INTRODUCTION TO DAIRY SHEEP FARMING — GETTING STARTED

Bee Tolman

Tolman Sheep Dairy Farm Bee Tolman & Simon Hurley, owners Bee Tolman, operator Cazenovia, New York

This was our 4th year in operation, and our 3rd year milking. We have 230 ewes all up, and produced a total of 47,000 lb of milk this year. We do not own the farm, nor do we own any machinery. We rent the farm and include a pasture-maintenance fee in the rent. We purchase all our feed, both hay and grain.

Due to very limited barn space, production is seasonal: our top 60 ewes will lamb out in late February, the remaining 170 will lamb out on pasture in late April/ early May. We wean our lambs at 30 days and start milking at that point. Our ewes are milked in a 12-bail rapid-exit parlor; the milk is bagged in 8-gallon bags and shipped frozen to the buyer. The milking ewes are metered in the parlor every 2 to 3 weeks. Our immediate goal is to average 400 lb milk (after weaning) per ewe per year. We sell all our milk to a processor, and do no value-adding of the milk ourselves.

Perhaps the best way to couch any thoughts I have on getting started in sheep dairying is to show our projected income statement for the year 2005, when we hope to achieve our 400-lb goal.

Projected income statement, 2005			
Revenues	Milk revenues (net of packing and shipping costs)	220 ewes * 400 lb * \$0.66/lb	\$58,000
	Lamb sales	360 lambs * \$70/hd	\$25,200
	Other revenues (wool, culls, side jobs, USDA)		\$4,000
Total			\$87,200
revenues			
Expenses	Livestock (feed, vet, shear, rams, dogs, transport)		\$22,100
	Property (rent, pasture, dairy suppl, R&M, electricity		\$18,800
	Admin (insur, prof fees, phone, side job exp)		\$5,900
	Hired labor		\$21,000
	Depreciation		\$13,000
	Interest on loans		\$1,200
Total expenses	-		\$82,000
Net farm income (return to operator labor & equity capital)			\$5,200

Getting started. I am addressing this presentation to those who are thinking of starting a viable, profitable sheep dairy business, where the primary focus of the business is milking sheep and marketing sheep milk.

- I. No business plan, no business
- II. Time
- III. Control your overhead
- IV. Invest in milk-recorded stock
- V. The devil in the details
- VI. That off-farm job
- VII. Plan to value-add your milk
- VIII. Talk, research, visit, talk

I. No business plan, no business

- Do a complete business plan before you do anything else. Include all financial statements in detail. Don't miss the details they will be your undoing (see "the devil in the details" below). And be conservative. I was advised by a goat dairy farmer (who has since folded) to add 30% to all budgeted costs. I didn't. I now know that if I had, my plan would have been far more accurate.
- Plan to maintain ongoing financial statements. With seasonal sheep dairying, 2/3 of your expenses will be in the first six months of the year, while 3/4 of your revenues will be in the second six months of the year. A rolling cash flow will help you manage those winter/spring shortfalls. Your multi-year projected income statements will tell you whether your farm business is healthy or if you need to make some serious changes.
- Be prepared to figure your cost of production. This will help you determine breakeven points for milking individual ewes and for milking your whole flock. You will find that time is precious and expensive, and milking breakeven (or below breakeven!) animals is just a waste of time.

II. Time

For me, time has been the killer. I had originally thought I could operate the farm alone, with very limited part-time help. I was wrong. From March to November, this farm is a two-person operation. My husband works off-farm, so I have had to hire someone full-time to help me on the farm. I am thus paying someone else what I had originally thought I would be paying my-self.

If you think you can run a sheep dairy single-handedly, consider this average day during milking season:

Milking time 3-1/2 to 4 hrs/day (1-3/4 to 2 hrs/milking)

Cleaning parlour/milkroom/yard..... 1 hr/d (1/2 hr/milking)

Getting sheep to/from parlour 3/4 hr/d

Moving fence for milkers 1/2 hr/d

Bagging milk for freezer 1 hr/d (incl. cleaning bulk tank)

That's 7 hours a day, 7 days a week. And you still haven't fed any lambs, dewormed or vaccinated any lambs, rotary mowed to keep your pasture quality high, made hay (if you feel compelled to do such a thing), marketed any lambs, metered milk, entered records, done your farm accounts, or any other of the myriad things associated with a farm of 200 ewes and 400 lambs. Not to mention that fact that you have also not eaten lunch or dinner, seen any friends, or conversed with your spouse.

