Chapter 3 -- PedigreeMaster screens

Before entering data and looking for specific items in the software, it is advisable to go through all of the various screens to familiarize yourself with all of the capabilities of the software. By doing this early, you will be familiar with what your data can be used for. Before viewing the various screens, however, go through the glossary of terms in Appendix A so that you are familiar with the terms and trait abbreviations used in PM. At the opening screen, the first thing to note is the **Help** button near the upper right corner. If you click on it, a web browser will open with a PM link. Clicking on that link will bring up a screen with a variety of help items in a frame on the left side. The help here is brief and not too explanatory, but may provide you with some quick answers. Also, it is important to verify that you are using the most recent version of PM that is listed at the top of the page. If your version is not the most current, click on the **Download** link and follow the onscreen instructions as described on page three.

Pedigree Display

At the main screen, clicking on **Pedigree Display** reveals a screen with eight tabs.

From the upper left, the animal ID is shown, along with the IDs of its sire and dam. Under that is the animal's gender, date of birth and group number and group name, if previously input. There is also a comments section available if you want to include management notes, such as scrapie genotype or other management information.   The "Breeding" tab is the default tab that opens. On the right side is a frame with the ID of animals in the system. You can move up and down with the computer's arrow keys, or use the slide on

the right side to see another animal displayed. On the upper right part of the frame is a filter if you want to look at a particular individual or set of individuals. Input the ID of the animal and its ID will be highlighted in the list on the right with its information shown on the screen. Next to the ID input area is a filter switch. The default is for the filter to be off. If you click on that switch, the animal's ID and status will be displayed.

The **previous** and **next** buttons under that can also be used to display different animals. By clicking on the **Browse** button, a screen will appear with a listing of basic pedigree and other data. To return to the previous screen, click on the X in the upper right corner of the screen, or press the ESC key. Clicking on the **Pedigree** button will reveal a pedigree with grandparents and great-grandparents, along with basic information of interest such as date of birth, gender, etc., under the ID.
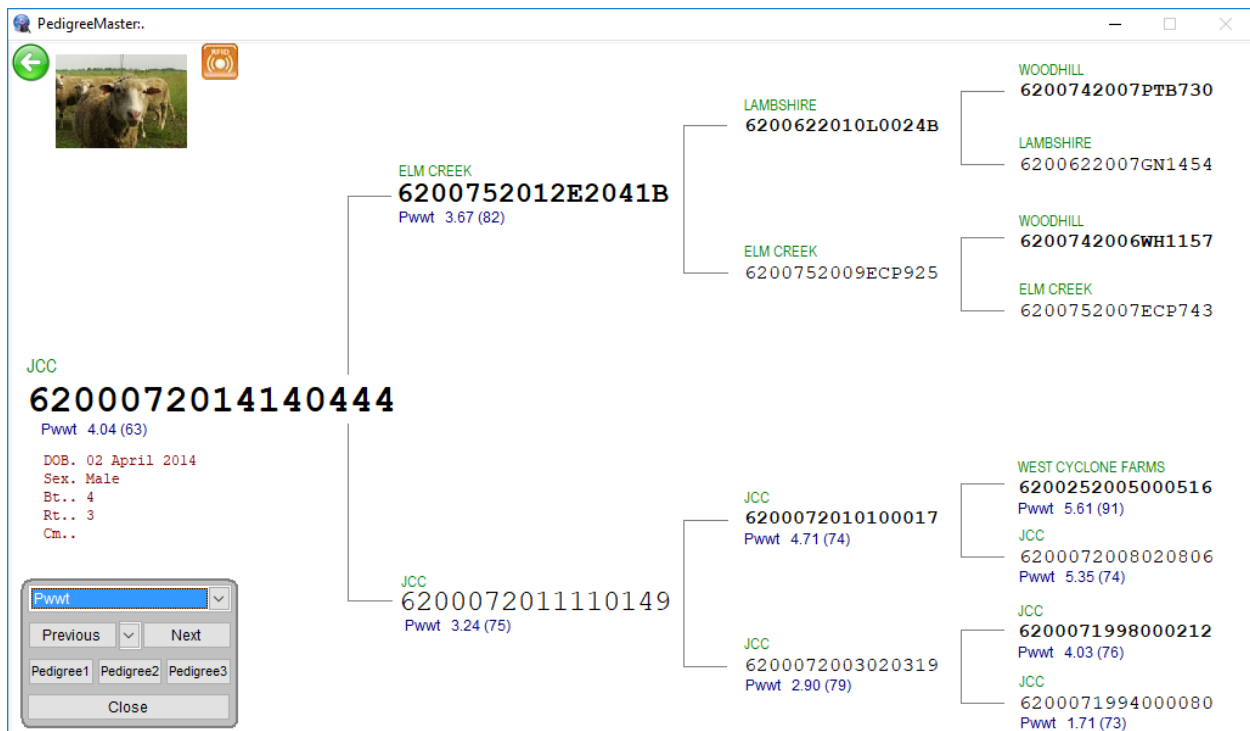
At the top of the box located to the lower left, you can select a trait or index from the drop-down menu whose values are shown under all of the animals shown in the pedigree. The **Previous** and **Next** buttons will take you to other animals. To get a printable version of a performance pedigree, you can click on either **Pedigree 1, Pedigree 2 or Pedigree 3**. All show the pedigree, along with the logo, sex, date of birth and other information, along with the EBVs. The difference between them is that **Pedigree 1** produces a performance pedigree with a large logo and the parents and grandparents, plus the animal, while **Pedigree 2** shows a smaller logo but includes the great-grandparent generation. **Pedigree 3** shows an additional generation beyond that shown in **Pedigree 2**. A **Print Preview** box will appear for all three that allows you to print the pedigree for sale display or other uses. Some printers also include an option to save the pedigree as a pdf image that is helpful to send via email to potential buyers interested in the animal. To go back, hit the ESC key or click on the folder in the Print Preview Box. To return to the main **Pedigree Display** screen, click on **Close** or hit the ESC key.

