

## Chapter 3 -- PedigreeMaster screens

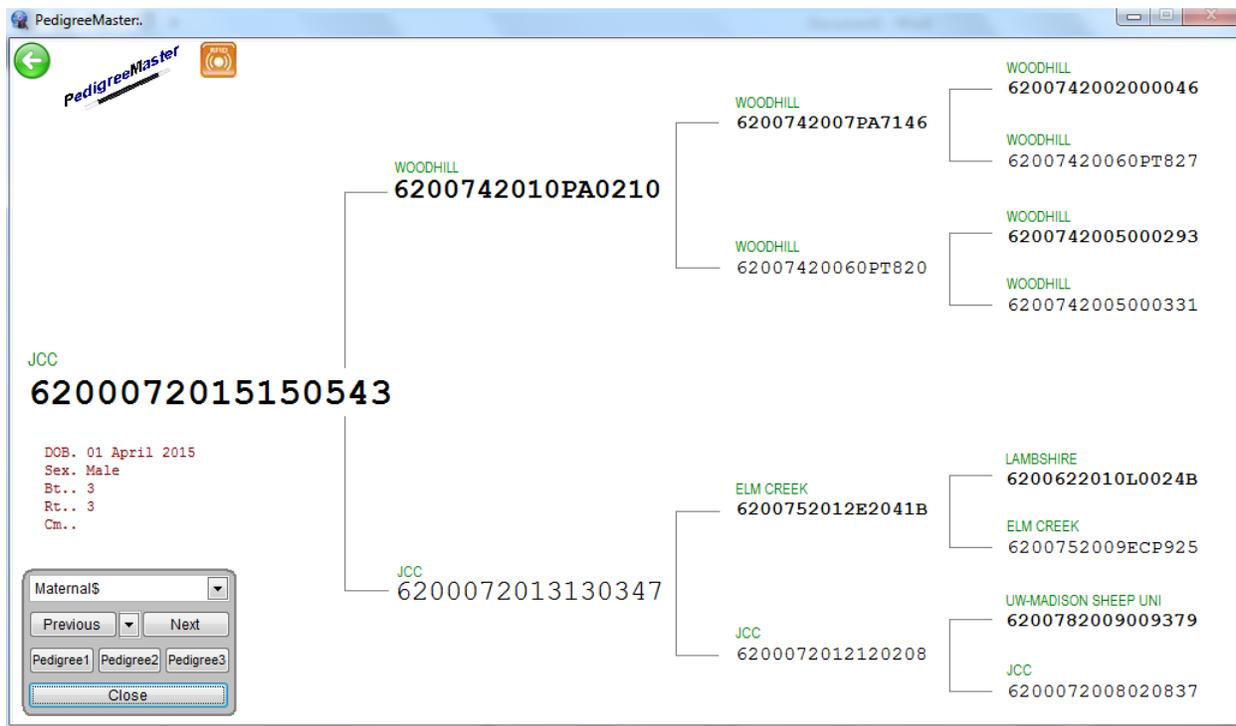
Before entering data and looking for specific items in the software, it is advisable to go through all of the various screens to familiarize yourself with all of the capabilities of the software. Before viewing the various screens, however, go through the glossary of terms in Appendix A so that you are 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 3.

### Pedigree Display

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

The screenshot shows the PedigreeMaster software interface. The main display area shows the animal ID **019999-1995-950019** in a blue box. Above it, the sire ID **019999-1992-920077** is in a red box, and the dam ID **019999-1992-920043** is in a green box. Below the animal ID, there are fields for Sex (1), Date of Birth (24/04/1995), Group (1 STUD Drop), and a Comment field. A 'Breeding' tab is selected, showing options to change group, add/delete animals, and edit sire/dam. A 'Status' dropdown menu is open, showing options like Current, Sold, Culled, Reference, Dead, Missing, Active, and Unknown. On the right, a list of animal IDs is shown, with 019999-1995-950019 highlighted. At the bottom, there are fields for Birth Type, Rear Type, Lambease, Conception Date/Method, Testicles, Jaw, Foster Ewe, and Recip ID.

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. To the left 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 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.

