



# **EXPERIENCES FROM TABER, ALBERTA, CANADA**

## **FORUM – REDUCED/STRIP TILLAGE**

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# ASSBT Reduced/Strip Tillage Forum

Experiences from  
Alberta, Canada

Bryan Avison



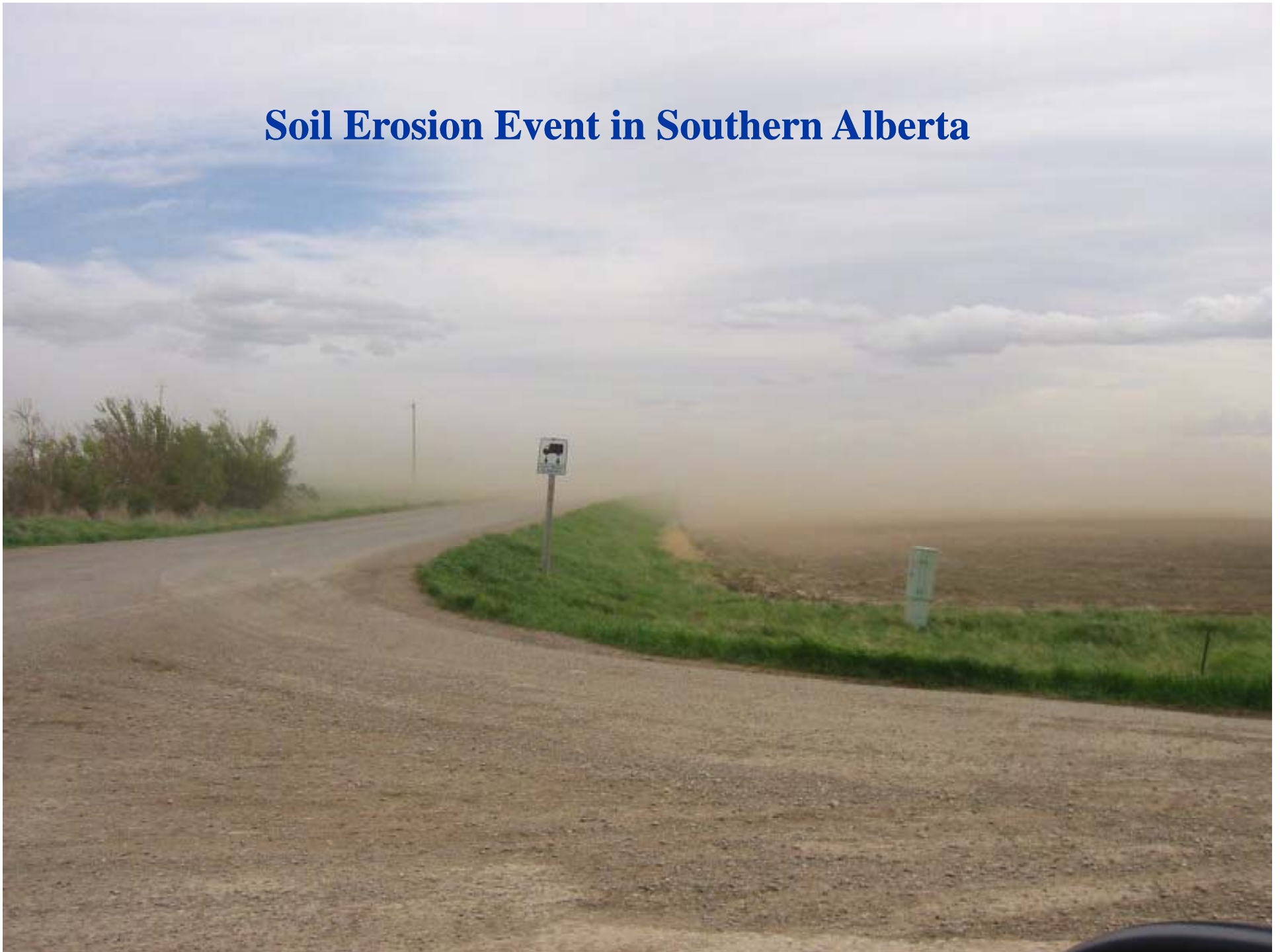
# Lantic Inc.

