

Compost Planting Pots
Farmer/Grower Grant Final Report FNE01-373
Freund's Farm, Inc.

2. The objective of the project is to demonstrate the feasibility of manufacturing self – fertilizing planting pots out of dairy manure. Manure has a high fiber content, which allows it to be readily molded. This was demonstrated previously by hand formed planting pots. For this project, a die will be prepared for the forming equipment and 2000 planting pots will be manufactured. Various quantities of bulking agent will be tried, with the goal to reach as close to 100% manure as is feasible. The 3-inch diameter planting pots will be similar to those used in a greenhouse setting.
3. The farming operation milks 200 cows 2 times a day. The milking animals are rotationally grazed on 200 acres supplemented with grain and corn silage at milking time. The heifers are grazed on an additional 120 acres. Hay is harvested from excess pastureland and from 40 additional acres. Corn for silage is grown on 185 acres. Managed woodland covers 200 acres. There are 40 critical acres in CRP programs. The manure is processed through a methane digester before it is squeezed and either stored in a lined liquid storage or composted for future use and sales.
4. The principal cooperators were Matthew and Benjamin Freund. Kathy Johnson (NRCS) helped with grant writing (SARE, Rural Development, and USDA) and logistics on farm. Dr. Tom Morris (UConn) has applied for more grants to fund testing and feasibility. He is currently designing and running tests on about half of the pots. Dr. John Rothman has begun patent and marketing work. John Emery manufactured the pots and provided preliminary economic data using his machines. Dr. Stan Weeks provide technical advice.
5. Manure was digested and pumped into 55 gallon barrels. The manure was shipped to Canada in 55 gallon drums. Some of the tests were on the separated fraction. The remainder of the tests were on manure as it came out of the digester, that is before any separation. The pots were manufactured in 4 separate runs and shipped back to us. The pots were to distributed to Dr. Morris, Dr. Rothman, and Freund's Farm, Inc.
6. We are very excited about the potential of the pots. Testing has begun. We need to wait to see how the pots react in various settings. The major accomplishment is completing the manufacture of a product that has market potential and creates an opportunity out of the manure disposal problem. The unexpected results are the level of support and commitment from UConn and NRCS and Rural Development where grants are pending to continue the project.
7. There were no site conditions which affected the outcome.
8. We have applied for a business plan grant to assess the economic feasibility of the pots. We should know by the end of May.
9. Exporting manure off of the farms in CT is critical to solving the imbalance of Phosphorus on our animal agriculture operations. New ideas for other products made from manufactured manure have come out of the pot manufacture process. The next step is to continue the grant writing, examine the economic feasibility, and continue the marketing effort.
10. We are investing as much time and energy into this project as dairy farming allows. We now need numbers that we can take to the bank to see if we can construct a facility here.
11. Several articles have been written. Enclosed please find two. We have shared the results with the Canaan Valley Agricultural Cooperative, Inc. We have not decided not to advertise too widely until more patent work can be completed.
12. Freund's Farm, Inc.
23 May, 2001