



SARE Grass-fed Dairy Research Project

Started Fall 2016

Research on production practices and establishing
benchmarks for dairy farms in the Northeast
feeding 100% grass fed rations

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Overview: Parts of the Project

- Initial Survey sent to 140+ Farms (83 surveys received) (Thank you to CROPP/Organic Valley and Maple Hill Creamery for help mailing out the surveys!)
- Second Survey to farms willing to participate (39 surveys received)
- 22 farms began providing monthly production data in spring 2017 (**Thank you to the participating farms!**)
- Research trials on high energy forage crops
- Project leaders will be sharing information with farmers, milk buyers and service providers

Wide Range of Successful Production Systems Within the Group of Participating Farms

- Fully seasonal farms
- Partially seasonal farms
- Farms milking once per day and twice per day
- Farms with different milk production goals from low to high or focusing on components
- Different calving intervals
- Variety of calf rearing methods

Common challenges faced by grass fed farms:

- Many are starting with land that has depleted soils, but using different methods to rebuild soil health.
- Getting enough energy from forages each year with weather related difficulties
- Having enough acreage to meet higher forage intake needs
- Providing the right amount and mix of mineral supplement
- High MUNs or low MUNs?
- How many replacements to keep and the cost (in milk) to raise them well

Benchmarking

- We are learning what information is easier, and harder to collect
- AND which ones are most useful for participating farmers
- Range of numbers seen is probably more useful than averages, since farms in the study are using different production models and have different goals.

First Grazing Season Preliminary Data

- Started with 22 farms, now 20 farms
- 47 cows/farm average
- Average of 1.7 acres of pasture per lactating cow
- Total of **5.5 acres per cow** on farms NOT buying or selling any forage.