**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 put 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! If an animal is no longer in the flock, change its status on the right side of the page to one that is appropriate. 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.

**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, if desired, are conception date and method (from the drop down menu), 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 Mics**, you can see how data may be input there.

The screenshot shows the PedigreeMaster software interface. At the top, the animal ID **620007-2015-150543** is highlighted in blue. Below it, there are input fields for Sex (1), Date of Birth (04/01/2015), and Group (3 late group). A comment field is also present. To the right, there are navigation buttons: Previous, Next, Browse, and Pedigree. A checkbox for 'Flagged' is also visible. Below the form, there are tabs for Breeding, Carcase, Fleece, Reproduction, Miscellaneous, Breeding Values, and Visuals. The 'Averages' section contains a table with columns for Date, Wt, cFat, Emd, Scrotal, Wec, and Group. The table has rows for Birth, Weaning, EP Weaning, P Weaning, Yearling, Hogget, and Adult 2y. The right side of the interface shows a list of animal IDs, with the selected animal ID highlighted in blue.

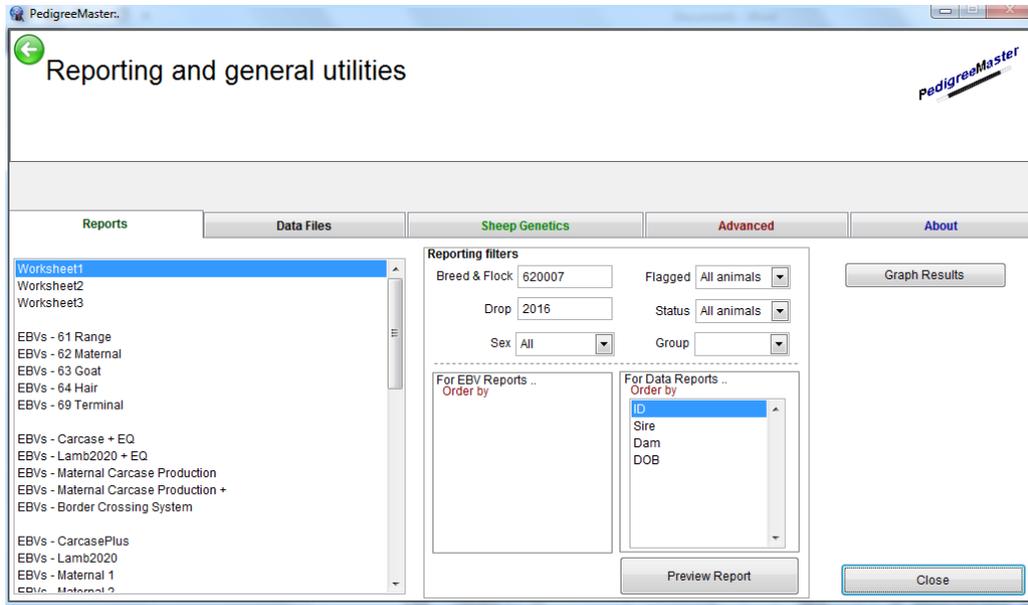
Averages							
	Date	Wt	cFat	Emd	Scrotal	Wec	Group
Birth	04/01/2015	7.0					
Weaning	06/02/2015	56.0	0.0	0.0			1
EP Weaning	08/05/2015	99.0	0.0	0.0	0.0		1
P Weaning	//	0.0	0.0	0.0	0.0		1
Yearling	//	0.0	0.0	0.0	0.0		1
Hogget	//	0.0	0.0	0.0	0.0		1
Adult 2y	//	0.0	0.0	0.0	0.0		1

Note: EP weaning weight is for “early” postweaning weight, which is what many United States flocks will use, especially those in the Midwest and East. Also, a hogget is a sheep that is 1-2 years old, usually around a year and a half old.

More about the use of this screen is explained in the **Data Input** section of this manual. The **Breeding Values** tab reveals the EBVs sent to you from previous processing runs. The **Visuals** tab gives you the opportunity to add visual data and comments if you wish.

## Reports and Utilities

Activities under this tab are numerous and greatly varied in their results.



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, or EBV type or comments. 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.