Breeding

By clicking on the **Breeding** tab you can change the group number, add or delete an animal, change the sire or dam and even give it a nickname, plus input or change other items such as birth type, or lambing ease. The importance of group designation cannot be overemphasized. A management group is a group of sheep that were born under similar management conditions at one site and over a period no longer than 42 days. Ram lambs and ewe lambs can be considered in one group if they were managed together under the same conditions such as the same feed and in the same location. Otherwise, they will need to be listed in separate groups if, for example, they were fed different rations or were on different locations.

CAUTION: Deleting an animal is usually NOT a good idea because deleting it means that all of its production values are deleted from the database. Thus even if an animal has died and has no relatives in the flock, its data is still of value in determining the group average in which it performed and removing it will artificially change the EBVs of animals in the flock. For the most part, you only want to use **Delete** if you have started putting in a new record and there are numerous errors with it and you want to completely start over. Under no circumstances should you delete an animal simply because it is no longer in the flock! By doing that, you will eliminate its data which is extremely important in the subgroup comparisons as they are the basis of the analysis. If an animal is no longer in the flock, change its status on the right side of the page to one that is appropriate. The **Fate Code** and **Pedigree method** section have nothing to do with the EBV calculations but can be very useful for management information. A dropdown menu lists a variety of ways an animal could have left the flock. The bottom choice returns a blank record in case you make an error and need to get back to the base. You can also input the date. The **Pedigree method** section allows you to input the way the sire and dam of the animal were determined. You can also input the accuracy of those methods.

Having the status set correctly is important in some breeds so that animals which are no longer part of the genetic pool do not show up in summary reports. Sometimes there is confusion about which status to choose for an animal. Guidelines to be used are:

Current – an animal that is currently in your flock

Sold – an animal that was sold into another flock, not sold for slaughter

Culled – an animal that was deleted from the herd and will not be a part of the breeding herd

Reference – these animals are those who are not part of the breeding herd but are used to show a genetic relationship between animals. This status is usually assigned for flocks recently inputting new animals.

Dead – animals that have died

Missing – this status is for animals that were in the flock but currently are not yet are expected to return to the breeding flock

Active -- this status is mainly used for animals that have semen or embryos available. Thus they are active but not part of the current flock as such.

Commercial – for animals that are not purebred or are no longer considered part of the purebred flock

Unknown – Assign this status when an animal is not recognized or has disappeared from the flock.

You can also make changes in such things as type of birth and type of rearing. You can input a lambing ease score but that is currently not used in any NSIP analysis. Other items that can be input on this page are conception date and method, as well as testicle measurement and jaw score (also from the drop down menu). If the animal had a foster mother, you need to input the ID of that mother into the space provided for it. Or, if a lamb was an embryo transfer lamb, its recipient mother needs to be identified in the appropriate space on this page. As you click on the other tabs such as **Carcase** (how the Aussies spell carcass), **wool, reproduction** and **Miscellaneous,** you can see how data may be input there**. Note:** EP weaning weight is for "early" postweaning weight, which is what most United States flocks will use, especially flocks in the Midwest and East. A hogget is a sheep that is 1-2 years old.