Buying: 9

Selling: 6

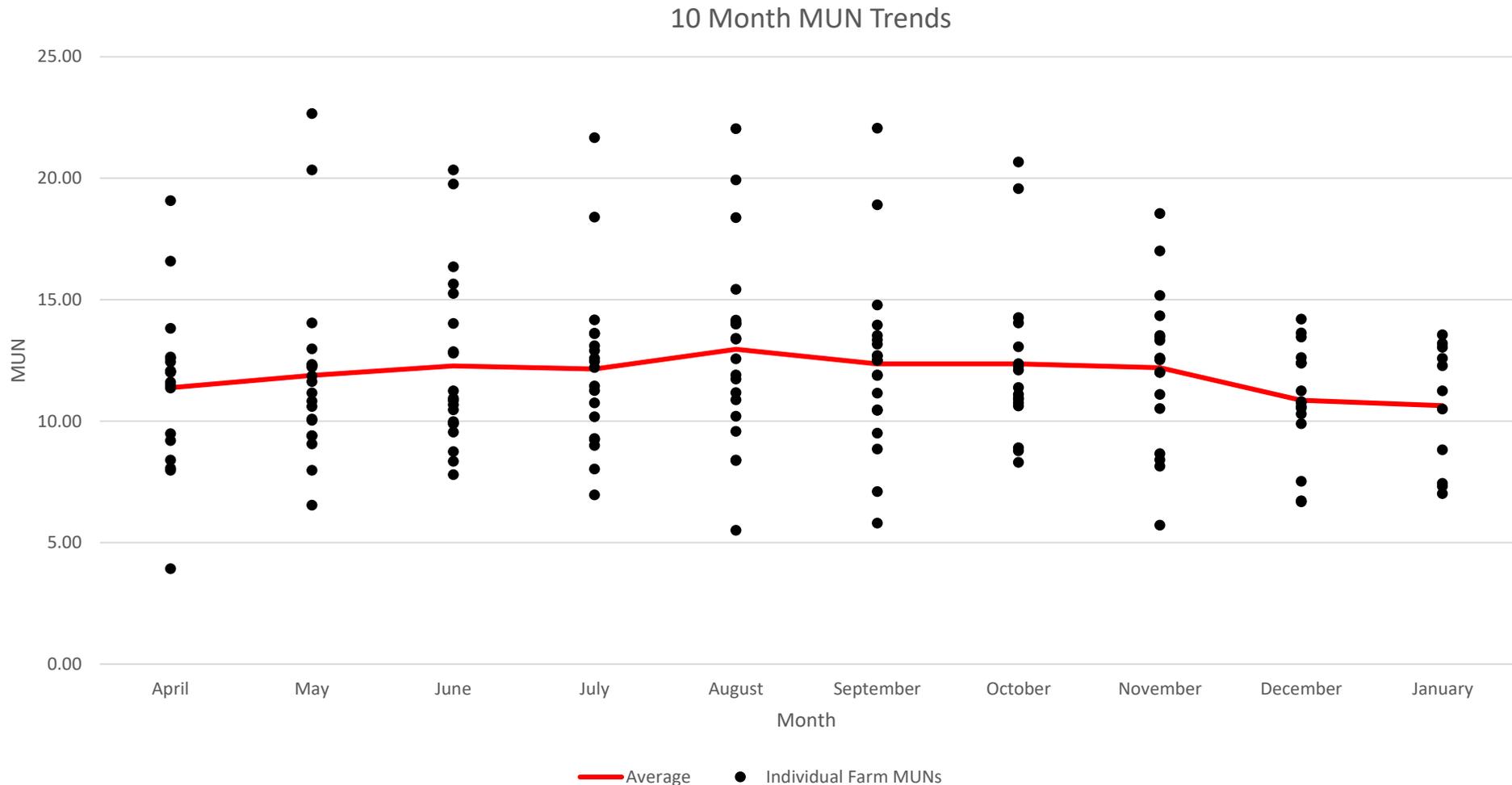
Neither: 6

- Most are using fertility inputs (lime, blended fertilizer, poultry manure, wood ash)

First Grazing Season Preliminary Data

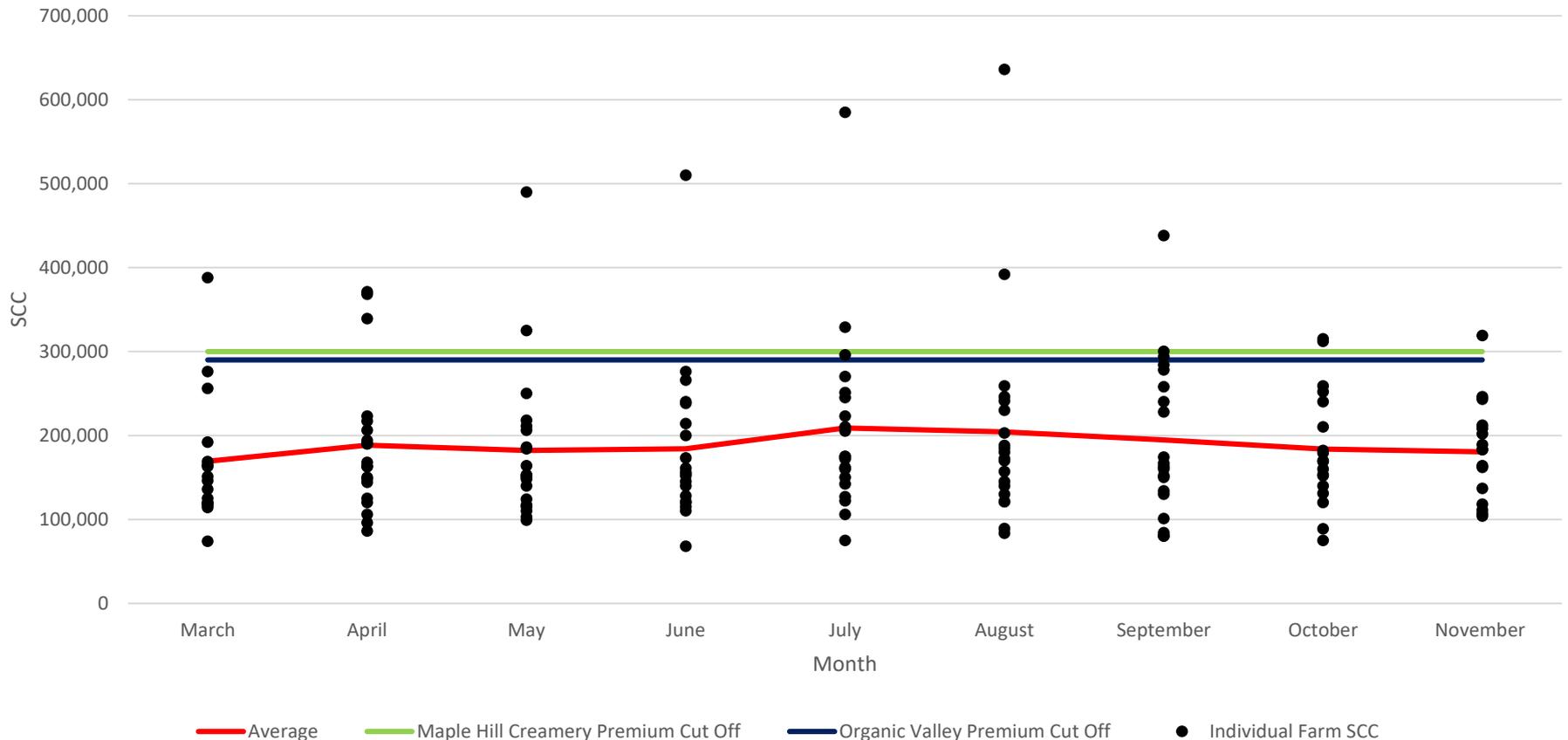
- 184 day grazing season
- 36.5 day average max recovery period
- Feeding an average of 5.7 oz of minerals per day
- 36% feed some energy source (mostly molasses) but some only on an as-needed basis
- MUNs were high on some farms throughout the grazing season, while others stayed mostly low.
 - Did not seem to correlate with feeding Molasses
- Still lacking solid reproductive data since many farms lack records