Print Preview ... Escape Key to close preview window

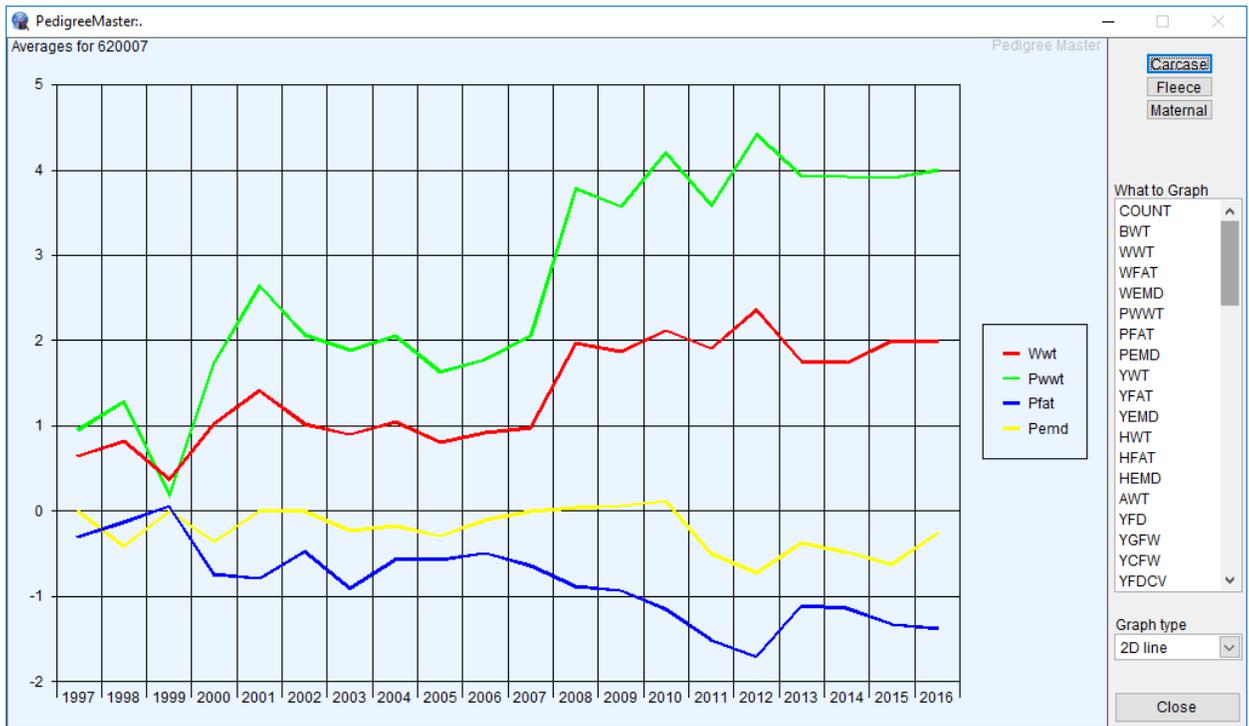
Print Preview

EBV Report...