Under the miscellaneous tab, there are several useful functions. Most of these are for advanced and/or very specific use.
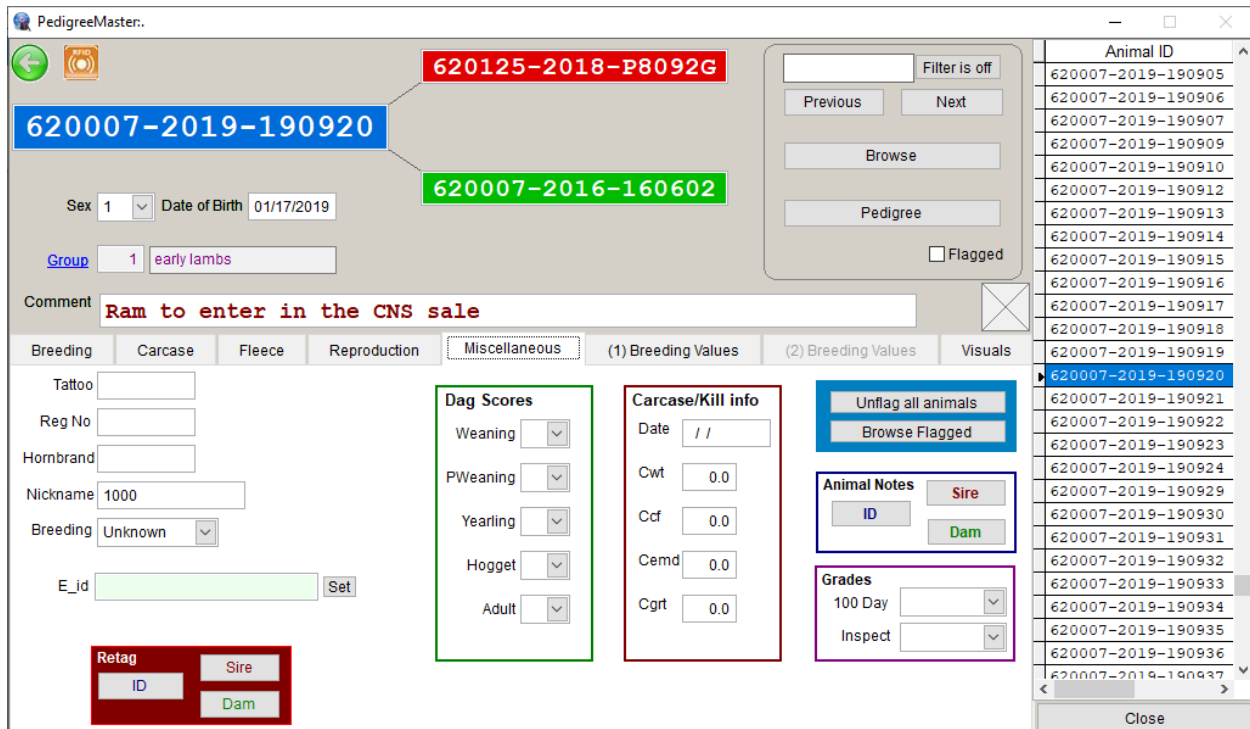
However, one very important function is the red **Retag** area at the lower left of the screen. This is the only place where you should attempt to retag animals other than newborns and it can also be used to retag newborns. This is because most other methods of retagging an animal do not account for making the necessary ID changes in offspring of the retagged animals. If these changes are not made, the important link of ancestry is broken. Here, when you make an ID change, you will be asked if you want to make the ID changes in relatives of the animal.

If you want to change an animal's ID, click on the **ID** button. A screen pops up with the animal's current ID and, under that, a space for the new ID. After you input the new ID and click on **Retag**, you will have a screen appear that asks if you want to make ID changes for animals that it is a sire of, and later a screen asking if you want to make ID changes for animals that it is a dam of, plus animals that are in the Visuals and Mating datasets. It is crucial that you input yes to these requests. Otherwise an animal will have two different IDs and, as mentioned before, there will be a break in connecting data among relatives. That is why this is the only acceptable way that IDs should be changed.

More about the use of this screen is explained in the **Data Input** section of this manual. The **(1) Breeding Values** tab reveals the EBVs sent to you from previous processing runs. The **(2) Breeding Values** is currently not active. The **Visuals** tab gives you the opportunity to add visual data and comments if you wish.

