Spreader Patterns and Calibration

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Broadcast Spreading
- Fertilizer
- Lime
- Soil Amendments
- Crop Protection Products

Broadcast Spreading Objectives
- Apply the Correct Rate of Product.
- Apply a Good Pattern.
- Maintain Proper Swath and Overlap.

Types of Spreaders
- Single Spinner
- Pendulum
- Twin Spinner
- Air Boom

Pattern Check Methods
- Collection Pan
  - Test Tube
  - Scale

Desirable Patterns
- Flat Pattern
- Oval Pattern
- Pyramid Pattern

Undesirable Patterns
- "M" Pattern
- "W" Pattern
- Spike Pattern
- Skew Pattern

Swath Control
- Determine correct swath width for the spreader and product you are spreading
- Maintain Uniformly Spaced Swaths
- Use foam markers
- Use DGPS and Lightbar

Swath and Pattern Testing

Swath Calibration Methods
- Determining Swath Width by Pattern Inspection Visual Method
- Determining Swath Width by Pattern Inspection Equation Method

Discharge Rate Calibration Methods
- Drag Chain Delivery
  - Measure discharge rate at drop chute.
  - Weigh sample for time or distance, convert into pounds per acre.
  - Adjust calibration.

- Test Tube Sample
  - Collect product in pans across width of swath.
  - Measure volume, convert into pounds per acre.
  - Adjust calibration.

Summary
1. Know your equipment.
2. Calibrate when necessary.
3. Be safe!