

Sponsors

University of Minnesota

College of Veterinary Medicine

College of Food, Agricultural and Natural Resource Sciences

Extension Service

Swine Center

Thank you to **IDEXX Laboratories** for their financial support to reproduce the conference proceeding book.

Production Assistant

Janice Storebo

Formatting

Tina Smith

CD-ROM

David Brown

Logo Design

Ruth Cronje, and Jan Swanson;
based on the original design by Dr. Robert Dunlop

The University of Minnesota is committed to the policy that all persons shall have equal access to its programs, facilities, and employment without regard to race, color, creed, religion, national origin, sex, age, marital status, disability, public assistance status, or sexual orientation.

Top hog index is as important as pigs weaned/sow/year

Dave Wade; Jim Moody, BS; Tara Donovan, DVM; Baxter Gutknecht, MS; Rose Rott, BS; Joe Bradford, BS

The HANOR family of companies

The objective of any producer is to market a hog that will bring top dollar. Traditionally, the monitoring of pig quality leaving the farm wasn't summarized in a format that would allow us to analyze a system or system change. Although not ignored, deaths at the processing plant and discounted pigs both on the farm and at the processing plant were generally monitored in a separate report. Internally, HANOR has developed an indexing system to include deaths both on and off the farm, and account for the value of discounted pigs both on farm and at the processing plant. This report is referred to as the "Top Hog Index" (THI).

The THI assigns a value to a pig after it has been placed in a project and assumes it will be a top hog, valued at 100%. Values are assigned to the other categories of pigs based on the relative value as compared to the value of a top hog. A pig that dies in the farm, in transit, or at the packing plant has a value of zero. A pig that is an Off-Grade sale or a Subject Hog has a value of 40% of a top hog, Slows are valued at 90% and Light Hogs are 80%. The assigned value indexes are the historic value for these categories of pigs as compared to the value received for our top hogs.

I want to just take a moment here to briefly describe the different categories of pigs as HANOR defines them. DOA and Dips are pigs that are sent to the processing plant, but either die in transit or die at the plant and we receive no revenue. Off-Grade sales are pigs that leave the wean to finish facilities and are sold to a cull pig market. Subject Hogs are those pigs at the processing plant that are resold for various reasons or deemed as Subjects by someone at the plant and railed off for further inspection. Slows are market hogs at the processing plant that can't move with their cohorts and have to be given time for rest and recovery. Light hogs are those pigs sent to the processing facility but are substantially below the minimum weight accepted at the plant and are severely deducted. Generally within HANOR, any pig marketed to a number 1 processing plant at 220 pounds or less is considered a Light Hog. Top Hogs are those animals that receive premiums or very modest discounts at a number 1 processing plant.

Many hallway discussions amongst producers have taken place trying to decide what is more important or more profitable between improvements in sow production or more compared to improvements in grow/finish. For instance, will a 1% improvement in pigs weaned per sow per year or

a 1% improvement in wean to finish mortality mean more to overall profitability for an operation? In most cases, management will just respond "get both", but we know that it can be more effective to focus on an area that will gain you much better returns for the effort put forth.

We have developed a very simple model that allows us to look at some "what-ifs" when a change is made to the Pigs Placed/Sow/Year or Top Hog Index as it might compare to each other or a standard THI model.

As we have looked at scenarios with different revenue prices and costing, there seems to be a real financial benefit for improving Top Hog Index compared to Pigs/Sow/Year. When revenues and costing were closer to the 2006 prices it was 1.5 times better economically to improve THI over the same percent improvement in Pigs/Sow/Year. But at the same time when revenues and costing are closer to the spring 2009 numbers, it's 3 times better to chase improvements in THI rather than P/S/Y.

As a management tool there are a couple of applications for the THI. First of all, we have been able to calculate per pig marketed, a value for a point of movement in the THI based on current costing and revenue. By using this THI per point value we can then make decisions based on the value returned for a production change. By improving or reducing items like facility utilization, vaccine and medication strategies, or improving feed conversion, we can generate an economic value for this change and make a more informed decision on if the cost to implement will give us the return we need. For example, if the THI value is \$1.30 point and a medication strategy is going to cost \$.50 per pig we can then assume that an increase of 39% in the THI will cover the cost of the medication. Second, the THI index allows us to look at the categories within one report, and critique how farm staff is managing the different categories of pigs. For instance, there may be pressure applied to the staff to reduce Off-Grade pigs, but then Mortality and Light Hogs increase, netting no real value to the system.

In our system THI plays a very important role in how our business is managed. By being able to assign values to the different categories of pigs leaving the farm and condensing them to one report allows us to set focus on areas that need improvement and what financial returns we can expect. I guess you can think of it this way. As Pigs/Sow/Year is to sow operations, Top Hog Index is to grow/finish operations.

Table 1:

	Value index	Target	Jan	Feb	Mar	Apr	YTD
Farm A		Distribution					
Mortality	0.0	6.0%	4.6%	4.6%	7.5%	3.4%	5.1%
DOA & dips	0.0	0.5%	0.6%	0.7%	0.4%	0.5%	0.5%
Off-grade sales	0.4	0.5%	0.6%	5.6%	2.1%	0.7%	2.2%
Subject hogs	0.4	0.4%	0.1%	0.0%	0.1%	0.1%	0.1%
Slows	0.9	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Light hogs	0.8	3.0%	1.9%	0.9%	1.8%	4.8%	2.3%
Top hogs	1.0	89.6%	92.3%	88.2%	88.2%	90.4%	89.8%
TOP HOG INDEX		92.4%	94.0%	91.2%	90.5%	94.6%	92.6%