Taber, Alberta

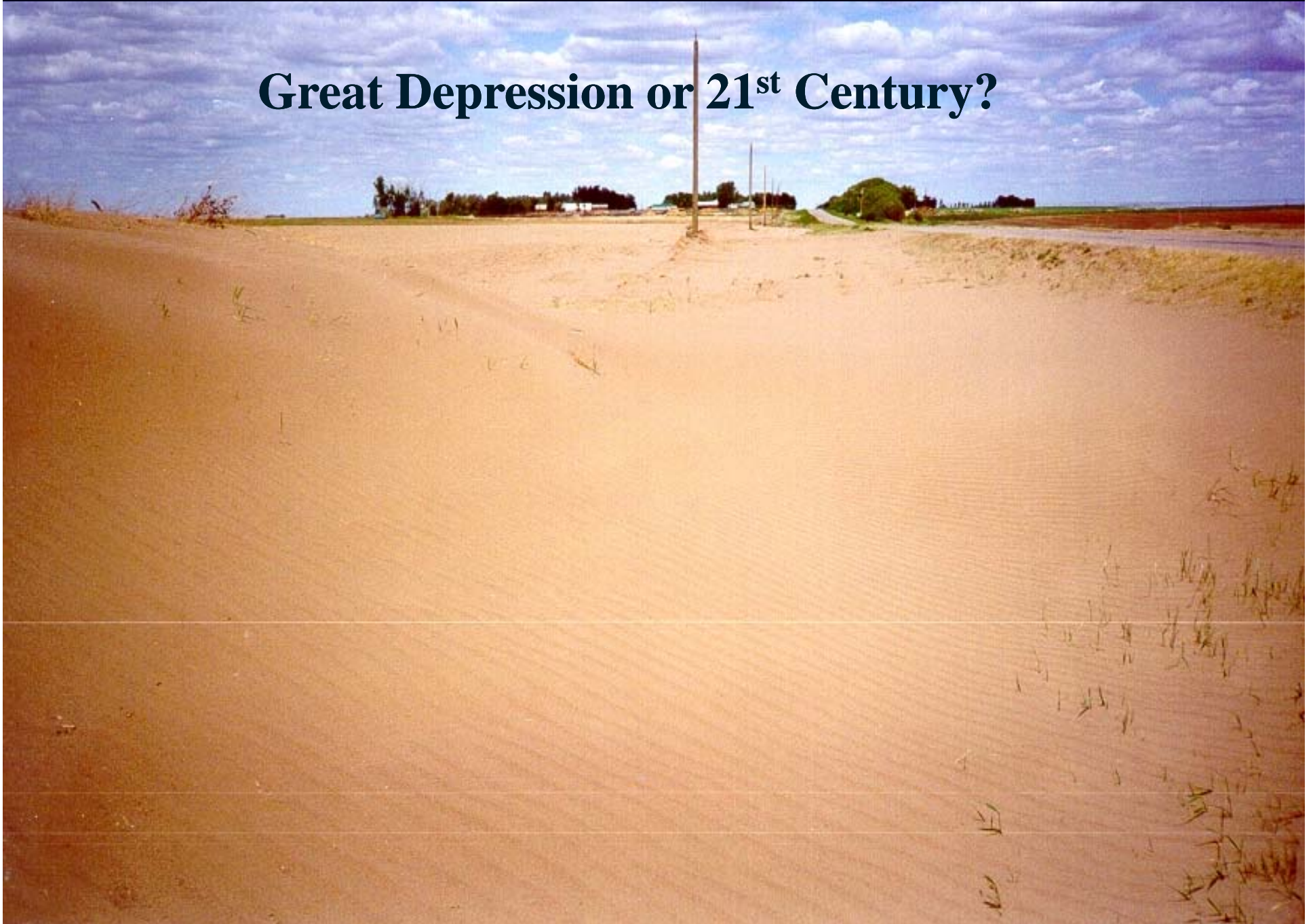




## Soil Erosion Event in Southern Alberta



# Great Depression or 21<sup>st</sup> Century?





## **Southern Alberta Traditional Seedbed Preparation and Planting**



## **Sugar Beet Field After Severe Erosion Event**





# 1996 - Southern Alberta No-Till Sugar Beet Experiment





# Reduced Tillage Systems made the Mold Board Plow Obsolete





# 2002 - Reduced Tillage Seedbed in Southern Alberta





**2004**  
**24 Row Grower Manufactured**  
**Strip Tillage Implement**





# 2004 - In Row Speed of Emergence and Soil Temperature Comparison

## Strip Tillage System



## Conventional Tillage





# In Row Straw Accumulation





# 1<sup>st</sup> Generation 6 Row Research Strip Tillage Implement





# Planting Operation on Strip Tillage Small Plot Experiment - 2005









Comparable Stand  
Establishment





# Differences in Early Season Canopy Vigor Between Strip and Conventional Tillage



Large Scale Strip Trial (CACDI site – Lethbridge)



# Evaluation of N Rates and Forms





© 2004

Tim Peckham



# Evaluation of P Rate and Placement



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# Strip Tillage in Alberta

## Advantages

### Economic Benefits

- Reduce fuel and labor costs
- Reduce capital costs
- Maintain current farm income

### Environmental Benefits

- Eliminate Soil Erosion
- Soil Health
- Carbon Sequestration

### Agronomic Benefits

- Complements RR production system
- High PUE of nutrients

## Disadvantages

### Initial Investment

- Sub-inch RTK Guidance System
- Strip Tillage Implement
- Planter Row Cleaners

### Crop Residue Management

- Ability to handle large volumes
- Uneven distribution creates many problems

### No Large Scale Commercial Production

- Only 1 grower in Alberta



Thanks for your attention!!

