p.m. Farm Program Decision Making: A Hands-on Workshop, Tim Lemmons, University of Nebraska-Lincoln Extension

1:00 – 6:00 p.m. Conference Registration – Exhibits Open

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. - 9:00 p.m. Using airborne Geophysical Methods to Map Hydrogeologic Frameworks for Groundwater-Surface Water interaction, Tim Lemmons, University of Nebraska-Lincoln Extension

11:10 a.m. 12:45 p.m. 
View Exhibits – Networking with other conference participants – Roundtable discussions

10:00 a.m. Exhibits Close

THURSDAY – JANUARY 29

7:30 a.m. - 9:00 a.m. Precision Agriculture Trends and Projections – Paul Schmoll, CropLife Media Group

8:00 a.m. Workshop 1: Farm Program Decision Making (9:00 - 12:00)

9:00 a.m. - 10:00 a.m. Getting the Most Out of Your Cell Phone, Jeff Shuck, R.C. Communications

9:00 a.m. – 12:00 p.m. Using Today’s Technologies

9:00 a.m. – 1:00 p.m. GeophysicalTools - Choosing a Map Publishing System

10:30 a.m. Break, View Exhibits

11:00 a.m. - 12:00 p.m. Geophysical Tools – Choosing a Map Publishing System

12:00 noon Lunch

12:45 p.m. NeATA business meeting – Brandon Hunnicutt, NeATA President

1:00 p.m. Using Airborne Geophysical Methods to Map Hydrogeologic Frameworks for Groundwater-Surface Water interaction – Jim Carr, U. S. Geological Survey

1:45 p.m. Break, View Exhibits

2:00 p.m. The Technology Doctor is In—Bring Your Questions

3:00 p.m. Do You See What I See: The Whole World of Remote Sensing Data, Jude Kastens, Kansas Applied Remote Sensing Program

3:30 p.m. Conference Wrap-up – Door Prize

4:00 p.m. Have a Safe Trip Home!

EXECUTIVE ROOM

9:00 a.m. Progress Towards Quantifying Ground-Water-Recharge From Irrigation Canals in Western Nebraska

Chris Nolting, U. S. Geological Survey

Creating an effective water management tool to better understand the effects of canal leakage on the ground- and surface-water system

Classifying leakage potential of irrigation canals in western Nebraska using surface geophysics

Hydroacoustic instrumentation and the use of heat used to quantify the rates and volumes of ground-water recharge

9:30 a.m. Smart Soil Sampling Using Multiple Sensor Data

Steve Adamchuk, University of Nebraska-Lincoln Extension

• Smart soil sampling is needed to better understand high-density data

• Sampling locations should be relatively homogeneous and be spread through each range of measurements and across a field

• Smart soil sampling is not trivial, but practical approach

GOVERNOR ROOM

Succeeding With Precision Technology

Paul Schmoll, CropLife Media Group

• Key elements of a successful precision program

• Success stories from a dealership

• Pitfalls to a strong precision program and how to avoid them

11:30 a.m. Weed Species Classification and Mapping Using Machine Vision

George Meyers, U.N.L. Biological Engineering Systems

• Automatic detection and discrimination of weed species

• Automatic detection of crop stress in wheat

• Computer vision in herbicide efficacy

• Computer vision in soybean seed technology

• Why this technology may be here sooner than later

1:00 p.m. ISOBUS - Compatibility is Coming

Steve Adamchuk, University of Nebraska-Lincoln Extension

• History and definition of ISOBUS

• Basics of H.O.T/783

• Status of implementation

CERTIFIED CROP ADVISOR (CCA) CREDITS REQUESTED
NeATA Conferences – 9.0 CCA Credits

Exhibitor Information

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 23, 2009

To Reserve Exhibitor Space, Contact:

Dave Vomvor

1206 W 23rd Street

Fremont NE 68025-2504

Phone: 402-727-2775

Fax: 402-727-2777

E-mail: dramar1@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.

Pre-Conference Workshop Registration

Space is limited. Register early to assure enrollment

NeATA Members $25 =

Non-NeATA Members $30 =

Conference Registration

NeATA Members: (Includes program materials, dinner, breakfast, lunch & refreshments)

Advanced Registration:

x $95 =

Registration postmarked after January 23, 2009 or on-site

x $120 =

Speakers:

x $50 =

Students: (full-time, under age 24)

x $50 =

Non-NeATA Members: (Includes program materials, dinner, breakfast, lunch & refreshments)

Advanced Registration:

x $120 =

Registration postmarked after January 23, 2009 or at-the-door

x $145 =

Speakers:

x $50 =

Students: (full-time, under age 24)

x $50 =

TOTAL $ =

(Registration refunds granted through January 23, 2009)

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 • Convention Center

2503 South Locust Street • Grand Island NE 68801

NeATA Room Rate

$70.00/1-4 occ., 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 by 12 noon with a major credit card.

Room rates valid through January 14, 2009

Listen to KRVN 880 AM or KTIC 840 AM radio for weather related announcements