

## Tools For Expanding Your Forage Team

**FRESH CORN SILAGE**



**GREATEST SMELL ON EARTH**

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## What's The Goal?

- Harvesting high quality forage
- Maintaining feed quality from field to feed bunk
- Maximizing dry matter recovery
- What's involved
- Who's involved
- What tools are available



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- Forage quality will never be higher than it is just before the crop is harvested



- Dry matter recovery
  - 1000 tons of \$35/ton corn silage harvested
  - 850 tons recovered = \$41/ton silage fed
  - Just 15% shrink adds \$6/ton



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## The Forage Team

- Who's involved
  - Farm management
  - Harvester
  - Farm consultants



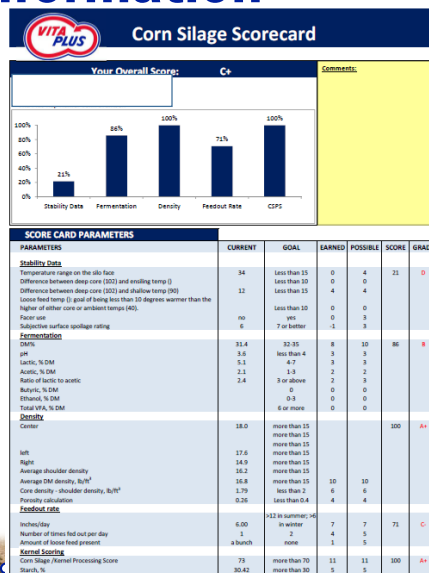
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## Last Year's Information

- Dry Matter
- Packing Density
- Processing
- Chop length



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## Moisture "Trumps" Everything

- High Dry matter
  - Reduced packing density
  - Prolonged aerobic phase of ensiling
  - Less aggressive fermentation
  - Greater infiltration of oxygen at feed out
  - Increased dry matter losses
- Low Dry matter
  - Yield not maximized
  - Undesirable fermentation (haylage)
  - Effluent nutrient losses



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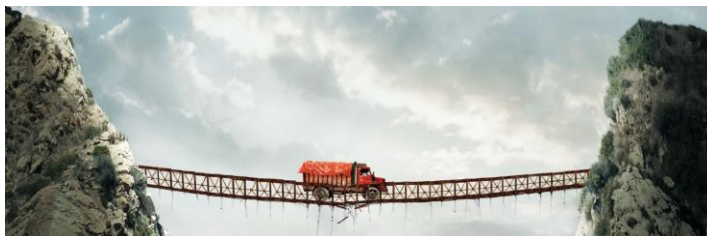
## Prior to Harvest

- **Monitoring Fields for moisture status**
- **How soon to start**
- **In What order should fields be harvested**



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- **Field to farm route**
- **Two way truck traffic**
- **Bridges and field drives**
- **Tile intakes, wet areas**



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## Areal Photos

- Smart phones can give a birds eye view of anywhere!



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## Kernel Processing

- Over 30% of total dry matter as Starch
- Significant energy contribution
- Rumen microbes need surface area to attach to

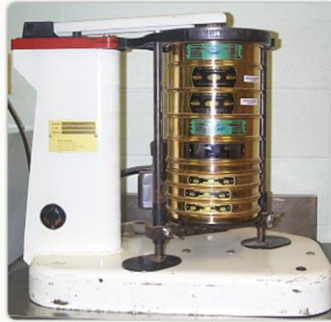
% of Starch passing through the coarse screen	Ranking
Greater than 70%	Optimum
50-70%	Average
Less than 50%	Inadequately processed



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## Kernel Processing

- Lab tests take time
- By the time results are back, harvest is complete.
- Visual inspection is not reliable



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## Kernel Processing

- **32 Ounce Cup**
  - Evaluate “on the Fly”
  - 0-2 Kernels likely well Processed
  - 3-6 Kernels may be adequately processed
  - 6+ Kernels likely not adequately processed



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## Particle Size

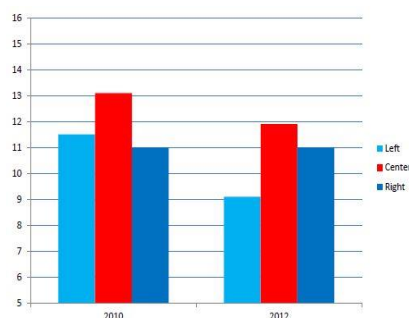
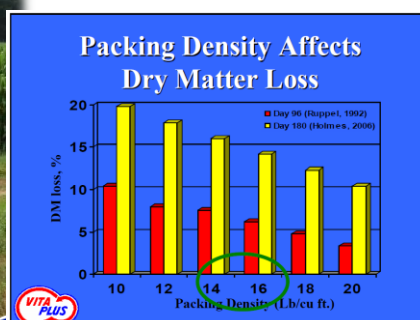
- Every farm may have different goals
- What other forages are available



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## Packing Density

- Too late to change but What could be done differently next year?
- Adding another tractor
- Filling strategies



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## Measuring Packing Density

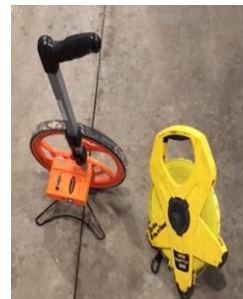
- **Probe and Drill**
  - Specific points
  - Trouble spots
  - Safety concerns



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- **Measuring feed out rate**
  - Safer?
  - Average of the entire structure



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# Thank You



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