The Quest for B(eph): Sourcing from Local Farms

Huijun, Lyza, Quincy
December 10, 2021
Land Acknowledgment

We respectfully acknowledge that Williams College stands on the ancestral homelands of the Stockbridge Munsee Mohicans, who are the indigenous peoples of the region now called Williamstown. After being forced from their homelands, the Mohicans continued as a sovereign Tribal Nation in Wisconsin, where they currently reside. We honor and respect their ancestors, past and present, as we, the Williamstown community, become a more inclusive and equitable space for everyone.
Content Warning

Throughout this presentation we will be discussing:

- Slaughter of Cattle
- Meat yields and various cuts
- Logistics of meat production

If you find any of these topics distressing, you are welcome to take the space you need, no questions asked.
Project Goals

1. **Determine** the feasibility of meat-ing Williams’s beef demand
2. **Address** logistical complexities of transition
3. **Build** a comprehensive, equitable plan and potential timeline
4. **Engage** with the College’s Strategic Plan to meet the College’s sustainability pillars
Roadmap/Process

- History of Agriculture in the Berkshires
- Challenges in Farming
- Challenges in Williams Dining Services
- Williams’ Sustainability Pillars
- Potential Solutions

Hilltop Farm, Pownal VT
Farming in the Berkshires

- Abundant Pastures
- Soil Quality
- Growing Season
- Farmland Loss

*Local Dairy and Cattle farms are struggling!*
# Berkshire Beef and Dairy Industry

**USDA, 2017, Berkshire County**

<table>
<thead>
<tr>
<th>Heads of Cattle per Operation</th>
<th>1-9</th>
<th>10-19</th>
<th>20-49</th>
<th>50-99</th>
<th>100-199</th>
<th>200-499</th>
<th>500+</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Beef</strong></td>
<td>65</td>
<td>14</td>
<td>10</td>
<td>3</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>92</td>
</tr>
<tr>
<td><strong>Dairy</strong></td>
<td>13</td>
<td>3</td>
<td>5</td>
<td>5</td>
<td>6</td>
<td>3</td>
<td>1</td>
<td>36</td>
</tr>
</tbody>
</table>

---

Note: The table above shows the distribution of heads of cattle per operation for both beef and dairy sectors in Berkshire County, as reported in the USDA, 2017 report.
Local Beef Supply

- Small Family Beef Operations
- Dairy Culls

21% of commercial beef nationally comes from the dairy industry, so we cannot discount our local dairies in this project of beef purchasing!

(https://www.dairybusiness.com/dairy-cattle-a-big-part-of-us-beef-supply/)
<table>
<thead>
<tr>
<th>Farm</th>
<th>Location</th>
<th>Operation</th>
<th>Farm Size (acres)</th>
<th>Herd Size</th>
<th>Scaling Up Potential</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hilltop</td>
<td>Pownal, VT</td>
<td>Dairy, beef, maple syrup, pork, chickens</td>
<td>500</td>
<td>33 cows for beef + another dairy herd</td>
<td>Yes</td>
</tr>
<tr>
<td>Cricket Creek</td>
<td>Williamstown, MA</td>
<td>Dairy, beef, pork, farm store</td>
<td>500</td>
<td>~80 dairy animals</td>
<td>-</td>
</tr>
<tr>
<td>Hemlock Farms</td>
<td>Williamstown, MA</td>
<td>Beef</td>
<td>360</td>
<td>-</td>
<td>40 cows max.</td>
</tr>
<tr>
<td>Sweetbrook</td>
<td>Williamstown, MA</td>
<td>Beef, maple syrup, farm stand</td>
<td>120</td>
<td>7 heifers, 6 feeders</td>
<td>20-40 heads, sell 12-14 heads wholesale</td>
</tr>
<tr>
<td>Chenail’s</td>
<td>Williamstown, MA</td>
<td>Dairy</td>
<td>400</td>
<td>180</td>
<td>Max Capacity</td>
</tr>
<tr>
<td>Fairfield</td>
<td>Williamstown, MA</td>
<td>Dairy and Crops</td>
<td>1400-1800</td>
<td>450</td>
<td>Scale up Beef</td>
</tr>
</tbody>
</table>
Farm Practices: Grass-fed Beef

- Farm-Grown Feed
  - Finishing
- Rotating Pasture
- Regular Health and Safety Inspection
Farm Practices: Dairy

- Grass or grain-based feed
- Safe Housing Density
- Regular Health and Safety Inspection
- Animal lifespan
- Culls

Regenerative Cattle Farming

Holistic farming practices to improve air and water quality, increase biodiversity, and sequester carbon in the soil

1. ecosystem resilience
2. soil health
3. farm productivity
4. economic & environmental benefits
Beef: The Epic Journey from Farm to Plate

- Farmers
  - Dairy or Beef
  - Finishing

- Slaughter/Processing
  - Certification
  - Process into various cuts

- Distribution
  - Storage/Freezer
  - Transportation
  - Institutional Partnerships

- Consumer
  - Enjoy!
  - Provide consistent market

Internal supply chain

Suppliers
Purchasing
Production
Distribution
Customers
## Williams College Beef Usage

