



Craig's Station Creamery

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Manager

Sustainability

- **Just what is sustainability?**
 - Do we have differing definitions?
 - Not mutually exclusive/are mutually reinforcing
- **Ecological/environmental**
- **Social challenge/culture**
- **Economics**
- **Political**

Ecological/Environmental

- **Healthy ecosystems are imperative**
- **It is paramount to our survival**
 - Any break in the system can result in long-term disaster
- **Need to reduce human impact**
 - Simply said — we do stupid things
 - Human logic is better than what we have displayed
- **Information gathering is an absolute**
 - Why do we take history in school?



Social challenge

- **We need to undo our past habits**
- **Ethical consumerism**
 - Get better at planning our lifestyles
- **Re-organizing living conditions**
 - Get better at planning our living
- **Re-appraising economic sectors**
 - Or work practices
 - How is our food produced?
 - How does it's production effect others
- **Sustainable power**
 - Reversing the previous methods of “making power”



Economics

- **Can we afford to be sustainable?**
 - It will cost more upfront
- **Can we not afford to be sustainable?**
 - It will cost less in the future
- **What are the reasons for both?**
 - What is the consumer willing to pay?
 - What is the consumer willing to put up with?
 - What will it look like in 100 years if we don't put up with it?

Sustainable phrase for the day

“Despite the increased popularity of the use of the term “sustainability,” the possibility that human societies will achieve environmental sustainability has been, and continues to be, questioned — in light of environmental degradation, climate change, overconsumption, population growth and societies’ pursuit of unlimited economic growth in a closed system.”

Traceability

- **What is traceability?**
 - The ability to verify the history, location, application of an item/material by means of documented recorded identification
- **Logistics**
- **Materials**
- **Supply chain**
- **Security/safety/honorability**

Logistics

- **Tracing goods in the distribution chain**
- **No other industry travels in the same manner as the dairy industry**
 - Milk trucks in bulk
 - Moving in high volume quickly in the manufacturing stream
- **We are a highly diversified industry**
 - Lots of products
 - Lots of use as ingredients
- **A lot of places to look**
 - Because of the diversity in the dairy industry, there are a lot of places and need to look for traceability

Materials

- **What materials are we tracing?**
- **Diversified industry means:**
 - All items
 - Close to 100 percent distribution domestically
 - Global distribution at or above any other food or ingredient

Supply chain

- **A robust supply chain**
 - Fields
 - Farm
 - Truck
 - Factory/manufacturing facility
 - Finished goods facility
 - Distribution facility
 - Consumer purchasing arena
 - Households



This thing is way different!



In the beginning

- **God created a farmer**
 - Paul Harvey
- **Perpetuation**
- **Logic**
- **Quality**
- **Sustainability**
- **Anti-pragmatic**
 - Remember – it's the dairy business



Next steps

- **Around 2009/2010**
 - What could it look like
- **A visionary**
 - Not a me-too, avoid the been-done-before ideology
- **Eight farms = one vision**
 - Like-minded
 - Willing to take the next step



