RUTGERS COOPERATIVE EXTENSION of Hunterdon County

New Jersey Agricultural Experiment Station

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November 8, 1999

Mr. Larry Van and Mr. Jim Peterson Marting Manufacturing of Iowa, Inc. PO Box 67 Britt, Iowa 50423

Dear Larry,

I want to take this opportunity to thank you and Marting Manufacturing, Inc. for assisting us with our steer feeding project and the ultimate use of the seven foot Smidley Super Steer Stuffer. Before giving you the details of our project, I would like to commend you for the design and the quality construction that we found in your product. The Super Steer Stuffer proved to be a real asset to our beef finishing project and afforded us a labor saving method to fulfill our project goals. The Super Steer Stuffer maintained the quality of our feed by protecting it from inclement weather and by its design restricted feed waste or spillage (if any) to a minimum. In addition, the use of the seven foot Super Steer Stuffer model matched very well with our small feedlot designs and expected feeding efficiencies.

The project that we have embarked upon is the development of a direct to consumer beef marketing concept of a pre-assembled consumer bundle of high quality locally raised beef. The beef is fed locally grown feeds and are placed on feed as stocker type cattle at 800 plus weights. There are no growth promotants or hormones used in the cattle and they are fed to achieve a high choice quality grade and a yield grade around 2 to 3. In this project we had a varied cross section of Angus and Hereford steers with frame scores ranging from 3.5 to 5.5 that came "out of the country" right off grass. The steers on average across the four groups weighed 835 to 935 pounds with two Angus steers weighing in excess of 1,100 pounds. The steers were assembled at our feedlot and were vaccinated with Bovashield and wormed with Eprinex, tagged, weighed, given a body condition score, and then placed on a fourteen day warm-up ration to get them up to speed to go on the full ration and for the transition to the "self service" Super Steer Stuffer. The finished steers once "harvested" were custom slaughtered and processed, aged twenty one days and then cut, wrapped, flash frozen, and pre-assembled into our unit or bundle design for marketing. In the end the steers were marketed for a gross price of \$1,500.00 or \$300.00 per unit, based on an average of five units per steer, via the direct to consumer marketing model.

The twenty-one steers in this project gained on average 3.29 pounds per day with a high of 4.81 pounds per day and a low of 2.2 pounds per day with nine steers gaining over four pounds per day. (The one steer gaining the 2.2 pounds per day just never performed well throughout the feeding trial. i.e. smallest frame score and lightest steer fed.) Since the group was fed from the self feeder, the twenty one steers cost of gain and rates are averaged across the entire group. Our cost per pound of gain was just shy of \$.60 per pound or \$1.97 per day for feed with the ration per ton cost of \$109.00.

Needless to say we were extremely pleased with the Smidley Super Steer Stuffer for multiple reasons. Once the cattle were warmed up and on full feed the Super Steer Stuffer reduced



the daily hand labor from forty five minutes per day to less than ten minutes which originally included the daily observation and the actual hand feeding in a moveable bunk feeder. At a rate of \$15.00 per hour labor this reflected a labor saving from \$11.25 per day to \$1.50 per day for the feedlot. (Labor for grinding feed was included in the feed cost and the labor and supplies attributed for cattle working/handling were calculated as separate line items and not included in any of the figures above.)

We also observed on a time and motion comparison that the Smidley Super Steer Stuffer afforded the feedlot cattle a more leisurely feeding rotation, that in affect allowed smaller more timid animals equal access to the feeder and ration throughout a 24-hour period. More aggressive and larger steers once having used the Super Steer Stuffer, left the feeder site to either go lay down on a provided bedding pack and/or to go to the water. Over four separate six hour observation periods the entire group of steers visited the stuffer at least two distinct times, which meant that for a given twelve hour period from dawn to dusk of daylight, the steers rotated and fed four times at the feeder for "self- service" consumption. No observation was done during darkness, but there appeared to be no pressure at first light or daybreak for access by the steers to the feeder. Additionally, the water source, bedding pack, and the Super Steer Stuffer were triangulated on a 80 by 150 foot open concrete lot. The triangulation aspect created a flow from the three areas that allowed individual steers to move unhindered from site to site.

It is extremely important that the feeder never be allowed to empty, which for the 65 head capacity of the stuffer used in this project and our smaller grouping (21 head) never presented a problem.

We also had occasion to observe that there was very little waste or spillage from the Super Steer Stuffer design and that wet weather conditions did not affect the flow of the feed or the quality as any excess feed in the trough zone did not get wet or spoil. The feed ration did not have any molasses mixed with it, so we did not have any flow problems and the bumper board design worked very well with our ration and the flow as the steers accessed the feeder.

Overall I was very pleased with the performance of the Super Steer Stuffer and would highly recommend its use for feeders with similar designs and cattle capacities matching the Smidley Manufacturer's design recommendations.

Sincerely,

Robert Mickel, County and Area Livestock Agent Mickel@AESOP.Rutgers.EDU

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