

Resources and Contact Information

Feasibility Study:

Feasibility Study for Zahncroft Dairy

3982 Smaltz Road
Womelsdorf, PA 19567

September 20, 2010

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Part I: Introduction

Part 1.1 Consultation Objectives

The objectives of this consult consist of:

1. Examine the feasibility of adding 30 cows to the current operation.
2. Examine the feasibility of adding 30 cows and renting additional land.

Part 1.2 Overview of Farm

David and Douglas Sattazahn are brothers in a farming partnership located in Womelsdorf, PA on a farm owned by their parents, Dennis and Betsy Sattazahn. David currently rents a dairy farm in the Fleetwood area of Berks County, Pa. He owns 35 mature cows. Douglas is presently employed by his parents on the home farm, performing all the daily tasks needed to run a dairy operation.

Part 1.3 Present Situation

David is renting a farm in Fleetwood, PA sharing the farm with two other farmers. The cows are fed by feed purchased from the owner of the farm at current market prices. His rolling herd average is 21,500 pounds of milk per cow per year. He has been milking cows since the spring of 2008 and will have 20-25 head of young stock by the end of summer, 2010.

Douglas is employed by his parents. He owns several head of cattle of various ages that are kept on his parent's farm. The cows are housed and milked in a tie-stall barn. The cows are fed feed grown on the farm.

The feasibility study that follows uses the assumption that David and Douglas will operate as a business partnership and take over the dairy operation on their parent's farm beginning in October 2010.

Option 1 of this study was part of an earlier analysis in July of 2010. It is being included in this study to show what affect Option 2 and renting the additional land will have on the net cash flow of the operation.

Part II: Option 1 – Adding 30 Cows to the Current Operation

Part 2.1 Objectives

The first objective of the consult is to examine the feasibility of adding 30 cows to the current operation, bringing the total milking herd to 100 head. Again, these numbers were included in the feasibility study done in July of 2010.

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breakeven milk price for Year 2 is \$15.80 and Year 3 is \$15.77. Debt per cow is very good at \$1,474. The total return would not allow for any future expansion until the loans are paid off. Careful budgeting should be done yearly to predict cash flow needs for the year.

The following recommendations are made for Option 1, adding 30 additional cows:

1. Consider raising own heifers, instead of having them custom raised
2. Pursue multiple loan offers to get best rate
3. Explore additional sources of revenue
4. Reduce expenses
5. Aggressive debt repayment with cash surplus will allow for future expansion to occur sooner rather than later.

Part III: Option 2 – Adding 30 cows and renting additional land.

Part 3.1 Objective

The objective of Option 2 is to add 30 cows to the present herd and rent two neighboring farms from their uncle. The tillable acreage to be rented would be around 230. In addition to the additional acreage, they would also have housing available to raise their heifers. Zahncroft Dairy would also have the opportunity to continue the heifer raising business that their uncle is currently operating.

Part 3.2 Feasibility of adding 30 cows and renting additional land

Table 2 shows the projected yearly cash flow for the first three years with this option. The following assumptions were used in making the projections. Milk income is based on cows milking each month assuming a 20,000-pound herd average the first year with a 5% increase in milk each year after. The net milk price remains constant at \$15.50.

1. Average production yields will be used for all crops.
 - a. Crop Needs Worksheet is located in Appendix
2. Custom operators will be used for chopping the forages.
3. New building and equipment loans will total \$110,000 (mostly building)
4. Loan terms are 15 years at 7%.
5. A crop consultant will be used to maximize the potential of the land.
6. Rent will be paid on a monthly basis.
7. Land base is adequate enough to produce all forages.
8. Average yields will produce excess corn to be sold.

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Part 3.3 Recommendations for Option 2

The combination of raising their own heifers, growing their own crops and taking over the heifer raising business will benefit Zahncroft Dairy in a positive manner financially. The net cash flow for Option 2 is much better than Option 1, with all years showing a positive cash flow. In addition, the prior loan will be paid off in year 3 which will generate additional cash flow for future years. Based on the above chart Option 2 is the best option for Zahncroft Dairy. Also, on an above-average crop year, there will be additional crops to sell, beyond what was used for this study, improving cash flow. In contrast, in a poor crop year, there should be adequate acreage to produce all of the farms forage needs. This will limit the negative impact to cash flow. Planning should be done to predict cash flow needs for each month.

The following recommendations are made for Option 2:

1. Pursue multiple loan offers to get best terms
2. Increasing yields will produce additional crops to sell
3. Use yearly excess cash flow to pay down debt and/or create a cash reserve fund
4. Explore volume discounts on crop and livestock inputs

Part IV: Summary and Recommendations

Part 4.1 Summary and Recommendations

Option 1 yielded a positive cash flow in Year 1 and is small cash deficit in Years 2 and 3. Option 1 could be pursued with some minor adjustments to the planned operation. Option 2 yielded a positive cash flow each year. Option 2 is the most feasible option examined in this analysis and should be pursued.

