

## Forage Production and Quality at Sand Creek Dairy LLC



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## Sand Creek Dairy LLC

- Hastings, MI
- 4<sup>th</sup>, 5<sup>th</sup> and 6<sup>th</sup> Generations
- 1200 milking, Holsteins & Jerseys
- Cropping-Dairying-Manure



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## Dairy Stats- 12 month avg

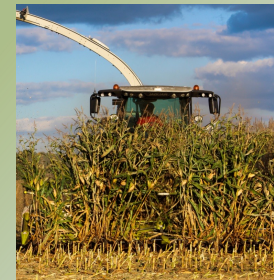
- Holstein- 32,585M, 1213F (3.7%), 1007P (3.1%)
- Jersey- 22,296M, 1,087F (4.9%), 823P (3.7%)
- 12 month Bulk Tank SCC- 111,000
- Goals for our milk market: Protein



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## Cropping Systems

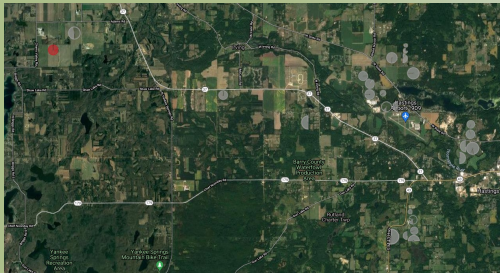
- Corn Silage
- Alfalfa Haylage
- Grass Silage
- Grain/High Moisture Corn
- Alternative Forages



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## What we're farming

- Sand, Clay, Muck
- Irrigation, Tile
- Small fields, lots of road travel



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## Forage Focus:

- Genetics
- Intervals
- Processing
- Storage & Feed-out



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## Genetics

- Goals: Maximum digestible nutrients
- Cows can digest: Cellulose, Hemi cellulose
- Cows cannot digest: Lignin!
- Selecting for feed efficiency



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## Genetics

- Hybrid Selection:
  - Reduced lignin content
  - Digestible Starches
  - Agronomic Strengths
  - BM1 vs BM3



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## Genetics

- Hybrid Selection:
  - Long Term Investment
  - Agronomic Strength/Winter in Michigan
  - High Digestibility vs hybrid vs conventional
  - Round-up Ready Varieties



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## Corn Silage

- Different hybrids for different animals
- Side Dress NH<sub>3</sub>
- PSNT
- Tissue testing
- Irrigation/Fertiligation
- Fungicide
- Harvest



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## Corn Silage

- Processing
- Storage
- Adequate Packing
- Covering quickly
- Sealing edges
- Inoculants



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## Challenges with high quality:

- Increased Management of:
  - Pest Susceptibility
  - Disease Susceptibility
  - Yield Drags
  - Soil Conditions
  - Irrigation
  - Harvest windows



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## New Challenges:

- Tar Spot



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## Haylage

- High digestibility & RR
- 22-26 day interval
- 5-6 cuttings
- Harvest Moisture



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## Equipment



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## Alternative forages

- Sudax
- Rye
- Forage Soybeans
- Bean Straw
- Italian Ryegrass



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## Alternative Forages



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## Questions?



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