III. Control your overhead

Overhead costs you in two crucial places: first it competes for limited cash when you're starting up, and then, as interest cost, it continues to compete for limited operating cash.

Regarding finding a suitable farm location, I'll repeat the advice of Jon Tappe, a Wisconsin producer:

- Look for buildings that can be modified or renovated, where someone else has paid the depreciation
- Consider renting. In Wisconsin (as in Upstate New York), there are plenty of quality farms available for rent. Although you don't need expensive equipment for handling or housing the sheep (used and home-made are more than adequate and will save heaps of money), I personally think that quality pays when it comes to the milk equipment, i.e., milking system, bulk tank, freezer.
- A good, labor-efficient milking system will save you time (that's \$\$).
- I skimped on the bulk tank, and had to dump 75 gallons when it failed (\$\$), and then had to pay for repair and new refrigerant (more \$\$).
- I have seen used freezers in place that run very inefficiently or leak warm air through gaps (that costs electricity = serious \$\$). (And actually, if you can find a market that does not require you to freeze your milk, dance a jig. The freezer is an enormous expense to purchase and to operate.)

IV. Invest in milk-recorded stock

I started with non-dairy ewes (130 Finn-Dorsets) and crossed them with East Friesian rams. I did this because of the high cost of crossbred East Friesian stock at the time (5 years ago). In retrospect, I wish I had done it differently. I wasn't prepared for the amount of genetic variation and the consequent variation in production (i.e., half-breds that look like Friesians but milk like Finns).

So, from the school of hard knocks:

- Only buy breeding stock from flocks with milk production records. Lamb growth rates tell you *nothing* about an ewe's potential as a dairy producer. Invest in good-quality stock they will pay for themselves. Again, just because an animal is East Friesian does not mean it will be a profitable dairy producer. Get good animals from a flock that meters regularly.
- Plan for a greater than 20% cull rate. The East Friesian gene pool in America is not like the Holstein-Friesian gene pool in America, in that the East Friesians have not gone through decades of intensive breeding and selection. Most dairy animals available for sale are crosses from flocks with very limited production histories. You will therefore find huge variations in production, udder conformation, disease susceptibility, and milking attitude.

To give you an example, in 2001 we bred 87 ewe lambs, who averaged 63% East Friesian as a group. By June 2002 we had culled:

- 3 for being empty
- 2 for small teat openings
- 2 for terrible, incorrigible attitudes in the parlour
- 2 for mastitis
- 7 for insufficient production in the parlour

V. The devil in the details

When putting together your business plan, get down to the level of detail. Ignored "little details" will come back to haunt you later. Here are a couple of examples of operating expenses that I guesstimated on in my original plan (and was way off the mark):

- Electricity. From January 1 to September 30 of this year, electricity at the barn was \$2,800 (I had originally guesstimated \$1,000 per year, ha ha). We expect it to rise another \$600-\$800 next year as we extend our milking season and increase production. At peak this year, electricity cost us \$15.56 per day; the freezer alone accounted for \$10.08 of that daily cost.
- Shipping milk. To be honest, in 1998 I hadn't quite envisioned how the milk was physically going to get from point A (bulk tank) to point B (processor). One small part of it turned out to be the bags that milk is poured into (this year, 1189 bags at \$0.55 each = \$654) and the boxes the bags are packed in (34 boxes at \$12 each = \$408).

These are only a couple of small operating expenses. Details, really. I hadn't planned for them, and together they account for \$5,000 in annual operating expenses.

VI. That off-farm job

At this point, for 95% of us, sheep dairying will not support a family. You need to plan on a family member holding an off-farm job for cash flow, health insurance, and savings.

VII. Plan to value-add your milk

Although that \$5,000 net farm income shown on the first page of this presentation is technically "profit", our sheep dairy operation certainly does not provide an adequate return to labor or investment. It is my firm belief that, given the price of sheep milk, *an operation that milks sheep and simply sells the milk will not be viable*.

Value-adding is admittedly easier said than done — it is yet another level of capital investment, time investment, and risk. But *at this point I would not contemplate starting a sheep dairy operation without including some plan to capture a portion of the value-adding process*. As Wisconsin producer Tom Kieffer put it: "The farther you can integrate vertically into the market — from the lowest point (like us, selling milk) toward the ultimate consumer — the better off your business will be."

VIII. Talk, research, visit, talk

- Go visit people who are milking sheep (and, if possible, value-adding)
- Check your budget amounts with people who have already invested/built/installed
- Get the pros and cons of various options (for instance, breeding stock source farms, milking systems) before you buy.

Good luck.