Reports and Utilities

Under the **Reports** tab, you will find a wide variety of reports to view or print. Some may not have much information for you as they do for those with other breeds, while some reports will provide your flock with a wealth of information. In the box at the left, select the

type of report such as a general worksheet, EBV, comments or notes on animals, as well as breed codes and trait codes.
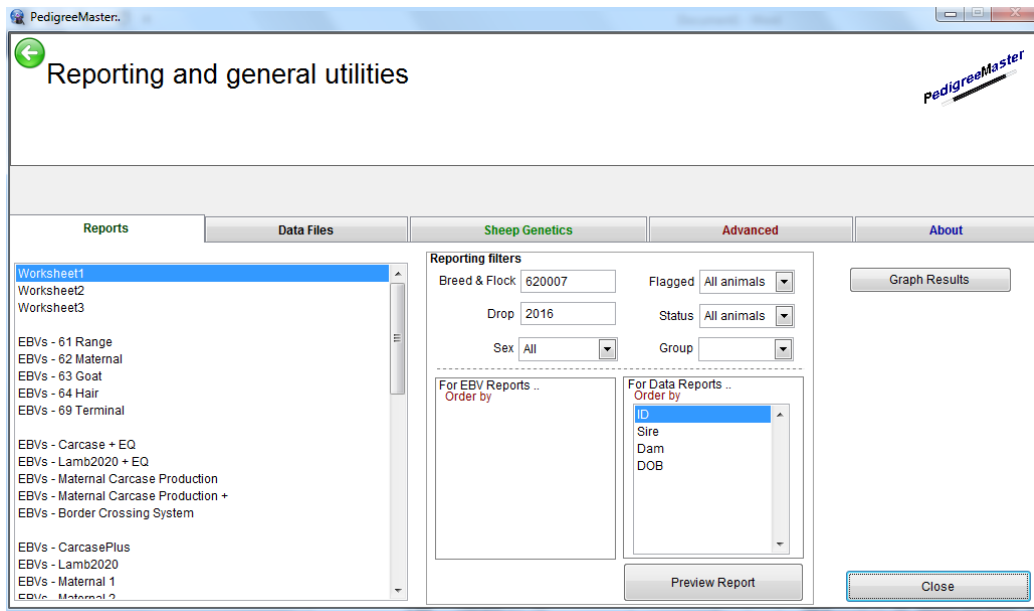
The report filters section allows you to have only certain groups be included in the report. Then select how you would like the data in the report to be ordered. For a worksheet report, click on how you would like the data ordered – individual **ID, sire, dam, date of birth** – and then click on **Preview Report**. For one of the EBV reports, click on either **ID**, **Sire, Dams** or one of the many traits listed. Also click on the box by **Descending sort** if you want to change the order of the sort. The default setting is for the lowest value to be listed at the top. Clicking on Descending sort will list the values from high to low. A **Print Preview** bar will appear with printer commands if you wish to print out the report. Press either the ESC key to exit or click on the folder in the Print Preview box.

An interesting tab to hit is the **Graph Results** tab. Click on it and your progress over years will be shown in a graph.
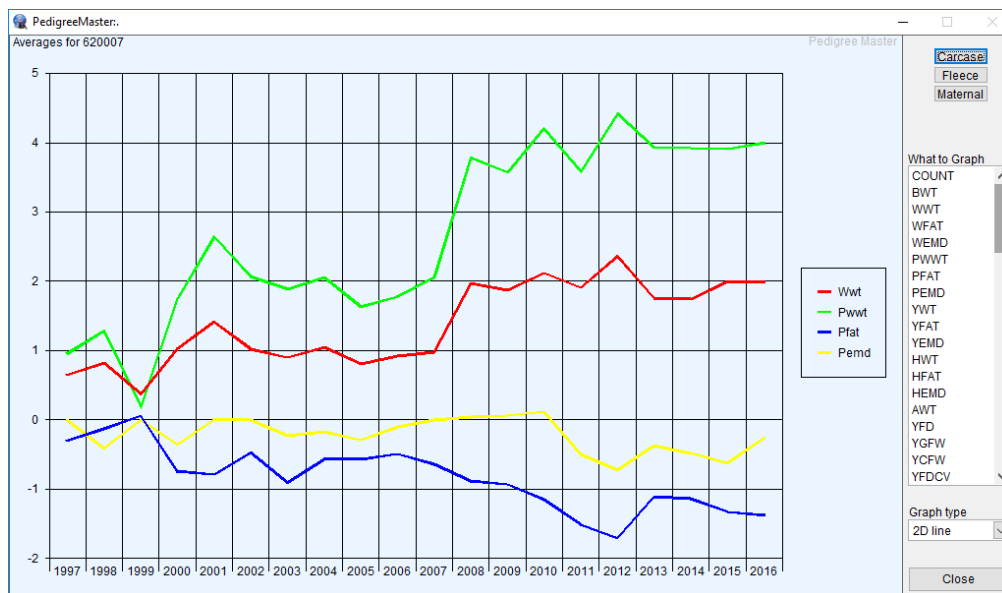
You can choose from the list of traits on the right side of the graph. This is a great way to see long-term progress. A variety of interesting graph types are available to choose from in the lower right corner. To go back, press the ESC key or click on the **Close** tab.

