Records System & Performance Calculator Link and Easy Instructions for Software Use

Introduction: With some simple data input, CSBA members now have easy access to a comprehensive flock records system and/or computer software that will calculate four key indicators of lamb performance prior to weaning: 1) Weight per Day of Age, 2) Average Daily Gain, 3) Adjusted Weaning Weight, and 4) Weaning Ratio. (See definitions below.) We thank Mississippi State University Extension Service for giving the CSBA permission to link to their system that includes the lamb-performance calculator.

Definitions of Key Lamb Performance Values:

- Weight per Day of Age = Weaning weight ÷ Weaning age in days.
- Average Daily Gain = (Weaning weight Birth weight) ÷ Weaning age in days.
- Adjusted Weaning Weight = Describes a lamb's genetic potential for pre-weaning gain and milking potential of the dam. The calculation removes or accounts for extraneous factors that impact a lamb's actual weaning weight (e.g.: lamb birth weight, sex, type of birth and rearing, and age at weighing, plus age of dam). It allows lambs to be compared more accurately to each other in every possible combination (e.g., lambs born as singles vs multiples, lambs raised as singles vs. multiples, ram lambs vs. wether or ewe lambs, lambs born to old vs. young ewes). It is a tool that can guide flock management decisions, such as selection of replacements and culling.
- Weaning Ratio (labelled "Adjusted Weaning Weight Ratio" in the final column of the spreadsheet) = Adjusted Weaning Weight as a percentage of the average of that lamb's contemporary group, making it easy to identify lamb performance that is above or below average. (100 is average; >100 is above average; <100 is below average)

Note: Adjusted Weaning Weights are NOT comparable among different flocks in other locations and/or reared in different conditions. They are intended for withinflock comparisons only.

Using the Key Lamb Performance calculator (requires a computer with a Microsoft Excel program):

- **Click** the following link: http://extension.msstate.edu/content/adjusted-weaning-weight-workbooks-excel-files_ It will take you to the MSU Extension website/Adjusted Weaning Weight/Workbooks page.
- Scroll down to Lambs: Workbooks:
 - o Click on Version 2022.
 - o Workbook will download.
- Click on download to open Excel.
 - o Spreadsheet will open to Configure Sheet in Protected View.
 - o Choose "enable macros" or "enable editing" in the navigation bar at the top of the screen.

- Click "User Guide" tab at bottom of screen for more complete instructions on how to use the spreadsheet.
- Click "Lamb Data" tab at bottom of screen to access worksheet for Adjusted Weaning Weight Calculator.
- Enter lamb data only in the white cells; the yellow-green cells contain formulas that generate values based on the data you enter in the white cells.
 - o **Exception:** Enter dam's age (in # of years) in the yellow-green column labeled Ewe Age. If full record-keeping package is used, then the dam's age will automatically be pulled from Ewe Data worksheet after lamb birthdate is entered
 - o **Note:** Calculator has the option to include birth weight or not. If birth weights are not collected, leave that column blank. Average Daily Gain (ADG) will not be calculated, but AWW can be calculated with or without lamb birth weight.
- **Do not** change or enter anything on Tables worksheet; alterations on that worksheet will prevent calculator from working correctly.
- If blank workbook is saved under new name on **p**ersonal computer, producers will not need to return to MSU website each time new group of lamb data is entered.