

Division of Marketing
Agricultural Development and Diversification (ADD) Program
1992 Grant Final Report

Grant Number 07003

Grant Title Sweet Water From Ethanol Production for Cattle Feeding

Amount Awarded \$32,000.00

Name William Bartlett

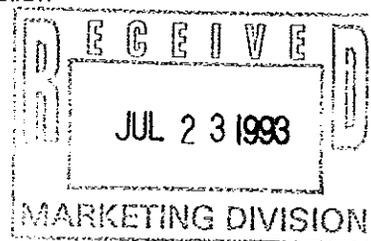
Organization Eureka Company
Berlin

E-Mail

WEB

Department Contact: DATCP - Marketing - ADD Grants
PO Box 8911 Madison, WI 53708-8911
Tel: (608)224-5136
<http://datep.state.wi.us>

Wisconsin Department of Agriculture, Trade and Consumer Protection
Agriculture Development and Diversification Program
Fourth Round Grant



Date: 21 July 1993

Project Title: Sweet Water From Ethanol Production For Cattle Feeding

Contractor Name: Dennis Craig and The Eureka Company

Project Leader: William P. Bartlett

Progress Report for Part of April, May, June, July

This will be the final report. Since April two semi trailers of cattle have been sold, 39 head and 34 head respectively. Photo copies of the sales slips are enclosed. Dressing percentages were 59% and 58.71%. At first appearance these percentages do not necessarily conform to our projections; however it has been pointed out that the cattle were killed within a couple of hours of pickup and would not experience the usual amount of shrink. The first group of cattle were shipped with NFO because other feeders in the area had good experience with that organization. The cattle went to Green Bay Dressed Beef. Needless to say we were not very pleased with the NFO's performance. With both loads we tried to follow the cattle through to the hook but we were unsuccessful. On the other hand government inspectors gave us a high percentage of choice grading which indicates we had pretty good cattle. We have sales for cattle for the freezer and we will be able to check out the carcass characteristics at this time.

We have had a lot of constraints upon this project and some things didn't get done that we planned. Time, the lack of proper scales and shunting and most certainly the weather were causative. We still feel that feeding sweet water and mash are very beneficial. As pointed out in previous reports we have noticed a pronounced drop in feed consumption when mash and sweet water are feed. The drop in the pounds of corn fed greatly exceeds the pounds of mash fed. The inescapable conclusion is that the mash and sweet water reduces the amount of feed uptake. Moreover we feel very comfortable in saying that the pounds per day has increased as well. This is a distinct advantage to the economics of cattle feeding. I would like to point out that Reeve Agri-energy in Kansas figured this out for years on 15,000 to 17,000 head. So it works in Wisconsin as well which is one of the things we set out to prove.

We plan on expanding the ethanol facility and selling dairy farmers mash. The Eureka Company has signed a letter of Intent to work with Estech of Applton to mix mash with hydrolized paper mill sludge. We plan on getting more cattle in fall and having two feeding pens. This joint venture has applied for 3 different grant which will carry on the work done in this grant. We very much appreciate working with the ADD program and hope that our work has been instructive.

OBJECTIVE (1) In what ways will this project increase the cashflow on the farm?

In the second paragraph of the April Progress report it was reported that we had a 14% decrease in corn consumption when sweet water was fed. It was pointed out that while this drop in corn consumption was going on while the cattle were gaining weight and getting larger so one would assume we would have more feed consumption. This is \$11.52/day feed saving. In addition we calculated that we would have needed 22 ton of protein to be purchased off the farm. Good protein would cost \$240./ton so we saved \$5280. Of course some of this was off-set by ethanol production costs but then a sale of the ethanol would have off-set this. A second factor is we used all local corn. If the local farmers had trucked this to grain terminals trucking costs would have been \$1.00/loaded mile. Using this corn locally eliminates the fossil fuel of trucking. Terminals charge dockage for fines and moisture. From the above it makes a great deal of sense to value add close to the farm. In fact we have pointed out that there is double value adding because we have not had to buy protein and we have had a drop in feed consumption. Another factor was in the fall we used corn right off the combine at 20 to 30% moisture which means saving drying costs. If one extrapolates some of the above figures the project can increase farm cash flows several ways. Under "Expected results" page 3 of the grant the above would be applicable.

OBJECTIVE (2) Did this project create Jobs?

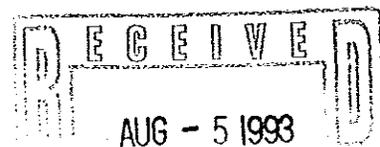
Absolutely, for D. Carraig and W. P. Bartlett. We had planned upon expanding but the weather has proved anything but cooperative. On the other hand Estech Corporation has liked what we are doing and two highly qualified professional engineers are going to go further with the ground work we have laid and develop a system for hydrolized paper mill sludge, mash and sweet water. With our project we have provided an example of how scrap paper from the paper mills can be used to create a renewable energy that the State does not have to import. While not necessarily one of the goals of the grant, this not only created jobs to make the pellets but also the tons we used in process heating removed those tons from the land fill burden and we used not out of state fossil fuel. Again there is a double example of utility. Other businesses that have heat requirements can do the same thing.

OBJECTIVE (3) Is New Era Feeds using Wisconsin ethanol instead of importing it?

Yes, New Era Feeds is using Wisconsin Ethanol from Juneau, WI. Our distillation column refused to work but with Estech in the picture we plan to get it working. At that time New Era Feeds will buy from us and save a lot of money on transportation from Juneau to Eureka.

OBJECTIVE (4) How can others in Wisconsin use this project?

We feel we have laid the ground work for a new and exciting industry. We have shown that Wisconsin farmers can produce their own protein feed from an under valued crop, namely corn. Producing this feed on the farm and feeding it in a moistured state has benefit to cattle. What we have learned this past year, both positive and negative, can be passed on to qualified entities. The one caveat is that there may be some proprietary information developed in the future and that information would be privileged.



OBJECTIVE (5) The Government Inspectors choice grading

This was summarized in the foregoing report, along with some photo copies of the weight and grading sheets. As a recap: There were 73 animals sold, 65 graded choice, 7 select and one bull. Taking 72 animals 65 of which graded choice that gives 90% plus choice grading. Most of the carcasses were over 700 # dressed. We were unable to follow through to the hook but last week we sold 2 head for the freezer market. We will be able to look at those when they are ready for cutting.