<table>
<thead>
<tr>
<th>Cuts</th>
<th>Pounds Per Year (Yearly Average)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ground Beef</td>
<td>23,000</td>
</tr>
<tr>
<td>Hamburger</td>
<td>6,000</td>
</tr>
<tr>
<td>Eye Round</td>
<td>6,000</td>
</tr>
<tr>
<td>Top Round</td>
<td>4,000</td>
</tr>
<tr>
<td>Beef Brisket*</td>
<td>2,000</td>
</tr>
<tr>
<td>Short Rib*</td>
<td>1,000</td>
</tr>
<tr>
<td>Flank Steak*</td>
<td>1,000</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>43,000</strong></td>
</tr>
</tbody>
</table>

In sum, to meet (meat) current usage would look like 100+ of heads of cattle!
Holy Cow!
Current Purchasing Impacts

- Large Corporate Distributors (with large CO₂ footprint!)
  - 3x/week delivery
  - Far freezers
- CAFOs
- GMO Grain Feed, Monocropping
  - Feed transportation across country

Why Source Local Beef?

- Preserve agricultural land
- Support local economy with *market* *resiliency*
- Food access
- Better food safety

*Investment in regenerative agriculture is investment in sustainability!*

Cricket Creek Farm
Peer Institutions to Look to

- Smith/Hampshire/Mount Holyoke/Westfield State
  - “Whole Animals for the Whole Region”
  - $250k Kendall Foundation Grant
- Middlebury
  - Direct beef purchasing from farms
- UMass Amherst
  - “UMass Healthy and Sustainable Food System Initiative”
  - $485k Kendall Grant to renovate dining facilities, permaculture conference, increase local purchasing
1. Define academic excellence
2. Provide complete education
3. Expand access & affordability
4. Engage alumni
5. Substantially increasing our commitments to Sustainability and to Diversity, Equity, Inclusion & Accessibility as fundamental society challenges
Supply Questions in Sourcing Local Beef

- Volume
- Consistency of Markets
- Distribution Partners

Cricket Creek Farm Store
Logistical Problems

- Processing
- Storage
- Delivery

So what can we do to help scale up all links on the custody chain?

Map of USDA certified Slaughterhouses. Courtesy of the USDA.
Our Proposals for Meat -ing Demands
Starting Small

- **Zeroing in on Ground Beef**
  - Highest % yield per animal
  - Largest portion of Dining needs
- **Staggering the Timeline**
  - Reasonable speed on both purchasing and production ends
  - Yearly expansion goals and consistent opportunities to re-evaluate and re-affirm relationships!
Timeline for Scaling Up

**Phase 1: Pilot Program**
Purchase beef from local producers for special events

Summer/Fall 2023

**Phase 2: Contracts and Scaling Up**
Fall 2023 - Spring 2025

**Phase 3: Partial Implementation**
Local Beef on Students’ Plates

Fall 2025
Ultimate Fantasy

Boss Level:

Source 100% of Beef Needs Locally
Pilot Program

**Direct Purchasing**
- Williams purchases directly from individual farms.
- Highlights local farm at special events.
- Introduces community to local beef.

**Short-Term Storage**
- Distribution partners
- Onsite storage
- Farm storage

**Special Events**
- First Days BBQ, Parents Weekend, Commencement, Reunion, First/Last Day of Classes
- Grilling on-site
- Farmers present at event!
Supply Chain for Williams B(eph)

Dairy and Beef Farms
- Raise for 2+ years

Central Transportation Person
- Corral Cattle into Trailer, Transport across County

Students' Plates
- Scaling up % overtime

Logistical Point Person !!

Storage in Nearby Freezer
- Both Long- & Short-term storage options, up to Dining standards

Cut and Pack in VT, NY, or MA
- Ground Beef Packages, Patties, Other Cuts

Slaughter in VT, NY, or MA
- USDA Certified
Potential Partners

- **Processing Relationships**
  - Hilltown -- Canaan, NY
  - Eagle Bridge -- Eagle Bridge, NY
  - Higley Hill -- Wilmington, VT

- **Distribution Infrastructure**
  - Tory Hill
  - Southshire Meats -- Bennington, VT
  - Ginsberg’s

- **Transportation**
  - Farmer point-person
  - Large enough trailer

- **Storage**
  - Williams Freezer

- **Funding/Up-Front Investments**
Project Impact Wrap Up

In buying local beef, Dining Services supports:

- Protecting agricultural land
- Minimizing carbon footprint from transport
- Building relationships with local farmers
- Investing in regenerative farming economy
- Retaining social and economic diversity within the rapidly gentrifying Berkshire County
- Improving student Dining Experiences
- Connecting students to the foods that fuel them
Special Thanks!

- Averill Cook -- Wendling Farm
- Crystal Gardner -- Hilltop Farm
- Jay Galusha & Justin Jennings -- Fairfield Farm
- Wally Chenail -- Chenail Brothers Farm
- Topher Sabot -- Cricket Creek Farm
- David Young -- Young Farm
- Sarah and Darryl Lipinski -- Sweetbrook Farm

- Temesgen Araya -- Williams Dining Director
- Mark Thompson -- Executive Chef
- Mike Webster -- Tory Hill CEO
- Ashley Randle -- Dept. Commissioner MDAR
- Donald Campbell -- Vermont Land Trust

And of course, Professor Sarah Gardner!
2. Foodprint.org, “The Foodprint of Beef”
9. Williams College Climate Action Plan, v. 2.0
10. Agricology.co.uk
11. Regeneration International
12. Farm Interviews
14. Sarah Gardner, *Farms for the Future*