May 31, 1997

Dear Regina: (1)

Upon your request, I'm writing a little more extensively on the results of the approved grant (ENE95-112) once a day organic milking compared to conventional twice a day milking.

We used ten first calf heifers as our once a day organic herd and kept a comparison with ten other first calf heifers being milked and fed in a conventional way. All twenty heifers entered the milking system with no physical or health problems ie: bad feet, mastitis, bad quarters etc....

The feeding programs for the organic cows consisted of intensive grazing from May through October along with some of our haylage and corn silage in the evening. Winter time feed consisted of the latter two along with good quality hay.

For the conventional cows, they received the same feed program of corn silage and haylage along with 30% of their diet being a total mixed ration 18% grain from Blue Seal. These cows were not intensively grazed.

Our market for the organic milk was retailed through our farm store - bottled (raw) in returnable glass bottles. We also marketed some of our milk to three other small natural foods store within a 40 mile radius. We retailed and wholesaled our milk at $1.00/qt and $1.50/½gallons along with the same amount in a bottle deposit

fee.

At the close of the year, we were forced to discontinue the sale of the milk from the organic herd. Their somatic cell count continued to increase along with other bacteria counts which is usually associated with with heard health problems ie: mastitis, dirty living quarters, and over-all poor farming practices with unclean living and milking areas that help contribute to the problems.

This was not the case in our situation. When inside, the cows were bedded and cleaned daily. The cows themselves were clean and there appeared to be no signs of clinical mastitis; but a high somatic cell count would indicate a sub-clinical infection. We believe this was due to the milk incubating in the cows udders for an additional twelve hours.

In order to sell raw milk for human consumption, it must meet certain standards ie: bacteria counts < 10 ppm. If you are not able to meet these standards, the state has the right to discontinue your license until proper steps are taken to improve the situation. At that point, we felt we needed to discontinue milking once a day and proceeded to dry off our organic herd. These cows have since returned to the herd with a normal somatic cell count and being milked twice a day.

Economically we felt it proved to be very rewarding. We still milk a split herd of organic and conventional from which we still feel is economically rewarding where ~~(the)~~ it should be understood that on a small scale diversified farm where you are able to market all of your farm products directly to consumers through a farm store year round it is definately worth pursuing.

In giving recomendations for organic milk production to future dairy farmers, I would suggest assessing the marketing potential of your product in your area and to grow accordingly. Starting small and growing with the demand would be the suggested route to take.

I've enclosed some comparison graphs for your files in regards to cost of production, income potential, and production records.

In closing I have fulfilled half of my two year obligation to the grant and have spent some dollars on fencing materials and would find it fare to say that I have earned at least half of what the grant offered. I appreciate your time and patience and look forward to hearing back from you soon.

Sincerely:

Gregg & Gloria Varney
Meadowscot Farm
Turner - Maine

| Labor=$8/HR | Conventional 2X milking | organic 1 x milking | COST 2X | COST 1X |
|---|---|---|---|---|
| Clean up | 1 HR/DAY x 305 days | ½ HR/DAY / 305 days | $2440.00 | $1220.00 |
| milking | 1 HR/DAY x 305 days | ½ HR/DAY x 305 days | 2440.00 | 1220.00 |
| TMR Grain | $15/DAY x 305 days | X | 4575.00 | — |
| Feed up time | ½ HR/DAY x 36.5 days | ½ HR/DAY x 180 days (winter) 15 min/DAY x 185 days (summer) | $1460.00 | $1395.00 |
| TOTALS | | | 10,915.00 | $3835.00 |

Grain Formula: For Every 3# of milk they get 1# grain.
Average 15# grain/day.

| | conventional | organic |
|---|---|---|
| Milk PRICES | Average $13.00/100# 152,500.-/# milk produced/yr 1525.- x 13.00 = 19,825.00 | Average $35.00/100# 1067.50/# milk produced/yr 1067.50 x 35.00 = $37,362.50 |