DATA FILES

The **Data Files** tab will show you a variety of datasets. The **Main Database** tab will display your actual dataset and you can make changes if necessary. By clicking on the **Sires** tab, you can see how many progeny are in the dataset from each individual sire. You can add a sire by clicking on **New Record** and adding the appropriate information. Similarly, you can delete a sire if you don't need him in the sire list any longer. The sire list will show up later when you add new animals into your dataset.
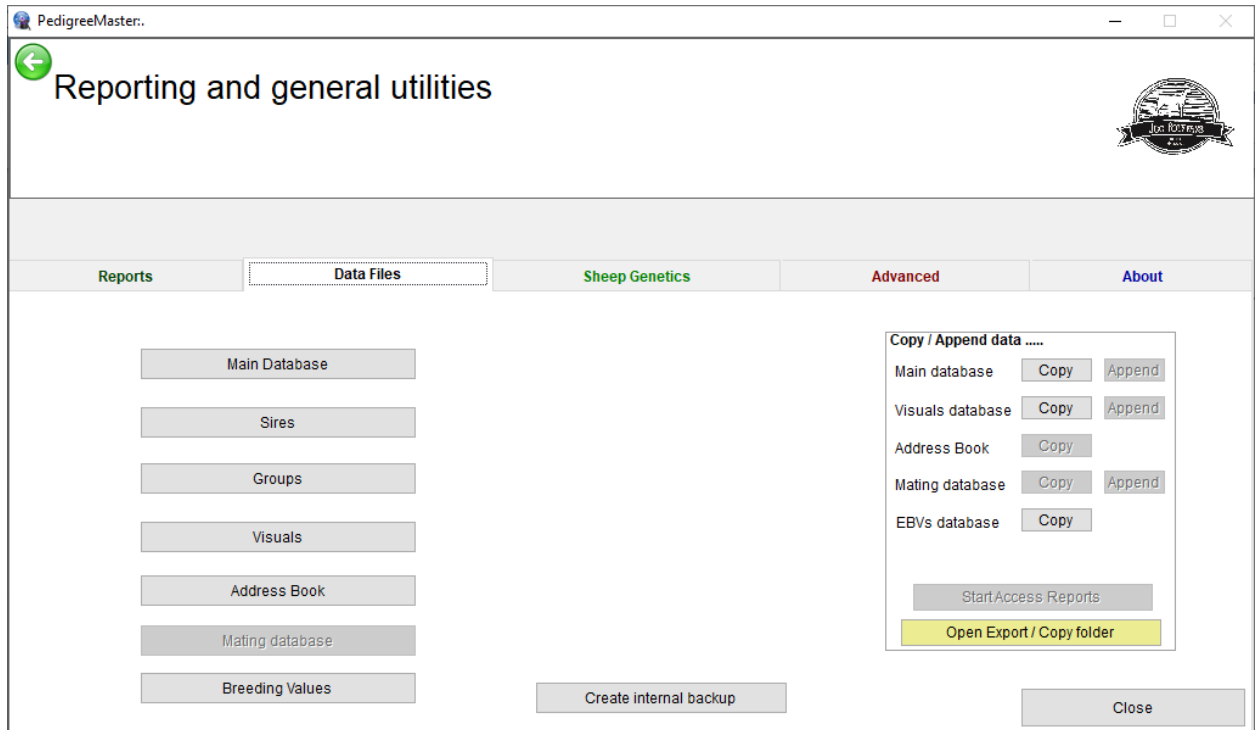

When you enter a new lamb, it will need to be assigned a group and the **Group**s tab will show you the names of the various groups from which you can choose. The groups come with pre-assigned names but you can customize these by selecting names that are more meaningful for you. Click on the **Groups** tab and then on **new record.** A line will be highlighted and you can type in the number for the group plus the group name, group sex and group drop. Click on **Close window** to exit. You can also edit a group's inputs or delete a group by putting the cursor on that row and clicking on **Delete record**. By clicking on the **Visuals** tab you can view, add and delete data regarding visual aspects of animals in your flock. This is not data that will be analyzed but is a good reference set for visual and other non-analyzable data such as genotype for scrapie. If you click on the **Address Book** after you have initially submitted data, a listing of other NSIP flocks in your breed should appear, along with their flock codes. Later, you will need to manually update these. The **mating database** is currently not functional. Clicking on the **Breeding Value** tab will reveal all of the EBVs for animals in your flock, as well as the accuracies of those EBVs, in tabular form.