In conclusion, Option 2, adding 30 additional cows to the current operation and renting additional land is the most feasible option of those analyzed. Implementing the changes recommended in Section 3.3 will yield higher returns than projected and allow for future expansion goals.

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APPENDIX

Crop Needs Worksheet

Cows	Lbs/Day	Lbs/yr	Tons/yr	Total Crop Needs	Tons/yr-needed	Produced/Yr	Extra Crops	Additional Acres Needed	Acres Needed	Est Custom Cost
Corn Silage	2700	985500	493		876	615	-261 T	12 short	40	3800
Haylage	3600	1314000	657		767	498	-269 T	22 short	64	9100
Corn, shelled	1500	547500	9777 Bu		9777 Bu	23985 Bu	14208 Bu	-84 extra	58	2460
Hay, dry	400	146000	73		256	304	49 T	10 short	51	
Roasted Soybeans	400	146000	2433 Bu		2433 Bu	2350 Bu	-83 Bu	2 short	58	1740
					0	1937	1937 Bu	-30 extra	0	
								-68 Total extra acreage	270	17100

Heifers

Corn Silage	2100	766500	383
Haylage	600	219000	110
Hay, dry	1000	365000	183

Recommendations

- 1) Consider not growing wheat, either buy straw or use corn fodder to bed
- 2) Raise more Haylage
- 3) Look at replacing some haylage by using rye/age or wheat/age, then double crop corn or beans
- 4) Sell extra corn or use corn acres for rye/wheat

Important to have corn silage and haylage needs met!

Prepared by Larry Smeltz

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Business Plan:

Zahncroft Dairy LLC
Business Plan
3993 Smaltz Road
Womelsdorf, PA 19567
(610)-698-1950
zahncroftdairy@gmail.com

Mission Statement

The mission of Zahncroft Dairy LLC is to provide high-quality products to consumers, lifestyles for ourselves, and environment for our animals, while remaining committed to our families, faith, finances, and the well-being of our animals.

Company Summary & Farm Description

The dairy will be an LLC formed between two brothers, David and Douglas Sattazahn, and their wives, Katie and Raechel. The dairy will be located in Womelsdorf, Pennsylvania. Their father, Dennis Sattazahn, owns the 140-acre farm where the cows are housed. The LLC owns 24 of those cows. Douglas is employed of the farm, in addition to a part-time position with Accelerated Genetics. His wife, Raechel, works full-time for AgChoice Farm Credit. David and Katie brought an additional 29 Holstein and Brown Swiss cows, which were being milked at a rented facility. Katie works full-time for Fleetwood Bank. A total of 62 young-stock are housed between the two locations, of which 40 are owned by the LLC.

Vision

Zahncroft Dairy LLC retrofitted 29 sand-bedded freestalls into the farm's loafing barn, while continuing to milk and housing the remainder of the cows in the current tie-stall barn. This allowed for the two herds to be combined at one location for better efficiency of labor and management. Two neighboring farms will be rented starting in April 2011 for additional crop acreage and heifer-raising facilities. Prior to this, feed is being purchased from Dennis Sattazahn and heifers are being raised by Clarence Sattazahn. The dairy will begin using the crops from 2011 when they are ready. The improvements the dairy is making will be building the foundation for its long-term goal of expanding to 150 cows.

