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# For more information on this and other topics, see www.ag.ndsu.edu

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County Commissions, NDSU and U.S. Department of Agriculture Cooperating. This publication will be made available in alternative formats for people with disabilities upon request, (701) 231-7881.

### **▼** About the Trainers

#### **David Franzen**

Franzen spent 18 years in the retail fertilizer industry as an agronomist/manager. He received his degrees at the University of Illinois, completing his Ph.D. in 1993. He joined the NDSU Extension Service as Extension soil specialist in 1994.

#### **David Hopkins**

Hopkins has worked in soil genesis and classification for the North Dakota Agricultural Experiment Station since 1981, completing his Ph.D. in 1996. He teaches Soil Genesis and Survey (Soils 444/644) in the Department of Soil Science at NDSU. His research interests concern soil morphology and land use, the effects of irrigation on soil quality and trace element distribution in landscapes.

#### **Lakesh Sharma**

Sharma received his M.S. degree in agriculture from Punjab Agricultural University, the highest rated agriculture university in India, in 2010. He transferred from Texas A&M University in the spring of 2011 to NDSU and works on the corn N-rate project with Franzen as part of his Ph.D. program. Sharma spent the summer working with the Greenseeker and Holland Crop Circle Sensor to begin to establish criteria for predicting N rate side-dress requirements in corn.

#### Tom DeSutter

DeSutter received his B.S. and M.S. degrees from South Dakota State University and his Ph.D. from Kansas State University. His primary focus is environmental soil science with respect to agricultural practices. He joined the NDSU Department of Soil Science in 2006.

#### Yangbo "Kathy" He

She received her M.S. degree in Soil Science at NDSU in 2011 and is a Ph.D. candidate working under Tom DeSutter. Her research focuses on how water moves and is retained in sodic soils, with special attention to those sodic soils that are tile drained. Her expected graduation date is spring 2015.

#### **Abbey Wick**

Wick received her B.A. and M.A. degrees from the University of Denver and her Ph.D. from the University of Wyoming. She recently joined NDSU as the assistant professor of soil health in Extension. She works with all aspects of soil health and land management, which includes salinity and sodicity issues.

#### R. Jay Goos

Goos, a professor of soil science, has been on the faculty at NDSU since 1980. He teaches the Introduction to Soil Science course and is conducting research in the area of soil fertility and management. His recent studies include iron fertilizer technology and the evaluation of nitrogen fertilizer additives.

#### Amitava Chatterjee

Chatterjee, an assistant professor of soil management, joined NDSU in 2011. His research includes controls of soil nutrients and land water management practices on nutrient use efficiency under corn, sugar beet, soybean and spring wheat. Chatterjee received his doctoral degree from University of Wyoming.

#### **Brandon Montgomery**

Montgomery is a graduate research assistant in soil science studying under David Hopkins. He earned his bachelor's degrees in soil science and natural resource science from NDSU in 2012, and originally is from Brooklyn Park,

#### Joel Ranson

Ransom is an agronomist with the NDSU Extension Service. He is responsible for small grains and corn. In addition to developing educational materials and programs that address production issues important to these crops, he conducts applied agronomic research, which most recently has dealt with variety selection, and nitrogen and pest management strategies.

#### Aaron Daig

Daigh recently joined the Soil Science Department at NDSU as an assistant professor of soil physics. His research focuses on water, gas and heat transport in soils associated with agricultural soil and water management practices. He received his B.S. and M.S. degrees from the University of Arkansas and his Ph.D. from Iowa State University.





Wednesday, Jan. 22, 2014

Fargodome (East side upstairs) 1800 N. University Drive Fargo, ND

Sponsored by





7-8 a.m. **Registration** 

8-8:45 a.m. Preview of upcoming North Dakota

corn N recommendations

Dave Franzen

8:50-9:30 a.m. Algorithms for use in directing

in-season N rates for corn

Lakesh Sharma

9:30-9:50 a.m. **Break** 

9:50-10:50 a.m. Soil survey research efforts

at NDSU

• Introduction

David Hopkins

 Sodic soils: Reconciling mapping skills, taxonomic criteria and the reality of characterization data

Sukhwinder Bali

 Evaluating a half-century of soil change on the eastern North Dakota till plain

Brandon Montgomery

10:50- Nitrogen transformations in local soils/potassium response

in corn/sugar beet Amitava Chatterjee

11:30 a.m.- Principles in soil water for cover 12:10 p.m. crop, tillage and subsurface

drainage of managed soils

Aaron Daigh

12:10-1 p.m. Catered lunch

1-1:45 p.m. Advances in our knowledge of

dispersion and swelling with soil sodium and the interaction of sodium chemistry with soluble salts Tom DeSutter and Yangbo "Kathy" He

1:45-2:30 p.m. Catching salinity issues early: What does it mean for crop production?

Abbey Wick and Chandra Heglund

2:30-3 p.m. **Break** 

3-3:45 p.m. Nitrogen studies in corn and wheat

Joel Ransom

3:45-4:15 p.m. Nitrogen fertilizer additives:

An update R. Jay Goos

4:15 p.m. Adjourn

# **▼** Continuing Education Unit Credits

3 units – nutrient management 3.5 units – soil and water management

# **▼** About the Training

Each winter, numerous occasions, such as county agricultural days, agribusiness meetings and Extension activities, provide opportunities to learn about crop and pest management. However, very few opportunities are available for in-depth soils training.

This course was designed to fill this void. The one-day schools are intended for producers, agricultural industry personnel, government workers and other individuals wanting a greater understanding of soils, plant nutrients and soil processes. This is an advanced course designed to answer more complex questions not normally addressed at many winter presentations. This course has been presented annually since 1996. Course topics vary each year.

## **▼** Lodging

Several hotels are near the Fargodome and in the area. Some of the closest are:

Homewood Suites Hilton (701) 235-3150 Candlewood Suites (701) 235-8200 Days Inn & Suites (701) 232-0000

# Soil and Soil/Water Training Registration

Preregistration due by Jan. 15, 2014

Name(s)
Address
- Address
Phone ( )
E-mail address
Preregistration fee
Registration after Jan. 17
Total enclosed \$

Registration fee is the same whether attending a full day or partial day.

A buffet lunch is included with registration.

For online registration:

www.ndsu.edu/soils/personnel/faculty/dr david franzen/

#### Please make checks payable to:

NDSU Extension Service

If paying by personal check, the state of North Dakota requires your birth date on the check.

Please detach registration form, place in an envelope with payment and return to:

> Extension Soil Science NDSU Dept. 7180 Box 6050 Fargo, ND 58108-6050