

Measuring Turkey Breeding Success

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To measure is to know. If you cannot measure it, you cannot improve it.

Lord Kelvin (Sir William Thomson, 1824-1907)

Measuring has long been recognized as way to monitor results and then make adjustments toward continuous improvement. Facts and feelings often get confused and many times the only way to determine which-is-which is through measurement. After years of consultations with people across the globe, several key observations about our behaviors and actions around measurement are shared here.

Successfully breeding turkeys is more than just creating fertile eggs. Factors include: Cull egg rate (and quality of eggs), rate of lay, eggs per hen, hatchability, poult per hen, poult yield, poult weight, 7-day mortality, four (4) week weights, market weights, feed conversions, grade, breast meat yield, durability, flock health, labor turnover and, of course, cost!

You are invited to attend this interactive session where you'll be able to provide your insights in real time. All responses are anonymous and a summary of the group results will be available afterward. **Please bring your smart-phone, iPad or laptop!**

Think of Key Performance Indicators or KPI's. Things we will measure now give us information that directs what we will continue to measure or modify, then we measure some more! Here are a couple of basic questions that show the sometimes predictable study of measurement. If a group of people are asked *What is your age? What is your weight? What is your height,?* The answers should provide us with a "normal distribution" of a population. The more people we have answer, the more the table looks like a "bell curve". Understanding answers in the scope of a bell curve helps drive further measurements.

What happens if I ask *How long have you been in the turkey industry?*

If our results are skewed to an older demographic, then we are in trouble! Time to start mentoring our replacements so our industry is well prepared for the certain changes yet to come.

When it gets interesting is when I ask a group to provide one or two single words that describe what is important to measure in breeding success. For this question, there are no "correct / incorrect" answers. This question should tell us what a group believes we need to measure and the degree of their agreement.

As your facilitator in this workshop, I'll move our conversation through a number of audience-generated and "live" questions. Your insights and knowledge will be an important part of what

we measure. A sample of possible questions we may cover are listed below, however this presentation may change as we all discuss what is important in measuring turkey breeding success.

Breeding and Hatchery

What percent fertility is acceptable, in the nearest 0.5%?

What percent hatch is acceptable, in the nearest 0.5%

Are eggs per hen seasonal (depending on lighting date)? If so, how many eggs per hen are expected in Summer, Fall, Winter, Spring lit flocks?

What is an acceptable cut-off egg weight (in grams)?

What weeks of egg production are considered "First Egg Poults"?

In a given breeder flock, how much variation should expect in egg weights (+/- grams/egg)?

What is an acceptable poult yield (%)?

What percent of poults would you expect to grade-out at the hatchery?

What percent sexing error is "normal"? Toms in a hen flock or vice-versa

Do you measure weights in the brooder house?

How many hours after hatching should a poult be on feed & water?

An acceptable poult temperature is what (degree F, to nearest 0.5 degrees)?

When you treat a sick flock and it responds, is this a success, or failure?

How much do you agree with the statement "The system for creating quality is prevention"?

Turkey Production

Do you measure the following every day?

- *Water consumption*
- *Feed consumption*
- *Temperature*
- *Relative humidity*
- *Bird weights*
- *Mortality*
- *Social stress*
- *Carbon dioxide*
- *Water sanitation levels*
- *Day-length*
- *Light intensity*

How many BTU's per square foot should you have in the brooder house?

What is the maximum carbon dioxide level (ppm) you would accept in a turkey house?

What is the maximum acceptable ammonia level (ppm) in a turkey house?

Do you score beak treatment?

Do you score toe treatments?

Are turkeys intellectually challenged?

The Human Element “Turkeys are easy, people are hard!”

What is your personnel turn-over rate (% per year)?

How often do you train your staff?

How many measurements are taking of staff daily requirements?

Are all your staff trained in animal welfare?

Do you have signed training documents?

Can your staff identify key turkey behaviors?

Do your staff look for safety hazards? Careful: might be a trick question!

Does your company have a mentor program?

What's Really Important

Rank in order of importance (1 most important, 10 least important):

- *Feed Conversion (FCR)*
- *Average Daily Weight Gain (ADWG)*
- *Weight*
- *Total Live Cost*
- *Grade A*
- *Total yielded live cost*
- *Turkey welfare*
- *Employee retention*
- *Safety*
- *Poults per hen*

Due to the dynamic nature of this presentation, what we actually cover will be, in part, up to the audience. Results of the actual presentation will be available to attendees as well as to those who log-in after the session.

While it isn't necessary to agree on what we measure, we can agree on the importance of measuring and assessing every day in order to improve and maximize turkey breeding success!