Northeast Sustainable Agriculture Research and

Education Program

Farmer/Grower Grant Report

Mark Fischer Woodcock Farm (802) 824-6135 PO Box 21 Weston, VT 05161 mgfish02@sover.net

Northeast Sustainable Agriculture Research and Education Program Farmer/Grower Grant Report

1. Project Name and contact information

"Technical Assistant for Cheese Curing for Farmstead Cheese Makers." FNE 02-410 PO Box 21 Weston, VT 05161 (802)824-6135 <u>mgfish02@sover.net</u>

2. Goals

To assist cheese makers through a better understanding of cheese ripening, primarily the environment where cheeses are stored and technique to maintain them to improve consistency.

3. Farm Profile

We remain a Sheep Dairy making cheese on forty five acres in Southern Vermont. Our flock is now up to 100-110 milking animals, which will probably be our maximum on the pasture available. Over the past three years our facility has remained much the same. We have tried to go a few years without capital spending, waiting to understand our business. We have added cheesemaking workshops with instructor Peter Dixon. This has been a great communication tool, because most of the participants are either cheese makers or aspiring to be one.

We have learned that the return from our farm, at our management level may not be enough for our sustainability. The most direct improvement is to make more product. We will be producing cows milk cheeses from winter to spring.

4. Participants

Dale Riggs, project coordinator, has been supportive, which has helped bring my project to its conclusion. Beth Carlson, affineur, was very helpful with producers and their questions. The cheese makers involved all showed a genuine interest in learning more to improve their products and its marketability.

Patrick Anglade, a french cheese technician instructed more than forty cheese makers from New York and New England area, on the subject of Lactic Acid Bacteria and Cheese Ripening. (His three day course was completely in line with farmstead production.) His experience in France working with over 500 cheese makers is unprecedented in this country. (We hope to have him return!)

5. Project activities

In the fall of ('02)', along with Beth Carlson(affineur) I visited ten farmstead cheese producers. We observed their aging areas, discussed problems, and tried to answer questions when possible. At this time I was looking at cheese ripening as a very separate stage in cheese production, one that could be controlled with temperature and humidity. Most of the facilities we visited were sort of ad hock, using the most economic methods to achieve some control. And at the same time incorporating some limitations.

The result of this tour was the beginning of a dialogue around the questions arising from cheese production. It was evident that there was no definite source of information or mechanical support in the area of cheese ripening. Over the next two years we continued to explore the different forms of cheese making and achieve some consistency in the types we already made. During this time I was at a loss to find a more valuable source of information to continue my grant. A conversation with Margaret Morris, a Canadian cheese equipment supplier, led me to Patrick Anglade, a cheese technician from *the centre fromager de carmejane* in France. Contact was made, a visit was planned with time enough for two, three day workshops, one in Vermont and another in New York State. The workshops scheduled for early December to complete my project on time.

6. Results

On our first farm visits three years ago everyone was on their own. Each producer created just enough control to create a product and begin their business. Since that time some American cheeses have received national acclaim, and so their producers and facilities have become more visible examples for those still developing. Manufacturers and equipment distribution have come on the scene with more products available for farmstead production, demanding more attention on the producer's part, particularly in the area of lactic cultures. For myself and those that attended the workshop with Patrick Anglade, the most important concept to be accepted is that cheese is made in the vat and ripening begins in the moment the milk leaves the animal. In order to have any consistency in your cheese production many parameters must be observed from milk handling to environmental control. The life of the cheese is established in the vat through observation and manipulation of lactic bacteria. A consistent profile of acid development must be recognized. The environment of the ripening room begins where the curds are placed in the mold and continues to the point of sale. Temperature and humidity are controlled to bring about chemical changes already established in the milk and curd.

7-10 Conditions, Economics, Assessment, and Adoption

Consistency is still one of the most important hurdles for a small producer. Economics always playing a major role, some forms of control cost money. We have made decisions for our business based on a greater understanding of the needs of our product. We are improving our hot water source to give us more control in the cheese vat and over the temperature of our make room. And improve sanitation through better cleaning. We are building a second cooler(aging room) to create another distinct environment for certain families of cheese.

11. Outreach

As described earlier our first approach was to visit ten producers and discuss with them their problems and successes regarding cheese ripening. The second phase was to create two three day workshops with French Cheese Technician, Patrick Anglade, one held in Vermont and one in New York State. These classes were provided at a low cost, and as a result received a great turn out, having over forty area cheese makers attend. This investigation is on going and continues through further communication among cheese makers.

12. Report Summary

We will never be factories, every batch will always be different. We can only demonstrate our understanding of cheese production in the correctness of our products. There are economic responsibilities related to your business goals. Depending on the type of cheese and volume to be produced, specific capital expenses must be met. We are still taking baby steps, but have begun making changes where they have the greatest contribution to the viability of our product.

Thanks for your support,

Mark Fischer (802)824-6135 PO Box 21 Weston, VT 05161 mgfish02@sover.net