Scales - A Valuable Tool in Swine Production

Richard Hollandbeck
Scales--A Valuable Tool in Swine Production

Richard Hollandbech, Animal Sciences Department

Annually the true value of much livestock is lost or misjudged in Indiana when scales are not used on livestock farms. Check weighing as a part of any breeding, selection, feeding or marketing program can reduce this loss.

In the past we thought that elaborate scales had to be used on hog farms. Fortunately, this is not true. Any workable scale can be used to good advantage. We cannot "out-guess" the scales in determining birth weights, weaning weights, growth weights and market weights. The use of scales to determine these weights accurately cannot be over evaluated.

Birth Weight

The birth weight of individual pigs can be obtained by using any small capacity scale, having a half-pound or less break. Some people have used baby scales no longer needed at the house; others use poultry scales; still others, small, hand spring scales. Birth weight of the individual pigs within the litter is a measure of a combination of the genetic and management influences which have made themselves felt on brood sow productivity. Light-weight pigs at this time will therefore indicate either a poor sow from the standpoint of brood sow productivity or that you, as the manager, have not properly fed and cared for the sow during pregnancy.

Weaning Weight

Weaning weights can be measured on any of a host of scales having capacities varying from 30 to 1,000 pounds. Generally, a portable scale is most handy. Many people use bathroom scales by holding each pig separately--their own weight in this case is a tare weight. Milk scales with a bucket or live poultry scoop hooked beneath are frequently used. Platform scales are widely used when weighing the litter collectively.

The weaning weight is another valuable measure which can be used in guiding the culling of old sows and the selection of replacement gilts. The 21- and 35-day weaning weights give us the measure of the milking ability of the brood sow. The 56-day weaning weight is a measure of the combination of the milking ability of the sow and the creep feed consumption rate of the pigs.
Gold Medal Swine Testing Project records kept on 3,378 litters weighed at 56 days of age by Indiana farmers show that the top one-third of the litters had an average weight of 419 pounds at weaning time; the middle one-third weighed 333 pounds; and the low one-third weighed only 252 pounds. Acceptable weight standards at this age are 300 pounds or more for sow litters and 250 pounds or more for gilt litters.

For 35-day weights, 150 and 130 pounds or more are acceptable weights for sow and gilt litters, respectively. Variations as indicated above tell us that we have room for improvement and can do so by using scale weights in production testing.

112-Day Weight

Weighing pigs individually at 112 days of age can be done with any one of a number of platform scales. Care should be taken to see that the crate used in connection with the weighing is such that these bigger shots can't jump out or otherwise get hurt in the process.

The weight taken at about 112 days of age is a measure of the growth rate of the pigs. This, our geneticists tell us, is a very good on-the-farm indication of the feed conversion rate, if the pigs have been on a full feed. This is certainly a valuable tool to guide our selection of replacement gilts. This measure can be coupled very effectively with a probing of backfat while the pigs are yet on full feed.

Gilts intended for replacement, if they have passed these criteria, can then be taken out of the growing-finishing lot and placed on a good pasture with a well-balanced growing ration until such time as they are bred.

Keeping gilts in the feedlot until they reach a market weight of 200 to 225 pounds will detract from their brood sow capabilities; at least, for their first litter. This, then, tells us that we should take our replacement gilts from the feedlot when they have reached a weight of about 150 pounds.

On-the-farm-testing has shown us that here, too, we have variation. In fact we see more variation within some litters than between the averages of the litters. With this in mind a successful, well-rounded breeding program should contain a place for individual 112-day weights (and backfat probes) to "ferret out" the better replacement gilts from the good-doing litters.

Market Weight

Checking when hogs have reached market weight is usually done with a platform scale semi-permanently or permanently placed in or near the feedlot. A sorting chute equipped with a cutting gate at the scale outlet is quite a labor-saver. The many hog producers who have such a setup are well satisfied and feel their money is well invested. Some prefer to weigh individually, while others sort to size and weigh collectively.

Determining market weight is probably the one check weight with which many farmers can realize more money saved faster than any other. After a market hog has reached the optimum market weight of 200 to 225 pounds, the amount of feed required per pound of gain increases rather markedly. When market hogs have reached this weight, they have reached their maximum growth rate. The additional weight gained after that time is primarily fat. Remembering that it takes two and a quarter times as much energy--about 30 extra pounds of corn--for each additional hundred pounds of gain, we can readily see why the feed savings resulting from the marketing of hogs at the proper time is great.

Remember--You cannot out-guess the scales for they are impartial judges!!!