Using RFID tags and an Excel Spreadsheet For Livestock Show Management

Developed By:

David Kehler, Director/Ag Agent

Butler Co. Extension

El Dorado, Kansas

1-24-2011

About Electronic County Fair Records:

Getting Organized
1. Order RFID tags with a "paired" male stemmed tag or button with the 4-H number.
2. Own or have use of an EID tag reader and be familiar with it's operation.
3. If using a wired tag reader, order a Belkin USB to serial adapter and install the driver.
4. Load this County Fair Worksheet onto a computer with Excel already installed. You may need to change the excel security to medium to allow the macros to run.
5. If using an Allflex reader, download the tag manager and configurator programs from allflexuse.com
6. Using the bag numbers of your tags, download the matching EID and 4-H numbers from the tag website. Create a folder on your computer to save these numbers in. Download and save each group or numbers both as .xls AND as .csv files. (you will need the .csv for the tag manager program and the .xls for the excel spreadsheet program.
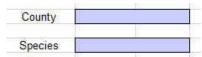
County Fair 4-H EID Worksheet Manual

Initialize – Setup

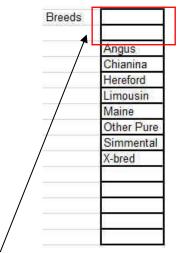Go to the "***Set-up***" tab at the bottom of the screen.

Fill in the **County** and the **Species** boxes.

These two boxes are mandatory for the software to work correctly.

Fill in all the breeds that are to be judged for that species. This section is variable as it will pertain to a drop down box in a later tab. Alphabetizing the breed list at setup will speed up data entry in a later worksheet.
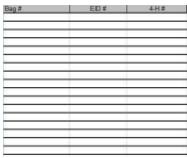

Note: Leave the first two spaces at the top empty so that the Breed cells in the "Data Entry" tab will start off blank.

After this information is entered, click on the "**Numbers**" tab at the bottom of the worksheet.

Assign – Numbers

The Number tab has 3 headers above a data field.

Populate this data field by doing the following:

1. Copy and paste the numbers from the .xls file that you downloaded from the tag website. Do this for each bag received for the species.

Once all the EID numbers have been entered and the 4-H numbers are assigned, click on the button labeled "**Sort by 4-H number**".

By pressing this button the software will look through all the bag numbers and re-arrange them so they are in order by 4-H number and format the numbers. This is important because the tags are easier to keep track of in the "**Data Entry**" tab by 4-H number rather than EID number. After the data field is sorted click on the "**Move EID and 4-H numbers to data sheet**" button.

Pressing this button will allow the software to transfer all of the EID and 4-H number data to the next tab called "**Data Entry**" and organize them by 4-H number.
NOTE: There is a third button on this screen called "**Clear Numbers**"

This will clear *every* number in the data field, not an individual mistake that may have been made. **DO NOT PUSH THIS BUTTON**, unless you would like to start completely over on this worksheet.

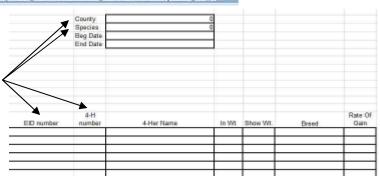Click on the "**Data Entry**" tab at the bottom of the worksheet to continue.

Input – Initial Data Entry

This worksheet is laid out in many sections of 20 tags that correspond to each bag. Since all of the worksheets are interactive, data will pre-populate many fields in this worksheet. The "**County**" and "**Species**" cells will fill in from the "**Setup**" tab and the tables of EID and 4-H numbers fill in from the "**Numbers**" tab.
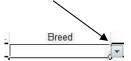

The "**Beginning Date**" box and "**End Date**" box at the top of the page need to be filled in at this point. The same box is above all other sections and will automatically fill in from the box at the top of the worksheet.
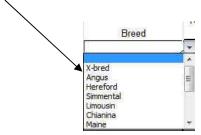

By entereing this data now, the program will be able to determine the rate of gain after the end weight is entered at judging time. When passing out tags go in order of 4-H number from lowest to highest. This will allow easy entering of the 4-H member's (4-Her) Name and Initial weight for that animal.

To input a breed in the Breed column click on the cell that corresponds to the correct animal. There will be a down facing arrow that pops up.
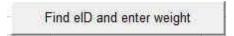

Click on the arrow and a list of the breeds from the setup tab will appear. Select the proper breed by clicking on it. Click on another cell to make the arrow disappear.
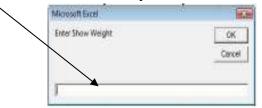
Input – Final Data Entry

When it becomes show weigh-in time, an EID tag reader will need to be linked to the computer and be able to enter numbers directly into this worksheet (using the Allflex tag manager or another data acquisition program like CPS). The scale will also need to be either: A) linked to the computer if it is an electronic scale, or B) be near enough to read numbers for manual entry if it is not an electronic scale. In order to enter an end weight on the worksheet for the correct animal click on the button named "*Find eID and enter weight*".