Another function which can be performed from this screen is to create a backup file for your own use by clicking on the **Create Internal Backup** tab. It is very important to keep backup datasets! Keep one not only on your computer but also on cloud storage and/or a jump drive

so that if your computer should someday fail, you don't have to put all of the data back into the system! No one wants to think about that happening, but it can. When you click on the Create Internal Backup tab, a backup tab appears that show you where your backup file is located, normally C:\SheepGenetics\PedigreeMaster\backups. You can then go to that directory and copy the file to external storage if you want to have a backup located outside your computer, which is a good idea. You can also use this file when you submit data.

If you want to copy data, clicking on one of the copy tabs in the box with the **Copy/Append data** heading. The copy option is available for your **Main dataset, visuals database,** and **EBVs database.** The copy function is currently not available for **Address book** or **mating database**. When you click on the copy tab you are given a variety of options for what data should be copied. After making your selection and clicking on the copy tab, a pop-up screen appears showing where your data copy resides. This will normally be c:\SheepGenetics\PedigreeMaster\Export\. You can then access this copy and move it to external storage. An easy way to do this is to click on the **Open Export/Copy** folder at the bottom of the screen. By clicking on it, you are taken to the directory where data is stored and from there you can move it as you like.

Information and processes under the **Sheep Genetics** tab include the **Import EBVs from ATFEBV** button which can be used to import EBVs from another location. This is a button that is rarely used but nice to have if needed.
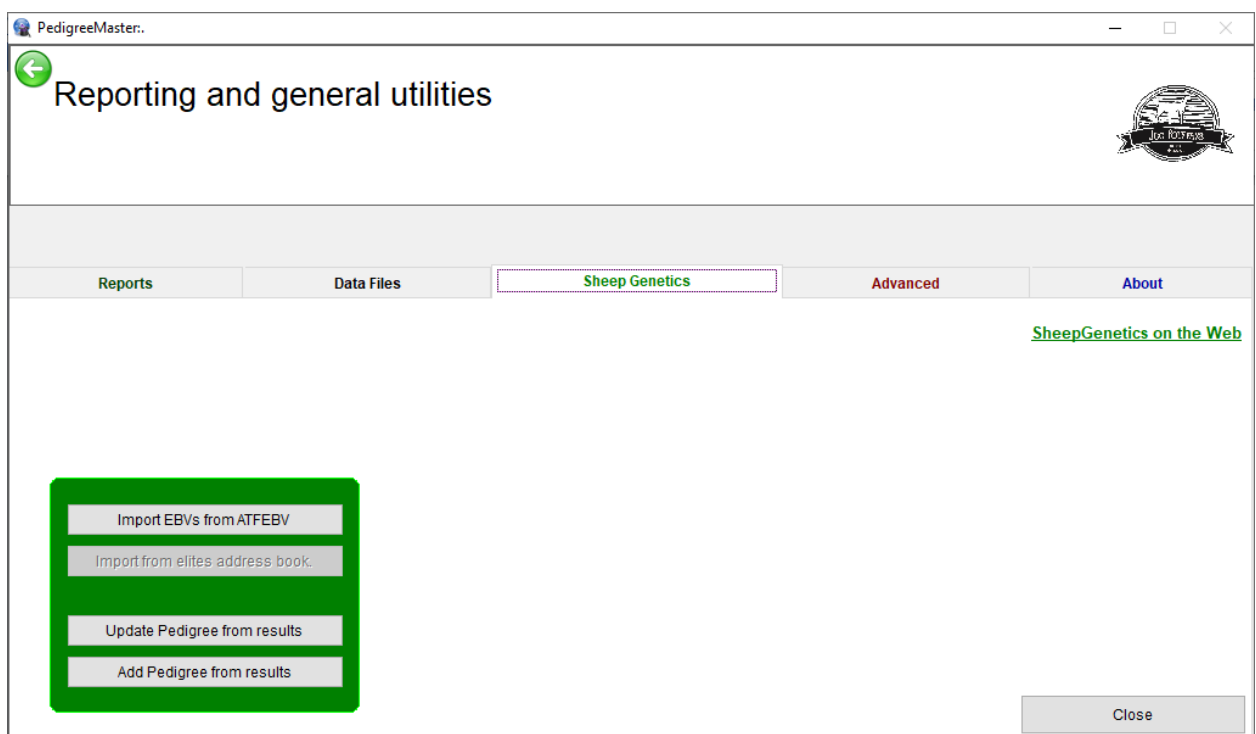
The **Import from elites address book** is currently not functional. It is very important to note the **Update Pedigree from results** and the **Add Pedigree from results** buttons. Each time that data comes back from processing, these two buttons should be clicked. This will update results that are shown on the pedigree printouts.