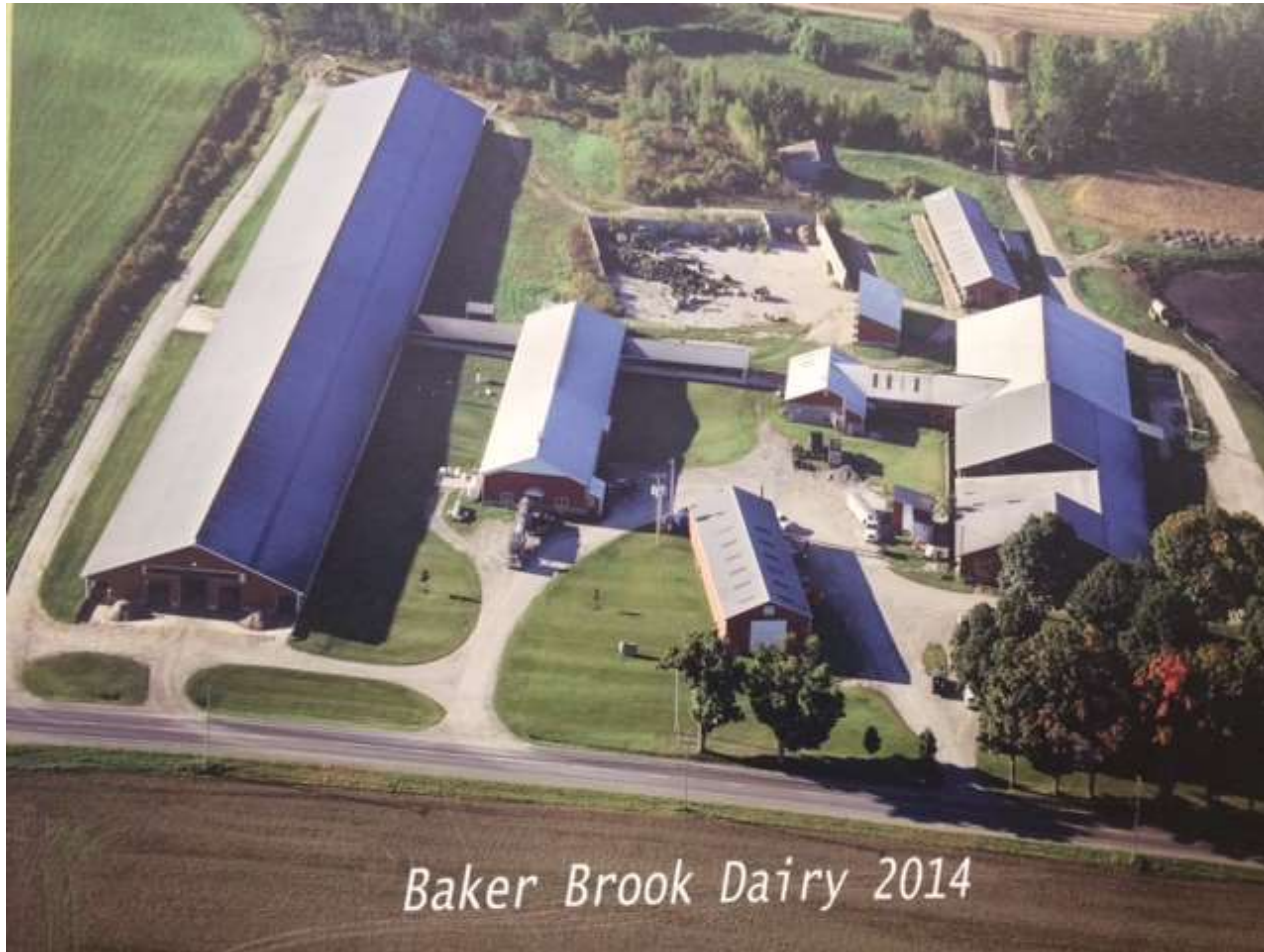
Critical thought

- What does the dairy-buying consumer want?
- What will bring value to the entire category/industry?
- What does our customer want?
- How do we deliver?
- What do we deliver?



Baker Brook Farms

Attica, N.Y.



Coyne Farms

Avon, N.Y.



Lawnel Farms

York, N.Y.



McCormick Farms

Bliss, N.Y.



Mulligan Farms

Avon, N.Y.



Noblehurst Farms

Linwood, N.Y.



Southview Farms

Castile, N.Y.



Synergy Farms

Wyoming, N.Y.



