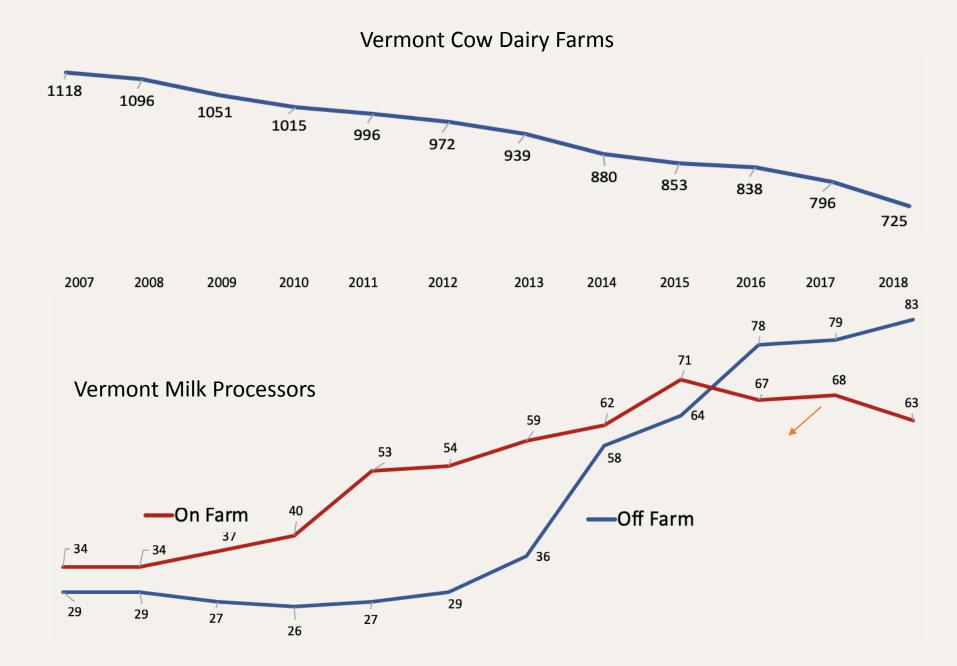
### Producing Milk With A Targeted Purpose

Presented by

George Miller Ellyn Ladd Galen Jones Jeremy Stephenson Jericho Hill Farm Grafton Village Cheese Crowley Cheese Spring Brook Farm Cheese



#### Cheesemaking Has Grown in Vermont

52 Cheesemakers 868 Dairy Farms 712 (81%) < 200 cows

SEN 8 S4 NORTH SOUTH OEN KEY Farm or chesse production facility is open to the public, see hours SEN 33 SEN 16 Farm visits by appointment only, please call ahead EN No tours or retail sales from the farm These silhouettes of animals represent the herds for each farm listed on the map: OEN 19 Goats Sheep Cows Call Aheed Cheese available for purchase on site MAPSCALE MLES 

#### Artisanal Cheesemaking—A Vermont Success Story

- Nationally, the specialty cheese category has been growing about four times as fast as non-specialty cheese in recent years
- Despite its size, Vermont is a leader in artisanal cheesemaking
  - Vermont has more than 50 cheesemaking businesses
  - Vermont has more cheesemakers per capita than any other State—close to 1 for every 13,000 people
  - More than half of Vermont's cheesemakers are making a raw milk cheese
- Vermont artisanal cheesemakers' national reputation far exceeds its production volume (see next slide)

#### ACS Best of Show 2013-2018

First Place	Second Place	Third Place
2018 Jasper HillHarbison	Jasper HillCalderwood	Cows (PEI)Avonlea Clothbound Cheddar
<b>2017</b> SpringbrookTarentaise Reserve	Farm @ Doe RunSt. Malachi	Jasper HillHarbison
2016 RoelliLittle Mountain	Bleating HeartBuff Blue Farm at Doe RunSt. Malachi	Caves of FaribaultJeff's Select Gouda Murray's CheeseGreensward
<b>2015</b> Glengarry (Ontario) Celtic Blue Reserv	Laclare FarmsCave Aged Chando	
2014 SpringbrookTarantaise Reserve	Point ReyesBay Blue	OakdaleAged Gouda