MUNs over 10 month period



SCC – some farms aren't getting all their quality premiums

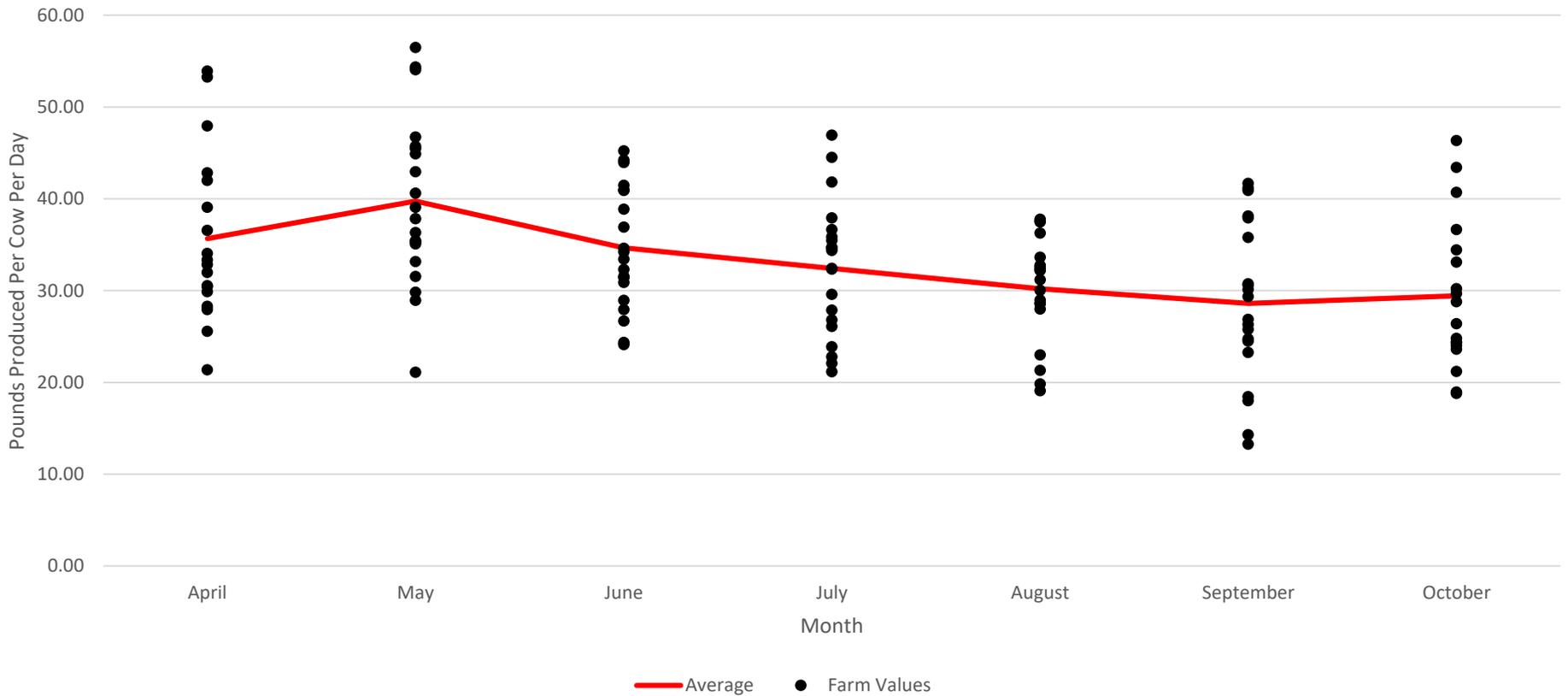
9 Month SCC Comparison



Wide range of milk production

High Milk/cow is not the goal of all the farms in the study

Average Daily Production During Grazing Season



Conclusions

- Initial surveys gave us a detailed snapshot of how farmers are managing their farms
- Shows a large group of farmers who were willing to share their information to help others
- By giving up grain and its ability to compensate for poor quality forages, farmers have enhanced their tools to profit – pasture management, harvest management, genetic selection
- Filling out the GFM each month helps farmers review their progress towards their goals

Conclusions

- Getting a better idea of WHY it costs more per CWT to produce % grass fed milk
 - Less milk per cow produced
 - More acreage per cow needed
- We have enough initial benchmarks to help new farmers interested in this production system to make better informed decisions and be better prepared for the challenges
- Still working on gathering winter farm data, more conclusions to follow