



## Getting Started Collecting & Using Data in Meat Goats & Sheep

By: *Kenneth M. Andries*

The ultimate goal of any enterprise is to generate a profit. One critical step to achieving a profit is to set specific production goals for the enterprise. When setting goals, remember two key factors, 1) research has shown that reproduction is the most economically important trait except in stocker or feedlot enterprises, and 2) growth is the second most important set of traits for all livestock enterprises. To utilize these key factors in your goal setting, you must rely on your records to give you a basis of comparison and direction.

### **Choosing the Right System**

To set specific goals for an enterprise, you must first be able to analyze the data that is important to moving you towards the goal. The collection of data can look very different depending on the program used or paperwork kept, but you must think about your management system and how a record keeping system will fit into your program. While there are a lot of programs out there, you need to make sure the program you choose will keep the data you need and provide the reports you want. Also make sure it can expand with expected changes to your herd over time.

For a good basic record keeping system, some people still utilize paper

and a simple computer program. Many producers will keep records in the barn and then transfer the data into an Excel spreadsheet. This system works very well as long as the correct data is collected. Start with a kidding/lambing sheet that records the kid/lamb ID, Dam ID, date of birth, sex, type of birth, birth weight, and any comments. Then record weights, body condition score, and eye color score on your goats/sheep on a regular basis.

Keeping this data will provide you the information to participate in different on-farm performance programs, like the KY Goat Herd Improvement Program, as well as in national evaluations like the National Sheep Improvement Program (NSIP). The NSIP program is available to both sheep and goat producers and it will calculate Expected Breeding Values for your herd/flock. Keep the record keeping system you use simple but flexible. There are a number of pocket data books you can get for sheep and goats which help keep data together in one location. Just remember that transferring the data into a computer program helps improve the ease of use and review of the data.

### **Getting the Right Equipment**

The next step is to get the necessary equipment to collect the data—ear tags and a scale. For many producers the starting point is a set of ear tags to provide ID on your animals. Without identification of



every animal, that can be repeated each time you collect data, it is not possible to have good data. While I know some people can remember each animal, an ear tag insures that others know who you are referring to as well, it also makes records easier to manage. A scale is critical in developing data that shows growth. Weights can be recorded at specific times during production to develop a trend for not only the pounds gained by each market animal but also provide the production level of each breeding female as well. Scales can range from fish scales and bathroom scales, all the way up to portable livestock scales. You may be able to build a scale for a lower cost than the ones advertised or explore purchasing a scales for “group use” with a local association.



### Getting the Right Data

After you have your animal ID, data collection should start at birth. You should record the number of kids/lambs born to each doe/ewe as well as the IDs of both the mother and the offspring. For the offspring, record the sex and make note of any issues or observations you have that may impact survival or desirability in the future. Lastly, record the birth weight on each individual. If you lose a kid/lamb, record when it died or was noticed to be missing. This helps you in the future to know specific times that may be of higher risk for loss and can help identify possible issues.

As mentioned above, recording weights is extremely important. You should record weights at birth and at least once prior to weaning. Take weights at 60 days for goats and 30 days for sheep, to measure progress and record any losses as they happen. Then take a weight at an average of 90 days in goats and 60 days in sheep for weaning. If you choose a different average age for weaning that is fine as long as it is within a normal range for the species. These weights help you to know how the kids/lambs are growing. You should also record the weight of your does/ewes at least once a year. Remember that all treatments, other than vaccines, are based on animal weight, so you need to know what they weigh to properly treat for parasites or other issues.

### Analyzing the Data

The data recorded between birth and weaning needs to be used for two purposes: 1) to identify animals you want

to save for replacements in your herd, and 2) to help identify dams that are not as productive as you need them to be.

### Identifying Replacements

You should select replacements from multiple births to help improve twinning and reproduction. Also look for females that grow faster in order to improve weaning weights (market weight).

### Identifying Culls

Knowing which females to cull is very important as undesirable traits will be passed onto the offspring with each lambing/kidding. Cull females that only raised singles or that had kids/lambs and didn't take care of them. Eliminate females that had chronic illness, mastitis, or had to be treated for parasites more than the rest of the herd. Rely on your records when culling! I have seen a lot of producers think they can remember the problem animals, but keep breeding the same animals every year because they don't keep a record or decide to pull her off the trailer because she looks good when they go to load the culls.

### Conclusion

Record keeping needs to start with a sound ID system and a scale. Begin recording data at birth using simple paper or pocket record books, and spreadsheets. There are a number of commercial programs that are getting better at data keeping for goats and sheep. Sheep programs can be used for goats because they allow for twin births. Production records are very critical in reaching goals based on measurable outcomes. You need to know where you are and how you progress, and records are how you get that information.

**Kenneth M. Andries**, *Assistant Professor and Extension Specialist, Kentucky State University* Dr. Andries was raised on a livestock and crop farm in Louisiana. He did his graduate work at Louisiana and Kansas State Universities majoring in Animal genetics. Dr. Andries has worked in extension since graduation from Kansas State University in 1996. He is currently the Animal Science Specialist and Assistant Professor at Kentucky State University where he is responsible small ruminant extension programming.

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