

Principal Investigator

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Project Duration

2002 to 2003

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Comparing Performance of Hoop Buildings to an Older Conventional Building for Finishing Hogs

Project Summary

We have a 170 sow farrow to finish hog operation that uses rented finishing and nursery buildings. Most of these buildings were built or remodeled in the 1970's. The operation is very time consuming because of all the time spent on the road, usually 2 to 3 hours/day. I wanted to move the finishing pigs home to save time.

I became interested in hoop barns as a way to build low cost finishing. I felt I could not afford new confinement buildings. As I started to research options, I began to wonder if hoop barns might be a more enjoyable way to raise pigs, both for the pigs and for myself. Also, the money now spent on lease payments could be used to pay off the hoops.

The purpose of this project is two-fold. First, I want to compare the hoop barns to older confinement buildings. Most comparisons have compared hoop barns to new facilities. New facilities are something many of us do not have. Secondly, I want to help smaller operators keep better records. Often, smaller operators do not have the time or the staff to devote to record keeping. I plan to use a computer software program called Pig Win to get a better handle on my record keeping. The Pig Win program utilizes a palm pilot for data entry.

Dismantling hoop structure prior to moving it to the Connolly farm.

Project Description and Results

In the summer of 2002 we purchased two used 30 x 72' hoops from a farmer who was retiring. Because of the wet weather, we experienced many delays putting up our first building. With the help of my neighbors, the first hoop was put to use on August 19. The second building is partially up and will hopefully be completed by the end of the year.

It is too early for me to give out any data as we have not closed out a group of hogs yet. I weighed 5 to 10 average pigs out of my nursery on entry into the hoop barn. I am recording all feed and death losses, and making observations with the palm pilot. I will analyze this data and make comparisons between the hoop and a confinement system for feed conversion, death loss, growth rates, and, hopefully, cost per pound of gain.

We had some mycoplasma-pneumonia disease problems in all of our facilities this fall. It seems that the disease problem is less in the hoop barn than in the confinement building. I am sure that our first group closeouts will not look very good.



I can make a few early observations about the two systems. The pigs in the hoops have had a much lower death loss. It looks like they will have a better growth rate, even with our disease problems and the lower protein levels we fed due to the low hog prices. We have had no tail biting problems in the hoop like we had in our confinement building. At this early point, I find myself preferring to work in the hoop barns over the confinement buildings. I think I have to see what it will be like this winter.

One thing I noticed is that in the confinement system, you have to manage differently than in the hoop system. In confinement, you must try to create a good environment with fans and supplemental heat. It is also important to have a handy way to sort pigs in either system.

I knew that for hoop barns to work you need access to lots of bedding. It is often hard to get custom balers to come in the fall, so I felt it was important for us to own our own baler. We bought an older New Holland round baler and made about 150 corn stalk bales off our farm. It proved to be important this year to have our own equipment because there were only a few days to bale due to a very wet October.

I think that converting more of my operation to solid manure will have a positive effect on the environment both for water quality and odor reduction. I also like the fact that the system uses minimal electricity and no supplemental heat.

At this point I am very happy with the palm pilot for data entry of my records. I just write the information in the palm pilot every day and it takes a few minutes to download it to the computer.

I think next year we will start to get some good data and be able to draw some conclusions. And, hopefully, we will have better hog prices.

Management Tips

1. Record keeping is very important no matter what size operation.
2. The use of a palm pilot is an easy way to keep records.
3. It is important to use lots of bedding in hoop barns and other deep-litter facilities.

Cooperators

Will Marsh, FarmWise Systems, Little Canada, MN
Wayne Martin, University of Minnesota Alternative Swine Program, St. Paul, MN
Beth Nelson, MN Institute for Sustainable Agriculture, University of Minnesota, St. Paul, MN

Project Location

From Le Center, go north on Le Sueur Cty. 11. Turn left at first stop sign, go .25 mile and turn right (stay on Cty. 11). Farm is approximately 2 miles on the right. House number is 33221.

Other Resources

Appropriate Technology Transfer for Rural Areas (ATTRA), PO Box 3657, Fayetteville, AR 72702, 800-346-9140. Web site: www.attra.org
 Provides assistance and resources free of charge to farmers and other ag professionals.

University of Minnesota Extension Service. 2001. Hogs your way: Choosing a hog production system in the Upper Midwest. Publication No. BU-7641-S. University of Minnesota Extension, St. Paul, MN, 612-625-8173 or 800-876-8636.

University of Minnesota Extension Service. 1999. Swine source book: Alternatives for pork producers. Publication No. PC-7289-S. University of Minnesota Extension, St. Paul, MN, 612-625-8173 or 800-876-8636.