

Managing Your Hogs' Market Weight

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These are difficult times for hog producers with record high feed costs. While market price is relatively strong, most producers are still losing money on every pig sold. We often get the question, "if I am losing money on every pig, when should I sell them?" The simple answer is that you want to sell them at the weight where the next additional pound costs you more to produce than you will earn. For example, if my feed cost is \$.12 / pound and the pig is gaining at 4.0 lbs of feed / lb of gain, each additional pound of live hog costs me \$0.48 and I need to earn at least this amount just to break even. This simple analysis assumes there are no additional costs for this additional pound. In other words, there is no additional cost for facilities, labor, transportation, health, reduced etc. While on the surface this assumption seems overly simplistic, it is fair to say that feed cost is the major driver for most producers in this decision. Dr. John Lawrence at Iowa State University has produced an on-line calculator that can lead you through this calculation (<http://www.econ.iastate.edu/faculty/lawrence/>).

To do the question justice, however, the answer is not so easily derived. This is primarily because we are selling loads of pigs, not individuals. And while the load could have an average weight as calculated in the simple approach above, the packer matrix will probably not be equal in its impact for every pound above versus below the average. In other words, if my optimum weight is 275 pounds as calculated above, it is highly likely that the lost revenue (or opportunity cost) for pigs above 275 will not equal the lost revenue for pigs that weigh less than 275. For example, if you calculated your optimum weight to be 275 pounds and are selling to Swift, the matrix carries a higher discount for increasingly heavy pigs compared to light. In effect, this pushes your optimum weight lower. Dr. Mike Tokach at Kansas State University has produced an on-line spreadsheet that uses your recent kill sheets to help you determine your optimum average weight for loads of pigs (<http://www.asi.k-state.edu/DesktopDefault.aspx?tabid=1229>). One assumption with this method is that all loads included in the kill sheet analysis were equal for variability. In other words, a kill sheet that averaged 270 had the same spread of weights as a kill sheet that averaged 280 pounds. This is surely not the case, but as with the effect of feed costs vs other costs discussed above, the impact of this limitation is probably low.

Most producers have continuous flow sites and/or fixed delivery schedules of pigs to the finishing site. The marketing strategy in such a case is as described above and strives to sell loads as close as possible to the optimum weight. For some producers however, managing optimum load average weight, still doesn't fully address their marketing strategy. These producers are managing sites all in-all out and the delivery schedule of pigs might be flexible. Should such a producer market one or two truckloads of the heaviest pigs and then wait a week to sell the rest? Or is it most economical to empty the barn or site over a 6 week period? And how frequent and big should the loads be? This analysis quickly becomes extremely complex and depends on anticipated pig and facility flow, transportation cost, packer matrix, contractual obligations, feed cost, market price, variability in growth, genetics, and ability to sort and identify ideal weight pigs. Dr.

Kathryn Boys and colleagues at Purdue University recently described a computer model that starts to get at this question.

To conclude, understanding and managing your optimum market weight is an opportunity for pork producers. In difficult times such as today, it is one way to reduce losses. In good times, it is another way to increase income.