

AnimalData Guest Users' Guide v. 0.1

Welcome guest users to AnimalData version 0.1. Thanks for taking the time to visit these pages, we welcome your constructive opinion on their function and design.

The organization of AnimalData is meant to be user friendly and easy to navigate. We are confident that once you learn the arrangement of pages, use of the system for data entry and recovery should be quick and intuitive. Please review the following information intended to orient new users to the AnimalData system. You may wish to print this page for quick reference while navigating. If you have any questions feel free to email the developers at steimanm@dickinson.edu or wahlst@dickinson.edu for clarification or to suggest improvements. Thank you.

Basic arrangement:

AnimalData is organized by sets of pages that are grouped by function. These major groups are reached by clicking one of the large tabs at the top of the screen. Within each major group are specific sub-pages described below. Each sub-page consists of an input form and a report form. New information is recorded through the input forms. Data recorded through the input forms is stored in tables – tables are recalled by running a report via the report form for each specific subpage. Using the input and report forms will be explained below.

To navigate between page groups and sub pages, simply click on a tab, causing its sub pages to appear. Clicking on the tab for a sub page will result in further tabs for input or report pages appearing. Click one of these to enter data or view a report. To change between sub pages or major groups, simply click the home button or the tab for the desired page from the list at top of screen. Within both input forms and reports, AnimalData uses many drop down menus to minimize data entry errors and the need for typing. These drop down menus are populated by the regular and admin users, with values specific to the particular farm. Other data entry windows allow text or numerical values appropriate for the specific input parameter.

As of 12/16/16 the major page groups, and their subpages are:

ANIMAL:

Contains ADD and REMOVE subpages. These are used to add new animals to the farm roster, and to remove animals from the “active duty” list via sale, slaughter, or other (death by illness, predator, euthanasia etc.)

MAINTAIN:

Contains:

VET: for recording medical care administered to a specific animal, including reason for care, reporting of symptoms, medications administered, and more.

CARE: for recording periodic herd maintenance activities, such as hoof trimming, FAMACHA and body condition scoring, coat evaluation, flies and more. Presently only sheep and goats have an enabled template – a care template for beef cattle is pending.

MOVE: for recording movement of different groups of animals between pasture paddocks, and forage consumption within those paddocks

NOTES: a dated text note function – for anything a user wants to record that doesn't have a pre-made page

EGG LOG: a simple dated form for recording production of eggs by laying hens

ADMIN: (note) the admin tab is only active for users registered as system administrators. This designation is made by the farm's page owner when new users are added. Regular users can be upgraded to admin status at a later date if desired.

Admin contains:

ADD: For adding new Users, Paddocks, and Major animal groups (such as GOATS or CHICKENS – subgroups like males, kids, does, laying hens, broilers etc are added within the ANIMAL > ADD input page)

EDIT: For editing or deleting values from some background tables (such as users, paddocks, subgroups) and reports that are not editable elsewhere (such as paddock moves). Most major data tables are editable within their main report.

VIEW: For viewing comprehensive reports such as the ANIMAL Report, which is a compilation of all recorded data for an individual animal. Other useful summary information or graphs may be added at a later date.

INFORMATION ON SPECIFIC PAGES: (Note as a guest user the system will stop you from inputting data at the final step, but you can pretend to input a record to see how the data entry forms function).

ANIMAL >

ADD>INPUT: This input form is used for creating a digital record of each animal on the farm. A unique animal ID is required. At the Dickinson College Farm, we've found use of the following code for animal ID's to be effective: an upper case letter designates the animal group (C for cattle, S for sheep, etc.) A two digit year figure designates the animal's birth year or year of arrival on farm if birth year is unknown. A two digit (or more) ID number designates the specific animal ID within that year – this number matches the ear tag of the particular animal. For example, C-11-11 is a cow born in 2011 with ear tag# 11. S-16-31 is a sheep born in 2016 with tag # 31. Text entries are also enabled in this input window, in case ear tags are lost or not used. Animal ID's will be used throughout the system and will be called up in drop down menus (for example, when recording vet and herd care info, or sales, slaughter etc.) We've found the above described ID protocol to be handy because it allows AnimalData to display the Animal ID's in a logical

order (alphabetically and numerically) making it easier to find a specific animal in a long list.

Following selection of an Animal ID, the user then selects appropriate values for animal group (Cattle, sheep etc), Breed and Subgroup, followed by gender, birth and farm or place of origin. Admin users can add new breeds, subgroups, and origins at the touch of a button – this function is disabled for regular users. These sub-tables can be edited in the ADMIN > EDIT function. Approximations may be used for date of birth – the default setting for this and all date menus in the AnimalData system is always the current date.

Next the user selects animal ID's for each parent of the new animal. N/A is allowed. A logical flow when setting up a new farm record set will be to input the oldest living breeding animals first, so that parentage for new calves, lambs etc can be recorded using the drop down menus.

