Trends in Precision Farming Technology

Don Preusser, President
John Deere Insurance Company

Minnesota Crop Insurance Conference
September 15, 2011

Precision Ag Technology Trends

• Why Precision Ag Matters

• Technology Evolution in Agriculture
  • Guidance Systems
  • Precision Farming
  • Coordination Enabled by Telematics

• Optimization of the Farming Operation

• Insurance Applications Now and the Future
  • Automated Crop Reporting
Precision Ag Technology Trends
Why Precision Ag Matters

Adoption of precision technology in agriculture matters to everyone.

- Global growth from 7 billion to 9 billion
- Increased food consumption and other demands
- Limited arable land and fresh water supply

It will take a combination of new land into production, improved productivity driven by seed genetics and increased technology to meet global demand for grain production.
Technology Evolution in Agriculture

- Time: past, today, future
- Technology Level: Precision Farming, Section Control, Variable Rate, Mapping, Precision Irrigation, Sub-Inch Accuracy, Automated Guidance, Parallel Tracking
- Influence on Producer Business Results: Simplifying Decisions, Logistics Management, Machine Productivity & Uptime

Optimize the Farming Operation

- Results Verification: FSA/RMA Compliance Reporting
- Operation: Prescription Development & Plan Approval
- Soil Information:
- Harvest Operation
- Spraying Operation
- Irrigation and Field Tillage Operation
- Nutrient Management Operation
- Planting/Seeding Operation
Precision Ag Technology Trends
Automated Crop Reporting

Convenience – simplifies crop reporting by allowing producers to collect and transmit planting and harvest data electronically

Accuracy – Establishes consistent farm/field data structure for complete crop production cycle

Return on Investment – Enhances the functionality of precision farming systems