Clicking on the **Advanced** tab will produce four new tabs to appear: **Miscellaneous, Flagged Lists, EBV Warehouse and Importing.**   Under **Miscellaneous** are five tabs.
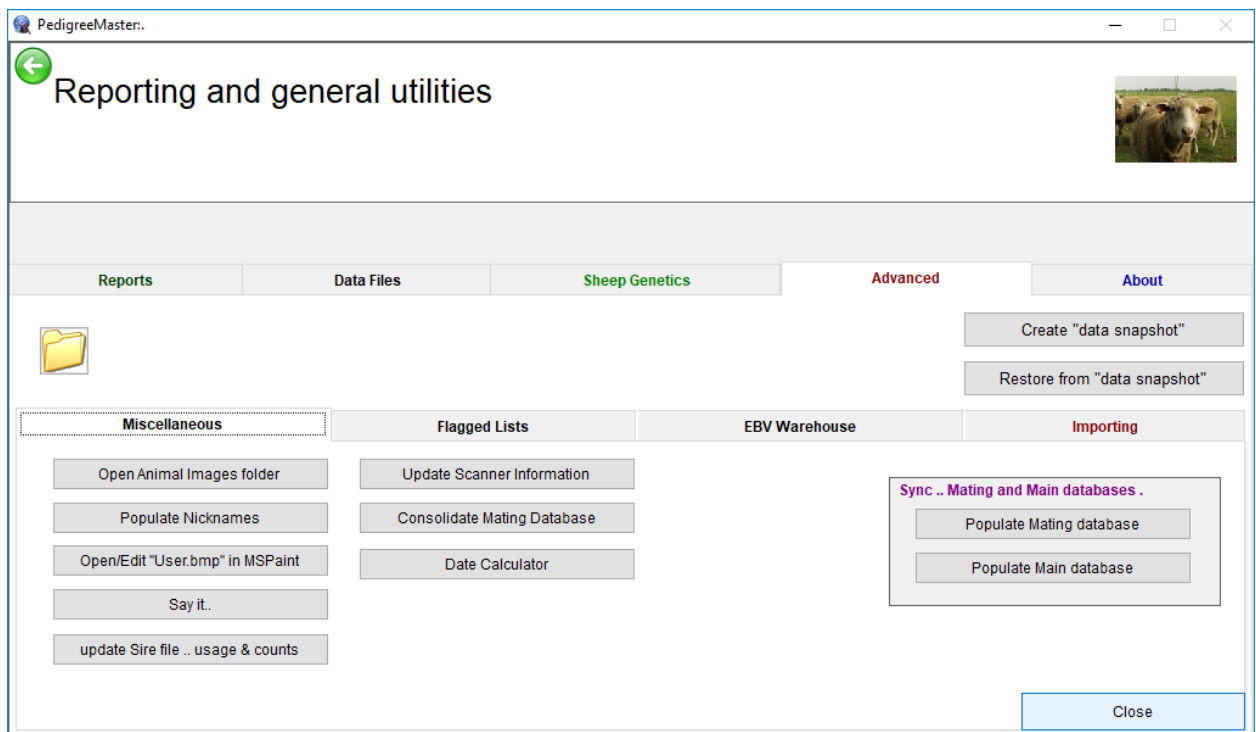
The first is **Open Animal Images Folder.** Clicking on this will take you to where some images of sheep and the PedigreeMaster logo are located. Clicking on this **Populate Nicknames** which, when clicked, puts the last six digits of an animal's 16-digit ID in the nickname spot if the nickname area is blank. The **Open/Edit "User.bmp in MSPaint"** tab is discussed in the **Getting Started** section of this manual. The **Sayit** tab appears to have no significant function, although it is interesting to work with. Click on the tab and type some words into the **Dribble Creator** space that appears. When you click on **Sayit**, a voice will verbalize what you typed in.

Clicking on the **update Sire file…usage and counts** will update the figures for number of progeny of various sires for various traits after a new set of data has returned from LambPlan processing. When you click on this tab, a screen appears asking if you want to limit the list to sires used in the last three years and you can respond Yes or No. This option is available because often people do not care about the usage of sires in the distant past, yet sometimes are. This will update the figures that show up under **Data Files – Sires**.

The **Update Scanner Information** button is self-explanatory. The **Consolidate Mating Database, Populate Mating Data base** and **Populate Main Database** are currently not functional. **Date Calculator** is handy for tasks such as predicting when ewes will lamb. First input a date into **the Date One** area. For example, you might input a breeding date. Next input a value in the **Days** area, such as the expected gestation length. Then press Enter on your computer and a date will appear in the **Date 1 + Days** area of when the ewe should give birth. You can also input a value in the Date 1 – Date 2 area and the number of days difference between the two dates will appear.