Animal name, and color & markings are optional text inputs. Clicking the “show comments” button opens a comments window that can be used to record any desired info about this particular individual – for example, temperament, unique birthing or health information, etc.

Adding a photo for each animal is optional but we've found it adds a pleasant personal touch to the somewhat repetitive nature of record keeping. To upload a photo, click the choose file button and select a photo (on some smartphones the option to snap and upload a photo in the moment may also be enabled). Photo size is limited to 4 MB. You can remove a photo by clicking Clear Picture and then upload a new one.

Clicking Submit will generate a confirmation screen, which enables the user to review the information before final submission. Clicking OK will generate a pop-up dialogue box informing the user that the record was successfully submitted, and will log the record in the data table – a new digital ID has been created for your specific animal.

All of the information inputted can be edited through the report for this table as described below. This enables, among other things, updating photos as animals age, inputting peculiarities into the comments window for this animal, and updating parentage info as more animal ID's are added to the system.

ADD> REPORT: Pulling a report for the ANIMAL table will show all of the recorded animals on the farm if desired, or all animals within a specified subset. Clicking ANIMAL > ADD > REPORT will lead the user to a series of drop down menus for animal ID, animal group, subgroup, breed and gender. The default setting for these categories is ALL – so leaving them as set as is will show all of the animals in the roster.

The next set of menus asks for a birth date range and provides a check box for “ignore birth date range”. The default setting for this check box is activated, so all recorded animals will be displayed unless the ignore birth date box is unchecked – this enables the user to query for animals born within a specified window by using the drop down date menus provided.

Next the user makes selections for parent animals (or leave set to ALL to see the whole herd) and finally for Alive/On Farm. Setting the Alive/On Farm button to ALL or NO will show animals that have left the roster by sale, slaughter or other demise, leaving it set to YES will show only the animals presently on the farm roster.

Finally, the user clicks SUMBIT and the report is displayed.

All records fitting the parameters specified in the report query will be displayed. Between major animal groups, the system generates a sum of number of animals of each gender, and total animals, from the data on the report. This function is handy if you want to quickly recall how many total cattle are on the farm, or if a more specific query is run (for subgroups, breed or gender, etc), this will generate a quick total of animals meeting the desired designation (total male calves, total ewes, etc.)

You will notice edit and delete buttons to the far right of the report table. These are only enabled for Admin users. Clicking the edit button (enabled for guest users) will open up the specific record and permit editing of all data within. Clicking the Delete button will permanently delete the record from the database. Both edit and delete functions require a confirmation "OK" before the action is finalized.

At the bottom of this and every other report is a "download report" button. Clicking this button will convert the data table displayed into a CSV (comma separated value) file, which can be opened in MS Excel or other spreadsheet programs. This enables users to import data from AnimalData into other files, conduct custom data analysis, generate graphs, etc.

OTHER PAGES COMING SOON

The function of other input and report pages within the AnimalData system is very similar to the forms described above. As a guest user you may wish to run some sample reports in a variety of pages. For the best results, you will want to change the date range in reports to something besides the default setting (current date for both start and end of report). To see some sample data, set the date range for reports to a wider period - this can be easily done by changing the year value for the "from" date to an earlier year (ex 2015) to see all recorded data for the past 12 months. At present the MAINTAIN > EGG LOG has seen most regular data entry. Note also that the SUBMIT button needs to be pressed after changing parameters on any report query, otherwise the data generated by a previously generated report may be displayed.

AnimalData is a new project in the early stages of development, so many of the tables are not populated with any data, or only contain "trial" data for system diagnosis. All reports are of interest in should and be valuable to small livestock operations everywhere. The following reports have unique aspects:

ANIMAL > REMOVE > SALE: Shows total net revenue generated from animal sales

MAINTAIN > VET: Enables searching for particular illnesses or conditions, and summing up the total amount of specific medicines used in a given period.

MAINTAIN > CARE: Generates a bar graph of FAMACHA scores (for sheep and goats) showing the percent of the herd pertaining to different FAMACHA values

MAINTAIN > MOVE: Generates a visually useful chart similar to a grazing chart, which shows the date each animal sub group was in each paddock. This report also does some rough calculations for pounds of fresh matter consumed over the given period.

MAINTAIN > EGG LOG: Includes data for how many times each day eggs were collected. Generates a graph of total eggs per day over time, so users can track trends in productivity

ADMIN > VIEW > ANIMAL: Generates a comprehensive record for each individual animal, including any recorded offspring, vet care records, and herd care records.

More detailed information on remaining input forms and report pages will be added to this users' guide soon - for an updated copy or to ask specific questions about navigation or page function, please email the developers at steimanm@dickinson.edu or wahlst@dickinson.edu