GETTING STARTED IN SHEEP DAIRYING

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Garden Variety Cheese is a small-scale farmstead sheep cheese business based on the Central Coast of California. I began commercial milking and cheesemaking March 1, 2009. Prior to this I spent over two years researching and planning this operation.
Planning

• Basic set of questions to be answered when beginning any sheep dairy enterprise.

• This process is the development of a business plan to guide the creation of your operation.
Overview

What type of business are you going to develop?

• Farmstead Cheese
• Processing Co-op
• Bulk Milk
• Other?
Farmstead Cheese

Close to urban/educated market—high operation costs, but high return

• 100 ewes or less—bucket milking machine
• Small-scale processing equipment
• Unique and high quality product
• Direct marketing to customers
Processing Co-op

Located near other sheep dairies and access to specialty markets.

• 100 to 500 ewes, 12 to 24 at a time, pit dairy
• Wide variety of possible products
• Shared marketing and risks
Bulk Milk

Large scale production of fluid milk for bulk sale to processors. Benefit from economy of scale.

• 500 to 1000s of ewes, 24 to 48+ at a time, automated milking system

• Sale of frozen milk allows for flexibility in location, no need to be near markets.
100 milking ewes, bucket-milker, 6 at a time on platform
Aged Raw Milk Cheeses
Sell to farmers markets, specialty shops and restaurants
High operation costs, high value product
Farmland

- Location—proximity to markets, other producers
- Pasture or hayfields, irrigation
- Existing buildings for milking parlor or processing facility
- Expenses—taxes, water district?, etc.
40 acres in Northern Monterey County. Former strawberry farm—30 acres pasture, barn and outbuildings. 90 minutes to San Francisco.
Feed

• Dairy sheep need very high quality feed
• Feed affects production levels, constituents and flavor, and animal health
• Pasture, hay, grain, TMR, by-products
Rotationally grazed irrigated pasture with spent brewer’s grain in the parlor.
Flock

• Any breed of sheep can potentially be milked
• Benefits of introducing dairy ram to non-dairy ewe flock
• East Friesian: high volume, long lactation, high prolificacy, low solids, susceptible to pneumonia
• Lacaune: high volume, high solids, adapted to milking parlor, low availability
50 original Lacaune-cross ewes bred to East Friesian rams
Facilities & Equipment

• Grade A or B, Pasteurized Milk Ordinance and state regulations
• Scale of equipment, custom-built, adapted, used
• Small-scale dairy equipment—specialty, imported, expensive, individual components
• What questions to ask
## Useful Information

### Table 1. Recommended Milking Settings

<table>
<thead>
<tr>
<th>Milking Setting</th>
<th>Setting</th>
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<tbody>
<tr>
<td>Height of Milking Platform</td>
<td>2.5 to 3 feet</td>
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<tr>
<td>Pulsation Rate</td>
<td>120 to 180 ppm</td>
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<tr>
<td>Pulsation Ratio</td>
<td>50/50</td>
</tr>
<tr>
<td>Vacuum Level</td>
<td>10 to 11 inches Hg</td>
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</tbody>
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### Table 2. Useful Estimates for Calculating Equipment Needs

<table>
<thead>
<tr>
<th>Equipment Requirement</th>
<th>Estimate</th>
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<tbody>
<tr>
<td>Daily Yield of Milk per Ewe</td>
<td>2 to 6 lbs. (1 to 3 qts.)</td>
</tr>
<tr>
<td>Length of Lactation</td>
<td>200 days</td>
</tr>
<tr>
<td>Cheese Conversion Yield</td>
<td>18 to 25 percent</td>
</tr>
<tr>
<td>Aging Room Temperature</td>
<td>55°F (45° to 65°)</td>
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<tr>
<td>Aging Room Humidity</td>
<td>65% to 85% (95%)</td>
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</table>
Converted old barn into milking parlor and cheese plant
200 liter (50 gallon) bulk tank, 125 gallon cheese vat with water jacket, pneumatic press with kadova molds
Staffing

- Twice-daily milking
- Cheesemaking or other processing
- Animal tending, pasture maintenance, lambing
- General farm management, equipment maintenance
- Marketing, sales
- Bookkeeping, taxes, office management
Cheesemaking and marketing prioritized. Milking and daily farm management delegated.
Budgeting

• Initial start-up expenditures (fixed costs)
• Annual operating costs
• Annual Income
Financing

• High initial investment and delayed return
• Personal savings and/or outside family income
• Start-up loans from ag lenders, FSA, non-profits
• Other sources of grants: NRCS EQUIP, non-profits
Conclusion

• Do your homework and sketch out the details
• Be flexible—don’t stick to your plans in opposition to reality. Look out for serendipity.
• Enjoy your work, love your animals, surround yourself with good people.