This pops up another box with "*Scan ID Number*" in it. The box will have a field for the ID number. The EID displays in the box at the bottom of the pop up box. Scan an EID number into the field using a reader and hit the enter key or click *OK* to continue. Note: If your data acquisition program has a "cr" (carriage return) activated, the "enter" step will be automatic. This will place the EID number in the A2 cell and the matching number will be found and the corresponding weight cell will be the active cell. If the exact match is not found, E2 will be the active cell and the weight placed there.

The name in the box will now change to "*Enter Show Weight*". Enter the show weight in the box. The weight can either be sent directly from the scale head if it is hooked up directly to your computer or it can be entered manually. Now hit enter or click the *OK* button.
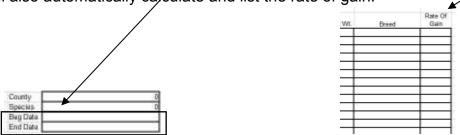

This will place the weight in the worksheet for the EID number that has been scanned in and put the weight entered in the show weight column. (this will not happen if the exact EID tag match is not found) **Note:** The newest spreadsheet (4-H EID spreadsheet with last wt 6-10) will place the most recent 4-H tag number and the weight in the A9 and B 9 cells.
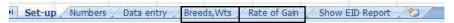
Repeat scanning the EID number of each animal and entering its weight until all have been entered. After the weigh-in has been completed, type "*s*" into the box that has "*Scan ID Number*" in it and hit enter or click the *OK* button.

This will stop the pop up box (you may have to do this twice) and allow all the weights that were entered to be viewed. If the Beginning and End dates have been entered then the software will also automatically calculate and list the rate of gain.

	Wt.	Breed	Rate Of Gain
County		0	
Species		0	
Beg Date			
End Date			

Note: In this tab all results are still sorted by 4-H number and in groups of 20. To get the results from all of the different sections together in one table, click on either the "**Breeds,Wts**" tab or the "**Rate of Gain**" tab at the bottom of the worksheet.

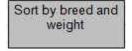| Set-up	Numbers	Data entry	Breeds,Wts	Rate of Gain	Show EID Report

Results – Breeds and Weights

In the "**Breeds,Wts**" tab there is a large bold lined table with 4 headings along the top with data fields that correspond to the headers.
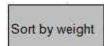
4-H Number	4-Her Name	Show Wt	Breed

By scrolling to the right of the data field, there will be 3 buttons to choose from. The first button is labeled "**Import Data**".

Import Data

This button brings all the data from all the different sections in the worksheet on the "**Data Entry**" tab and arranges it in the data field on the left of the worksheet. The other two buttons will sort the data list in the table depending on how the animals are being judged. To sort all the animals by breed and by weight, select the "**Sort by Breed and Weight**" button.

Sort by breed and weight

This will organize it so the breeds are in alphabetical order and then the weight is ordered with the smallest weight on top in each breed. If weight is the only criteria being judged then select the button "**Sort by weight**".

Sort by weight

This will organize all of the weights in order with the largest being on the bottom. If you would like to see the Rate of Gain data, select the "**Rate of Gain**" tab at the bottom of the worksheet.

| ᴴ Set-up | Numbers | Data entry | Breeds,Wts | Rate of Gain | Show EID Report | ᴼ |

Results – Rate of Gain

The "**Rate of Gain**" has a larger table that includes the initial weight, show weight, breed and rate of gain columns.

4-H number	4-Her Name	In Wt	Show Wt.	Breed	Rate Of Gain	
Rate of Gain Ranking						
						1st
						2nd
						3rd
						4th
						5th
						6th
						7th
						8th

To import the data from the "**Data entry**" tab, select the button on the right labeled "**Import Rate of Gain Data**".

Import Rate of Gain Data

After the data has been imported into the table, select the button labeled "**Rank by Rate of Gain**".

Rank By Rate of Gain

This will sort the data in the table in accord with the Rate of Gain column, thus the animal and 4-H number with the largest rate of gain will be at the top.

NOTE: This table will fill in from the bottom. This means that when the lowest rate of gain will always be at the lowest cell on the table with blank spaces above the highest rate of gain to the top of the table. To fix this, copy and paste the data at the bottom of the table and place it at the top.