		Spidd Creek rann-Eden
2013 Jasper HillWinnim	ere GraftonBear Hill	Bleu MontBandaged Cheddar
		Bleu MontBig Sky Grana

	Awards Since 2013
Vermont	94 Firsts
Wisconsin	41 First
Canada	21 First
California	3
Pennsylvania	2
New York	1
Minnesota	1

TO6 Caper Hill Road

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#### Monitoring the Milk

- Testing for bacterial load and components
- Quality feedback and contractual parameters •
- Manage the herd for cheese milk vs fluid milk •



St. Albans Cooperative Creamery Laboratory 140 Federal Street St. Albans, VT 05478 Phone #: 802-524-6581 or (800)-649-5953 Fax #: 802-524-5832

Client Name:\_SPRINGBROOK Sample Receipt Date: 12-30-2014 Sample Receipt Temp: 2.3 c Sample Date:12-29-2014

#### **Cheesemaker Profile Testing**

Controls:OK Antibiotic Results: **Bacteria Testing** Components PAST RAW ΡI Total Coli E. coli Staph CFU/ml CFU/ml CFU/ml CFU/ml CFU/ml CFU/ml % Other Somatic Delvo 5 Pack Sample # Sample ID 1:100 1:10 1:1000 1:1 1:1 1:10 % BF % Protein % Lactose Solids MUN Cells 1:1000 Ratio 50-142 3,000 70 <1,000 10 2 4.50 3.36 21.47 100,000 1.34 1 <10 4.60 5.63 2 Lewis 2.800 20 58,000 1 <1 10 4.32 3.45 4.85 5.88 21.70 140,000 1.25 3 Miller 900 20 <1,000 1 <1 70 4.91 3.80 4.68 5.66 13.16 97,000 1.29

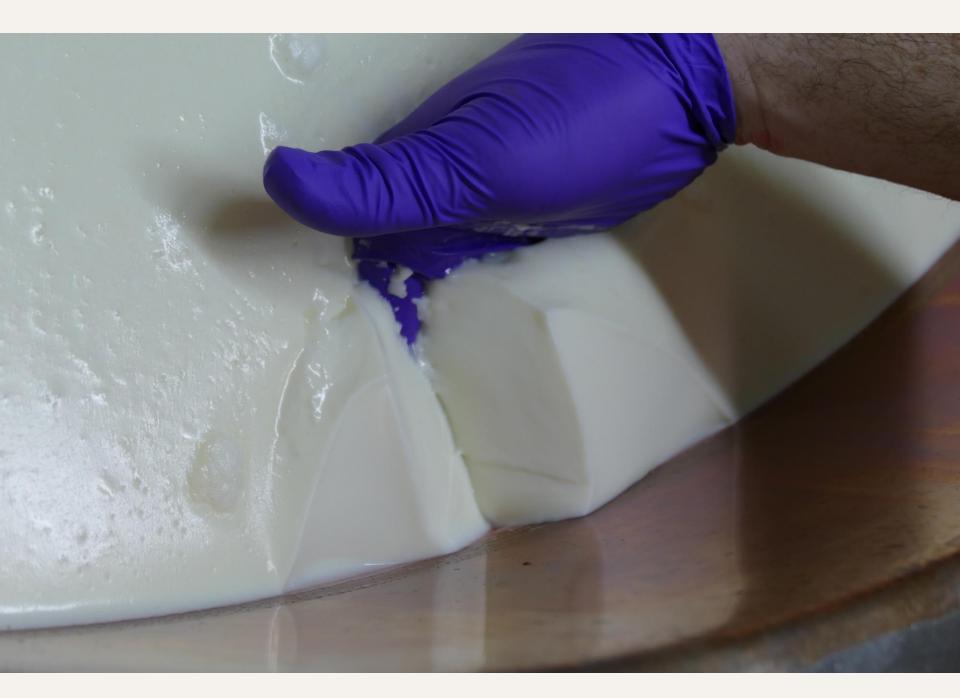
Approval: Date:

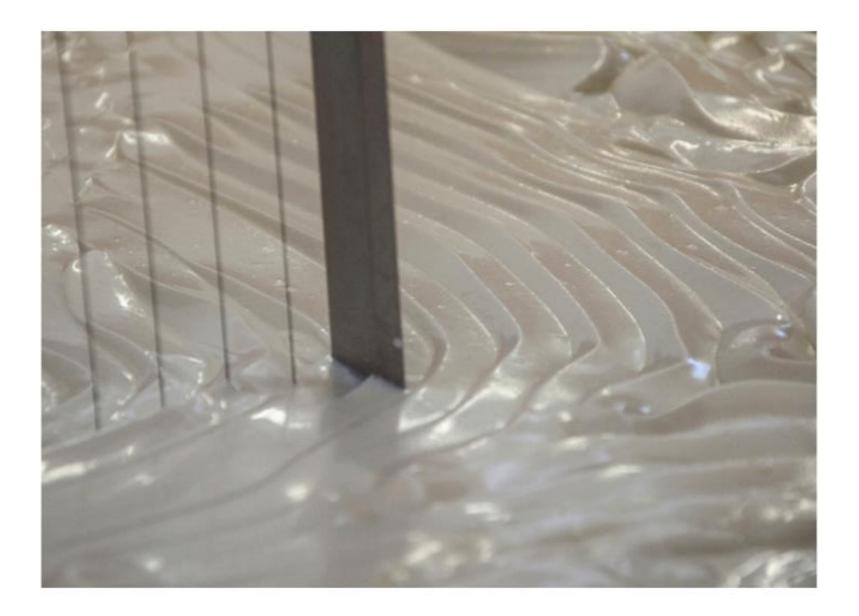
This report and all related correspondence with St. Albans Cooperative Creamery is for the exclusive use of the client above. Results are dependent upon the condition of the sample submitted by the client.

