



Program Schedule

Wednesday, July 7, 2004

12:00 pm Lunch
Dickinson Research Extension Center
Hosted by: Dickinson Chamber of Commerce Ag Committee

1:00 PM Load Buses at DREC
Air conditioned for your comfort

Industry View – Improving the odds for successful – sustainable cropping in western North Dakota – discussion will be given on the bus enroute from Dickinson to Taylor. This will be an informative discussion providing insight into the business of agriculture and direct seeding.

Welcome Purpose of Tour
Direct Seeding – Management Tour

Industry View Moderated by:
Ed Cuskelly, Helena Chemical Co
Paul Belzer, Minn-Dak Growers Ltd.

1:30 PM Producer No-till
I-94 Taylor Exit Mr. Jay Elkin
Exit 78 Producer, Taylor, ND

Shifting Disease Spectrum in Direct Seeded Wheat Production
Dr. Marcia McMullen
NDSU Extension Plant Pathologist, Fargo, ND

Expected changes in disease patterns in no-till systems and current control practices utilized will be discussed.

Shifting Weed Spectrum in Direct Seeded Fields
Craig Rystedt
Technical Rep, Monsanto

Herbicides and crop management are used to control weeds in direct seeded systems. What can producers expect in weed species shifts and how do we manage these changes.

Does It Matter If We Treat Our Soils Like Dirt?
Dr. Mark Liebig
USDA-ARS Soil Scientist, Mandan, ND

When agricultural soils are treated like “dirt” through poor management, yields decrease, soils erode, and nutrients are lost. In the climatically extreme northern Great Plains, it is essential to have a resilient soil resource. This can best be achieved through conservation tillage and diverse crop rotations.

Biological Scum - The Processes That Make Soil Productive
Dr. Kristine Nichols
USDA ARS Microbiologist, Mandan, ND

The soil environment is a diverse and complex home for billions of organisms. Fungal hyphae which act like glue and bind soil particles together can be a major fraction of soil organic matter. Learn how to agriculturally manage this process for improved soil fertility, structural stability, and higher yields.

Crop Rotations and Tillage in Southwest ND
Dr. Patrick Carr, Agronomist
Dickinson Research Extension Center, Dickinson, ND

Some suggest that the benefits of crop rotations are greatest in sub-humid and humid regions. However, properly designed crop rotations when coupled with tillage reductions can enhance wheat yields 80% or more in semiarid regions.

Five Criteria of Direct Seeding Drills and Planters
Dr. Keith Saxton
USDA-ARS (Retired) Engineer, Pullman, WA

When choosing seeding machines for conservation tillage, their capability must successfully meet five criteria. Each of these criteria will be explained and discussed base on the science and experience of direct seeding. Live demonstrations of these criteria will be presented during this presentation.

5:00 PM Barbeque Supper
Dickinson Research Extension Center
Sponsored by Chamber of Commerce Ag Committee



Dr. Keith Saxton

Keith Saxton is nationally and internationally recognized for his work in developing new theories, methods, practices and machinery for improved soil and water management and resource conservation. He has done extensive work on water management and soil conservation for 42 years with the USDA-Agricultural Research Service. Dr. Saxton taught undergraduate and graduate courses at Washington State University as well as presented numerous technical discussions to farmer groups, professional workshops, scientific meetings, and invited keynote lectures throughout the U.S. and many foreign countries.



Dr. Mark Liebig

Mark Liebig is a soil scientist at the USDA-ARS Northern Great Plains Research Laboratory in Mandan, ND. He works with a multidisciplinary team of scientists to develop soil, crop, and animal management practices for the northern Great Plains to overcome limitations to productivity while maintaining or enhancing environmental quality.



Dr. Marcia McMullen

Marcia McMullen is an NDSU extension plant pathologist at Fargo, ND. Her responsibilities include providing management information on cereal diseases and coordination of the NDSU extension Integrated Pest Management program. Her applied research interests include disease survey and chemical and biological control of seed, root, leaf, and head diseases in wheat and barley.



Dr. Patrick Carr

Pat Carr is the research agronomist at the Dickinson Research Extension Center. He has studied energy- and resource-efficient crop and integrated crop-livestock systems that are sustainable both economically and environmentally since 1992.



Dr. Kristine Nichols

Kristine Nichols studies "soil scum." She is a soil microbiologist at the USDA-ARS Northern Great Plains Research Laboratory in Mandan, ND.

Craig Rystedt

Craig Rystedt has been involved with the development of several technologies used in weed control for direct seeded fields since graduating from NDSU. His work has improved farm productivity and profitability. He currently works for Monsanto Company.

Jay Elkin

Jay Elkin began direct seeding in 1989. He used a low disturbance no-till drill on sandy, poor yielding fields and conventional seeding using a shoe drill on his better producing ground. In dry years, Jay noticed these sandy fields produced as much as the conventionally seeded fields. Over the past five years he no-till seeded one third of his farm but in 2004 he seeded all of his cropland using no-till methods. Jay's primary crop is wheat but has rotated to flax where sawfly has become a problem. In this intense wheat rotation, disease pressure is managed using fungicides. Wheat yields are 40 + bu/acre making residue management his #1 challenge. Harrowing doesn't work and often times makes matters worse. Jay is considering several options for managing this problem.

Direct Seeding Management Tour Sponsors

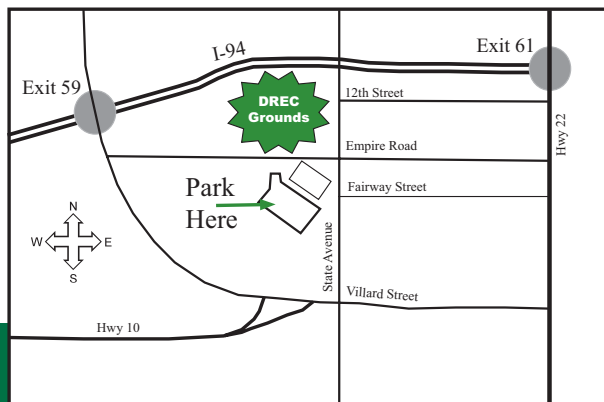
- Arvesta
- Bayer
- Dakota West RC&D
- Dickinson Chamber of Commerce Ag Committee
- Dickinson Research Extension Center
- Local Soil Conservation Districts:
 - Dunn, Golden Valley, Slope-Hettinger, Stark-Billings
- Monsanto
- Natural Resources Conservation Service
- ND Extension Service
- ProSeed
- Simplot Co

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to reserve seat on the bus for the Direct Seeding Management Tour.

Miss the Bus? You can still catch the tour at the I-94 Taylor Exit (Exit 78) at 1:30 PM.



Dickinson Research Extension Center Field Day

July 7, 2004

Direct Seeding Management Tour Cross-Slot Drill Demonstration 1:00 pm

Featuring:
Dr. Keith Saxton,
Pullman, WA



Agronomy Tour 8:30 am
Grounds Tour 3:00 pm