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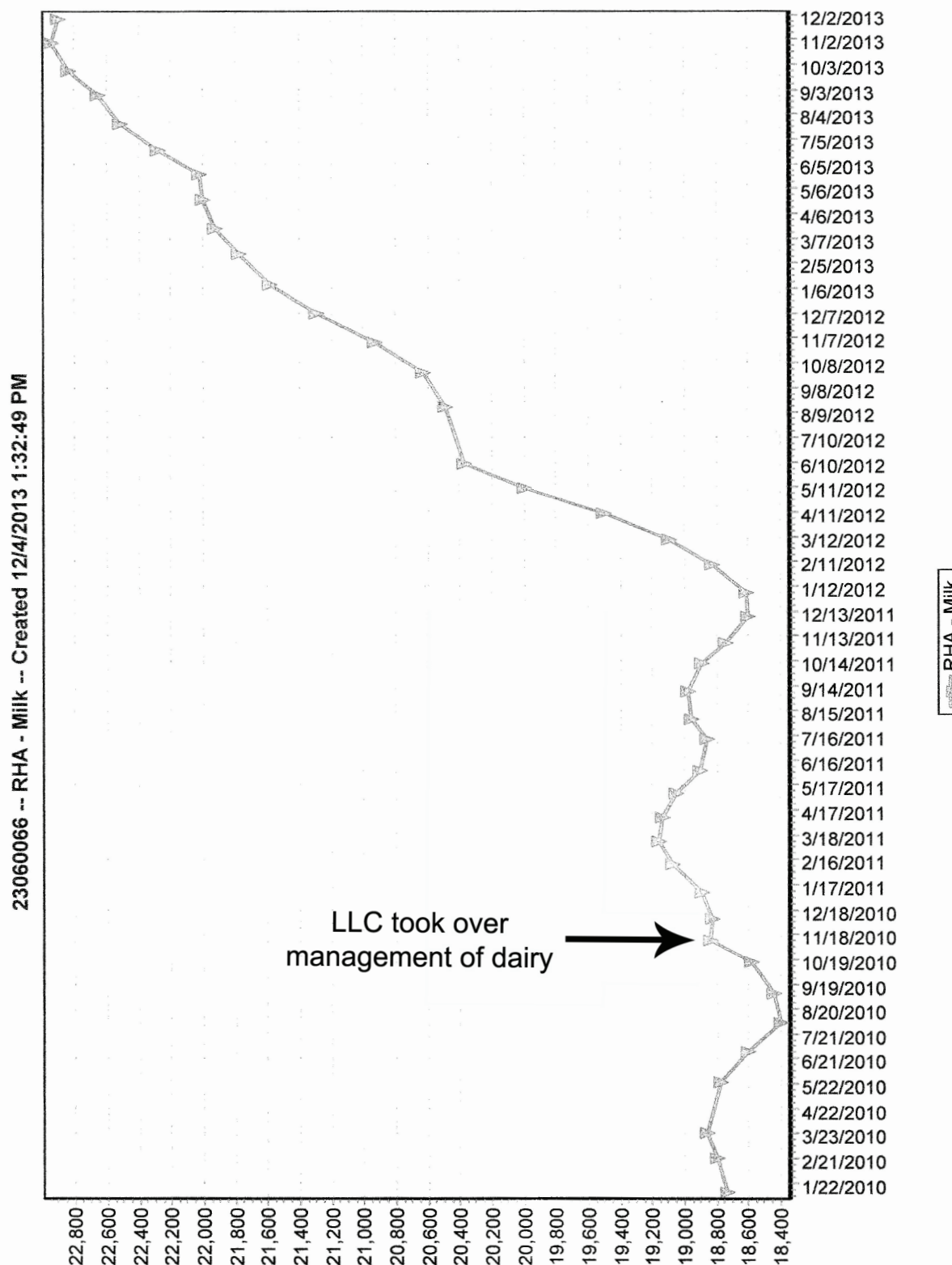
Business Plan:

Objectives and Goals

1. Retrofitted 29 sand-bedded freestalls into the farm's loafing barn. Add curtains to sidewalls and several other small improvements for housing cattle.
 - a. Goal: Completed project by October 26 2010
 - b. We used Farmer Boy Ag to provide the necessary renovations.
 - c. The bottleneck to this goal was to complete the project on time. We worked with the builder to have the renovations completed efficiently and are incorporating the features that can be added while cows are in the facility at a later date.
2. Increase milk production of the herd
 - . Goal: Profitable increase production to 75 pounds/cow/day
 - a. We will improve cow comfort, forage quality, and reproduction.
 - b. The major bottleneck to this goal will be achieving these results during the transition period that will take place for the two herds to merge. We will overcome this by:
 - i. Upgrading mattresses and air flow in the tie-stall barn (new mattress installed 8-23-10)
 - ii. Working with a crop consultant and harvesting forages in a timely manner (Currently working with Agri-Services LLC)
 - iii. Aggressively breeding cows after 60 days fresh and intensively managing fresh cows
3. Reduce purchased-feed expenses
 - . Goal: Farm additional acreage to grow more feed
 - a. We will rent adjoining farms, owned by family members, which also include facilities for housing heifers.
 - b. This goal's bottleneck is being able to manage cash-flow around paying rent each month for additional farms and paying crop inputs. However, these additional expenses will be offset by lowered purchased feed costs and resulting lowered heifer-raising costs. Renting these facilities will present a separate enterprise of custom-raising heifers for other farmers.
4. Improve calf and heifer health
 - . Goal: Decrease mortality rate under five percent and morbidity rate under twenty-five percent for newborn calves (Dairy Calf & Heifer Association Goal Standards)
 - a. We will improve the current calf facilities by widening the pens and creating an opening to improve air flow.
 - b. The bottleneck for this goal is that calves at the home farm are currently exceeding the mortality and morbidity rates due to poor ventilation and inadequate space per calf. Providing adequate ventilation and sanitary housing in addition to the proper nutrition will allow us to overcome this bottleneck.