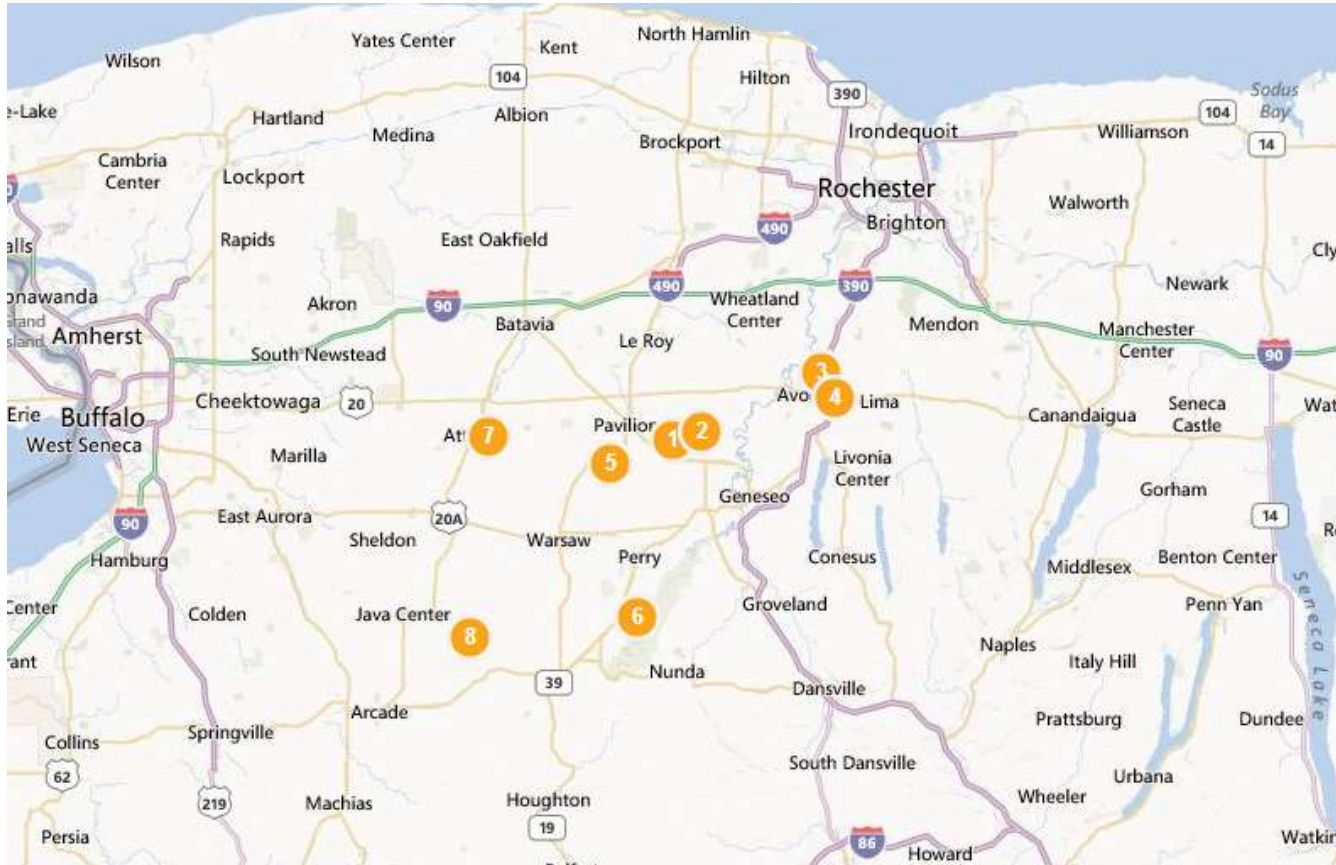
CSC/WNYE joint venture

- **Dairy Farmers of America (DFA) and Craigs Station Ventures (CSV) formed JV in mid-2013**
 - DFA is nation's largest dairy cooperative
 - CSV comprised of eight 1,000+ cow dairy farms in western New York
- **Broke ground in mid-September 2013 on cold milk separation facility**
 - Operational on October 17, 2014

CSC/WNYE joint venture

- **Why?**
 - Increasing demand for high-quality milk components in the Northeastern U.S. market
 - Consumers/retailers calling for more traceability and sustainability from their suppliers
 - In dairy, much of this falls back to the farm level
 - DFA customers focusing more on marketing and product development and less on manufacturing
 - This JV offers those customers a supply chain partner

Craigs Station Ventures



1) Noblehurst Farms, York

2) Lawnel Farms, York

3) Mulligan Farm, Avon

4) Coyne Farms, Avon

5) Synergy, Wyoming

6) Southview Farm, Castile

7) Baker Brook Dairy, Attica

8) McCormick's Dairy, Bliss

Craigs Station Ventures

Noblehurst Farms, York



1,700 cows

Lawnel Farms, York



1,500 cows

Mulligan Farm, Avon



1,200 cows

Coyne Farms, Avon



1,000 cows

Craigs Station Ventures

Synergy, Wyoming



2,100 cows

Southview Farm, Castile



2,050 cows, two sites

Baker Brook Dairy, Attica



1,500 cows

McCormick's Dairy, Bliss



1,950 cows

Craigs Station Ventures

- Members committed to sustainable, efficient farming practices
- CSV member has largest on-farm digester in New York
- Noblehurst operates anaerobic digester adjacent to Craigs Station Creamery that:

- Recycles facility's waste effluent
- Provides green energy to facility
- Reduces plant's carbon footprint