The **Flagged Lists** tab is for advanced users where specific groups are desired for reports. This has its greatest advantage in very large flocks and is of limited use in small flocks. **EBV Warehouse**, when clicked on, reveals a tab titled **View Current Breeding Values.** When that tab is clicked, a table appears with animal IDs, EBVs, and accuracies of those EBVs. This report is for viewing only. There is a sort option with this so that you can sort the values in

order of any of the table variables. The large and small **A's** determine font size, while the **Lock** tab functions as it does in Excel to allow you to look at data to the far right of the spreadsheet while still viewing the first column, which is the animal ID.

The **Importing** tab is used to import data from Pedigree Wizard or from PM archives.
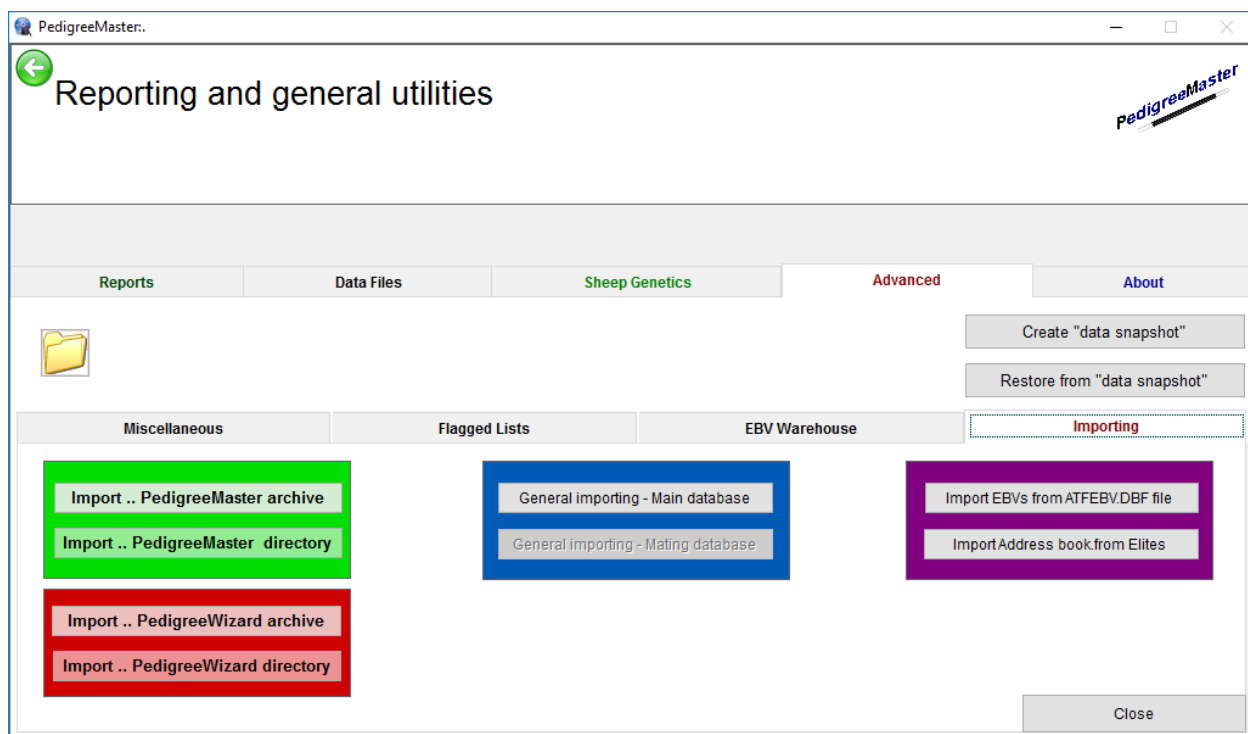
The **Import …PedigreeWizard archive and Import…PedigreeWizard directory** were described earlier in the manual. The **Import…PedigreeMaster archive** and **Import…PedigreeMaster directory** are to be used when bringing in archived data, such as when a data is to be transferred from an old computer to a new one. The remaining tabs on this screen deal with various ways to import external data. Clicking on the About tab gives you the address of Sheep Genetics as well as a link to the software update page.

Other Opening Screens

The **Add & Change records** button is used for data entry, see page 26. **Address Book** is used to keep information on other breeders. It is initially stocked from your first data run but will need to be manually maintained and updated by you after that. The **Summaries, Validation** and **Database Backup** button is used mainly with data submission and is discussed on page 33. Click on the **Groups** button and a listing of contemporary group numbers and descriptions appears. These will be necessary to input data as described later in this manual. This screen gives you the opportunity to review the groups and make changes if needed prior to data entry. The **Sires** button, when clicked, reveals a list of sires of lambs. Keeping this list current will be very useful when later entering data. The button labeled **Reindex database** is to be used each time is received from processing.