

# Challenges and Solutions for Today's Producer

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- Growers demonstrating intensive and knowledgeable management practices expect and appreciate rewards

# Current Challenges

- ◆ Weather
- ◆ Insects
- ◆ Disease
- ◆ Perceived varietal shortfalls
- ◆ Reducing Tillage practices
- ◆ Fertilizer prices
- ◆ Weeds

# Weather

- Lack of Moisture
- Lack of Heat Units
- Early/late frost
- Excess spring moisture
- ‘Sun-burning’
- Cool nights with slow recovery time (Flux)

# Weather Solutions

## ■ Current

- ◆ Earlier maturing varieties, seed later – frost/h.units
- ◆ Semi-dwarf varieties - drought
- ◆ Avoid CPS wheat and barley if in dry cycle – drought

# Weather Comments

- Grower's preference for 'new' varieties:
- Drought tolerance
- Earlier maturing – same yield/quality traits
- Frost tolerance

# Insect Solutions

## ■ Current

- ◆ Spray Insecticide
- ◆ Treat Seed
- ◆ Resistant varieties....

# Insect Comments

- Possibly the most controversial topic
  - ◆ Environmentally
  - ◆ Agronomically
- Producers/Industry would love to see resistance, particularly when it's bug season
- Cross-breed Rottweiler with LadyBug

# Disease

- Seed/Head Diseases

- ◆ Fusarium
- ◆ Ergot

- Root rots

- ◆ Common?
- ◆ Take-all

- Leaf diseases

# Disease Solutions

## ■ Current

- ◆ Fungicides – Foliar and/or Seed Treatments
- ◆ Crop Rotation
- ◆ Variety selection

# Disease Comments

- Our current diseases are somewhat manageable using crop rotation, fungicides, and varieties. The diseases we don't have should concern us (Fusarium, rusts, etc)

# Adapting to the Adoption of “Zero” Tillage

- Straw management
- Cold Soils
- Fertilizer Placing
- Disease
- Compaction

# Accepted Solutions

- Variety selection (semi-dwarf, etc.) – straw/disease
- Blacken soils for some crops – straw/cold soil
- Equipment and Specialty products – Fertilizer management/Compaction

# Zero Tillage Comments

- Frost tolerant and/or more vigorous varieties
- Straight-cutting capabilities important
- Darker straw to absorb heat

# Fertilizer Prices - Solutions

- Current

- ◆ Grow crops less demanding
- ◆ Apply less
- ◆ Maximize efficiency

- Other

- ◆ More nutrient efficient plants – breeding
- ◆ Nitrogen fixation in plants

# Grower Comments

- “I don’t really want to see a bunch of GMO type work done that may jeopardize markets, keep our cereals more traditional”  
– Terry
- “What if they inserted a gene from somewhere so the plant only required half the Nitrogen?” – Dan
- “Well that would be alright!!” - Terry

# Variety “Shortfalls”

- Standability and harvestability
- Straw residue
- Consistency
  - ◆ Protein
  - ◆ Color
  - ◆ etc

# Varietal Comments

- “I love snowbird, I get close to 50 bushels an acre, good protein, and it stands for me!”  
- Don
- “I’ll never grow Snowbird again; it yielded alright (70+bu/ac.) but falls down flat”. - Gerald

# Weeds

- Shift toward perennial weeds with reduced tillage
- Increase in resistance
- Transition of species into new areas
- Control is expensive

# Weeds - Solutions

- Current

- ◆ Herbicide timing and selection

- Other

- ◆ More competitive varieties
  - ◆ Allelopathy

# Summary

- Producers need to rely on a combination of breeding, management, and equipment advancements to help tackle current challenges
- Weather, insects, and to some degree diseases, are among the most discouraging for growers and others in the industry

# Summary

- Varieties for ‘potential’ challenges are at least as important as improving the issues today

- Growers demonstrating intensive and knowledgeable management practices expect and appreciate rewards

# Thank-You

■ Questions?