Noblehurst Green Energy digester



Synergy Biogas

1.4 MW on-farm co-digestion plant

*Also processes effluent from
local dairy plants*

Future expansion to 2.0 MW

October 17, 2014

First load of milk delivered to Craigs Station Creamery

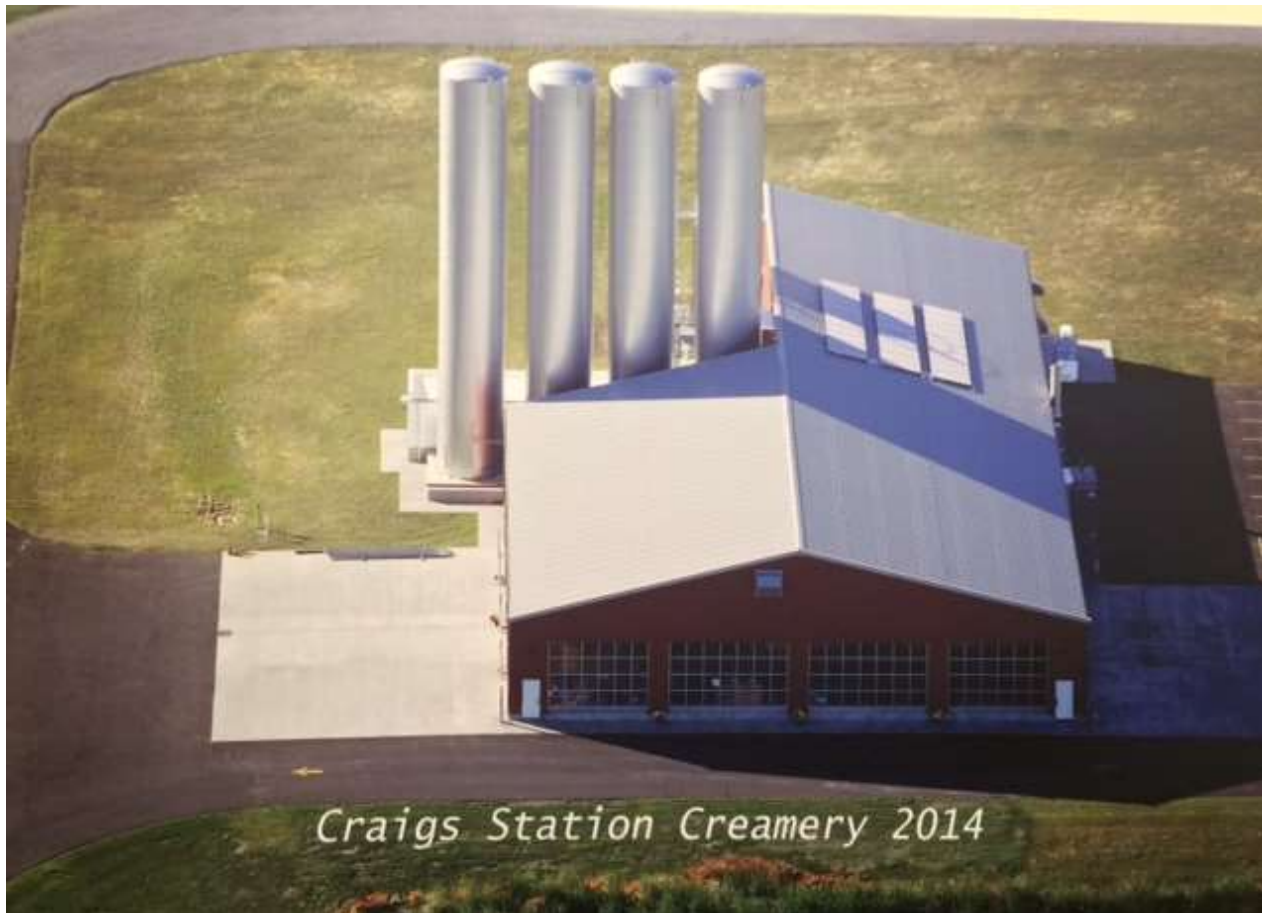


State-of-the-art receiving bay



Cold bowl separation





Anaerobic biodigester

Noblehurst Green Energy



Making our own energy!



Products

- **It all starts with consistent, high-quality farm milk**
- **rBST-free**
- **Standardized and/or skim and cream**
 - Custom blends from skim to 40 percent and all points in between
 - Will ship in any quantity from lunch pails to super tankers
- **Cold bowl separated**
 - Reduced protein denaturing (standardized/skim)
 - Enhanced cream functionality
- **Milk production attributes**
 - Kosher and Cholov Yisroel
 - High in Omega 3 or Omega 6
 - Marketing-focused, consumer-oriented needs
 - Super Kosher

Attributes

- **Locally produced, New York milk**
 - All eight farms located within 25 miles of WNYE
- **Traceability back to these farms**
- **Enrolled in DFA's Gold Standard Dairy Program**
- **WNYE powered by on-farm green energy**
- **Reduced carbon footprint**
 - Low hauling miles, green energy, modern/efficient milk production and processing
- **Wal-Mart survey responses**

Attributes of cold bowl separation and the correlation to making cheese

- **This higher-heat treatment causes denaturation of whey proteins, which subsequently stick to the casein particles. The effects are:**
 - Longer flocculation times
 - Weak or no curd formation
 - Poor syneresis (moisture release)
 - Coarse textured curd with reduced ability to stretch, mat and melt

Operational efficiencies

- **Tanker washing capability at WNYE**
- **Milk scheduling advantages**
 - Reduction of water and chemical usage
 - Up to 2/3 less usage than traditional washing
 - Conserve natural resources and less need to process sanitation components