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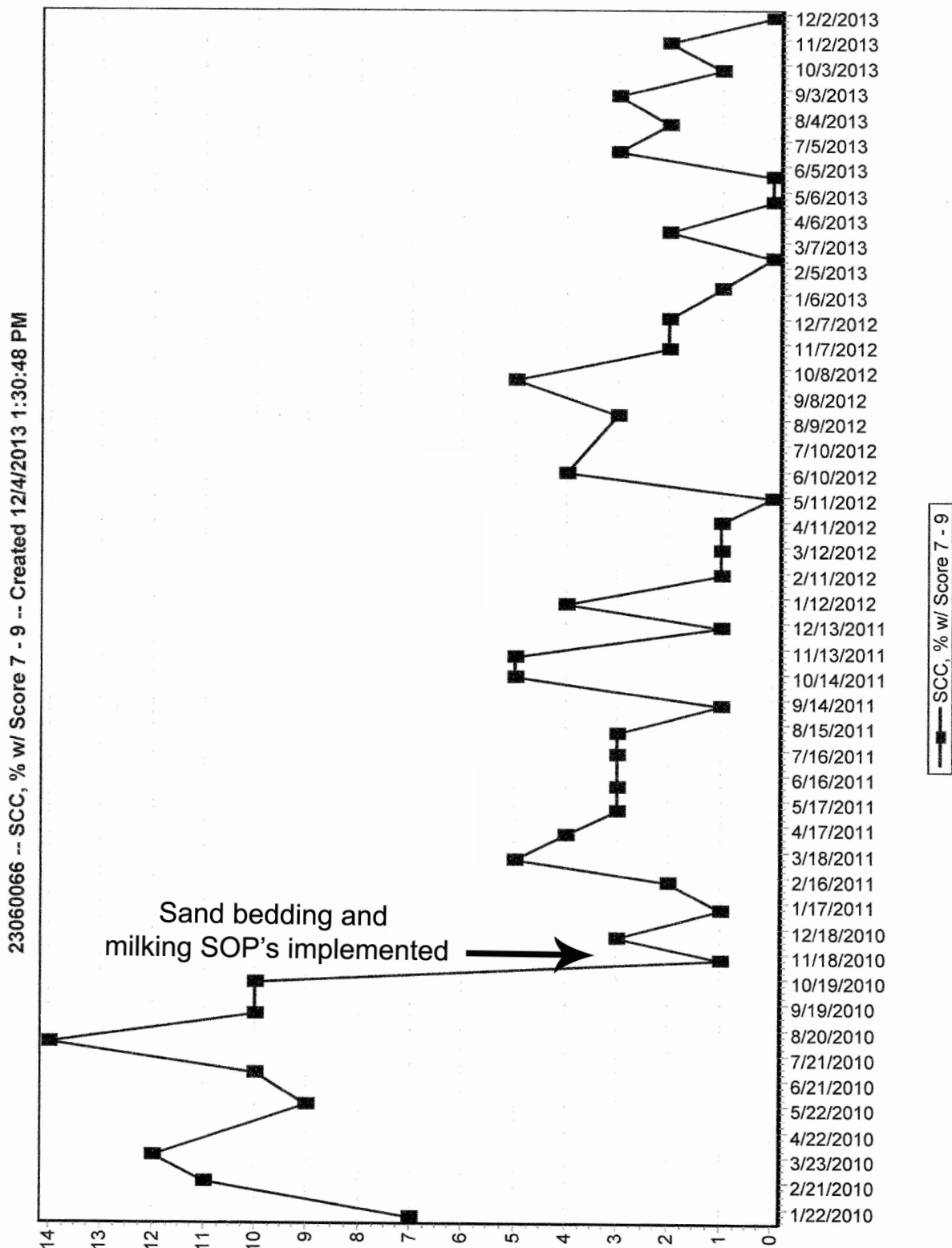
Rolling Herd Average:



Prior to October 26, 2010, the data shown is for the family farm before the LLC was formed. Data after October 26, 2010, is from the LLC formed by David and Doug Sattazahn.

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Rolling Herd Average:



Prior to October 26, 2010, the data shown is for the family farm before the LLC was formed. Data after October 26, 2010, is from the LLC formed by David and Doug Sattazahn.

Resources and Contact Information...*continued*

Contacts:

Please call the Center for Dairy Excellence to make contact with any of these individuals or organizations to learn more about their role in successfully completing this project.

Dan McFarland, Penn State University

AgChoice Farm Credit AgBiz Masters program

Hartman Shurr P.C.



CENTER FOR
DairyEXCELLENCE

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