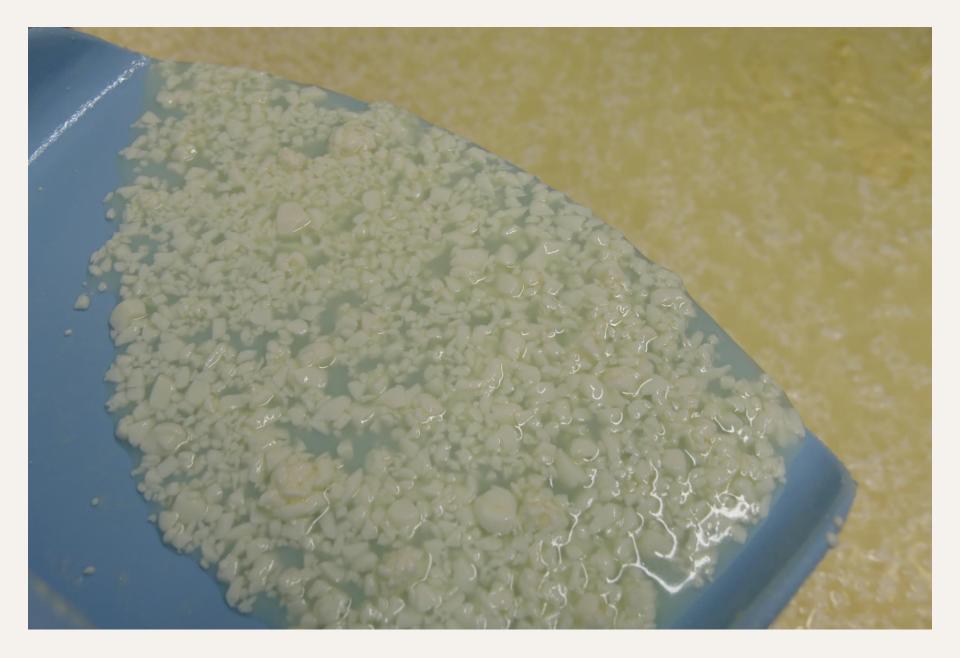
### **Good Milking Practices**



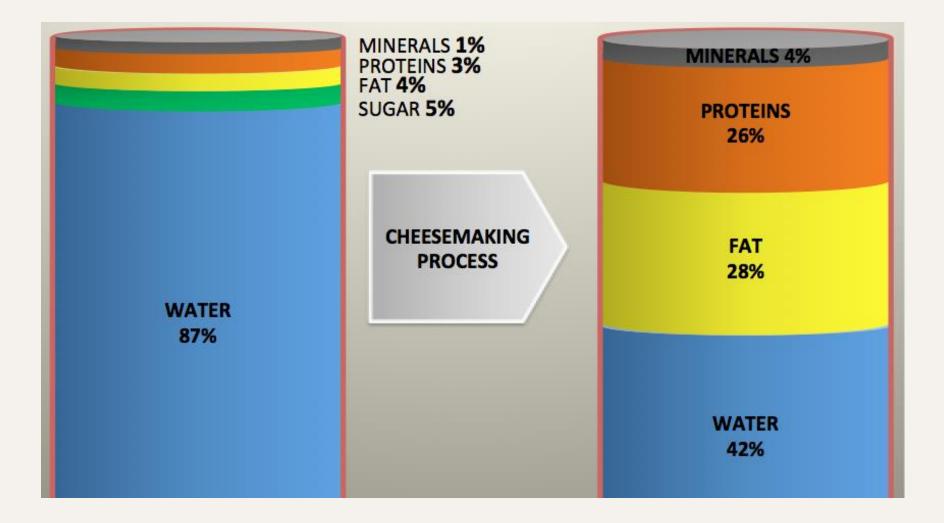








### Milk Components





#### Apine Style Cheese and Fermented Feed

Seasonality

'Late Blowing'



#### **Community in Cooperation**

-Pay a price for milk which makes economic sense for the farmer and the cheesemaker

-Remove the farmer from a commodity market and pay a steady price

-Produce milk with qualities required for the production of specialty cheese







#### Sourcing Milk for Crowley Cheese Background

- Crowley Cheese is America's oldest cheese business (1824)
- Cheese is produced at the Crowley Cheese Factory in Mount Holly near Okemo
  - Opened in 1882 as a cooperative (Winfield Crowley)
  - America's oldest surviving cheese factory (National Historic Place)
- Raw Milk cheese (no thermalization)
  - Recipe is a unique cheddar—technically between a traditional cheddar and a Colby
  - Cheese is still made entirely by hand
- All milk is purchased
  - Holstein milk—Woodlawn Holstein Farm in Pawlet
  - Jersey milk—Jersey Girls Dairy in Chester

#### Challenges Sourcing Milk for Crowley Cheese

- Requirements:
  - Pathogenic and component quality
    - Clean milk
      - Farm and hauler
    - Consistent component characteristics
  - Logistics
    - Proximate farm
    - Limited by our 1250 gallon bulk tank
    - Delivery early in the day
    - Don't produce between early November and late January
- Other Issues: breed; feed; component ratio; Non-GMO; "certified humane"
- Biggest challenge: Coop prohibition of member milk sales to third parties
- Second biggest challenge: hauling logistics

### **Grafton Site**



### **Brattleboro Site**



## **GRAFTON VILLAGE CHEESE**

- Started making cheese again in 1963
- Known for hand-made raw cheddar
  - Our milk is thermalized in part due to the many different farms we source from
  - Targeted components in the past have been Jersey milk and high fat

# Challenges

- Grafton Village Cheese purchases over 1,000,000 pounds of milk per month
- The 2 Co-ops we purchase milk from have done a good job on milk quality
- Aged cheddars allow for milk and cheesemaking defects to appear over time
- Our grading program is our mechanism to sell the cheeses at the appropriate time











## **Consumer and Buyer**

- Average buyer (large company) and consumer (end user) are more educated about cheese, ingredient sourcing, and processes of cheesemaking
- More choices in the market place for handmade artisanal cheeses
- Flood of cheaper European cheeses
- Tough market for cheese makers

### Future

- Grafton Village Cheese could be a great place to develop a community based regional cheese founded on shared values and targets
- Supported and owned by the Windham Foundation. Our mission is to support Vermont's rural communities
- Infrastructure in place 2 plants with a strong food safety plan
- Already working with 13 different partners to produce cheese – farmers and other cheese makers

### Vermont cheeses on display