Animal ID	Sex	Bwt	Mwvt	Wwt	PWwt	Pfat	Pemd	Ywt	Yfd	Ycfw	Ysl	USA	MATERNAL	Size	Dem
6200072016160601	M	0.4	2.4	1.9	3.8	-1.7		3.2				30.6	118.81	6200782014P14305	6200072013130318
6200072016160602	F	0.5	2.4	1.9	3.9	-1.7		3.3				30.6	118.85	6200782014P14305	6200072013130318
6200072016160603	F	0.5	2.4	2.1	4.3	-1.8		3.5				30.6	118.94	6200782014P14305	6200072013130318
6200072016160604	M	0.5	1.4	1.6	2.4	-1.5		1.9				22.7	114.64	6200782014P14305	6200072012120243
6200072016160605	F	0.5	1.4	1.7	2.7			2.1				22.7	114.72	6200782014P14305	6200072012120243
6200072016160606	F	0.5	1.4	1.7	2.8			2.2				22.7	114.69	6200782014P14305	6200072012120243
6200072016160607	M	0.4	1.7	2.3	4.6	-1.2	-0.2	3.5				35.3	114.16	6200742010PA0210	6200072010100029
6200072016160609	F	0.3	1.8	1.3	3.0			2.9				29.6	116.75	6200782014P14305	6200072014140436
6200072016160610	F	0.2	1.8	1.0	2.4			2.4				29.6	116.60	6200782014P14305	6200072014140436
6200072016160611	F	0.6	1.5	2.3	4.0	-1.3		2.9				31.6	115.31	6200742010PA0210	6200072011110149
6200072016160612	M	0.5	1.5	2.3	4.2	-1.2		3.0				31.6	115.31	6200742010PA0210	6200072011110149
6200072016160613	M	0.5	1.5	2.5	4.9	-1.2		3.5				31.6	115.44	6200742010PA0210	6200072011110149
6200072016160614	M	0.4	3.0	1.9	3.7	-1.2		2.4				21.5	115.47	6200742010PA0210	6200072013130307
6200072016160615	F	0.5	3.0	2.3	4.2	-1.4		2.8				21.5	115.66	6200742010PA0210	6200072013130307
6200072016160616	F	0.6	1.9	2.1	4.1	-1.7		3.3				37.9	119.04	6200072014140437	6200072012120223
6200072016160617	M	0.6	1.9	2.6	5.6	-2.0		4.7				37.9	119.31	6200072014140437	6200072012120223
6200072016160620	M	0.5	1.9	2.0	3.8	-1.2		2.6				29.3	114.86	6200742010PA0210	6200072014140447
6200072016160621	M	0.4	1.9	1.9	3.5	-1.0		2.4				29.3	114.76	6200742010PA0210	6200072014140447
6200072016160622	M	0.2	2.7	1.8	3.9	-0.9		2.7				38.0	117.90	6200742010PA0210	6200072013130317
6200072016160623	F	0.4	2.7	2.4	5.0	-1.4		3.5				38.0	118.26	6200742010PA0210	6200072013130317
6200072016160624	F	0.4	2.7	2.3	5.0	-1.4		3.7				32.9	118.22	6200742010PA0210	6200072013130317
6200072016160625	M	0.5	2.7	2.7	5.9	-1.7		4.5				32.9	118.45	6200742010PA0210	6200072013130317
6200072016160627	M	0.4	2.6	2.4	5.1	-1.4		3.7				24.8	114.57	6200742010PA0210	6200072013130347
6200072016160628	F	0.5	2.1	1.8	3.2			2.6				26.6	116.91	6200782014P14305	6200072014140405
6200072016160629	F	0.3	2.1	1.1	1.9			1.4				26.6	116.55	6200782014P14305	6200072014140405
6200072016160631	M	0.4	2.2	2.4	5.3	-1.3		4.1				31.9	112.80	6200742010PA0210	6200072013130357
6200072016160637	F	0.4	1.8	2.1	5.0			4.2				22.1	114.59	6200072014140437	6200072011110103
6200072016160639	M	0.4	2.7	2.2	4.4	-1.2		2.9				22.7	115.47	6200742010PA0210	6200072013130306
6200072016160640	M	0.3	2.7	2.2	5.0	-1.2		3.7				22.7	115.49	6200742010PA0210	6200072013130306
6200072016160641	M	0.3	2.7	1.7	3.6	-1.0		2.5				22.7	115.19	6200742010PA0210	6200072013130306
6200072016160642	M	0.3	1.8	1.0	1.9			1.8				24.8	113.35	6200782014P14305	6200072014140426
6200072016160643	F	0.4	1.8	1.5	2.8			2.5				24.8	113.59	6200782014P14305	6200072014140426
6200072016160645	F	0.3	2.1	1.8	4.1	-1.4		3.5				25.0	115.20	6200072014140437	6200072014140440
6200072016160647	M	0.2	2.2	1.6	4.2			3.5				29.2	116.34	6200072014140437	6200072015150542
6200072016160648	F	0.3	2.2	1.9	4.6			4.0				29.2	116.46	6200072014140437	6200072015150542
6200072016160650	F	0.6	2.6	2.2	4.0			3.1				30.9	117.65	6200782014P14305	6200072015150502
6200072016160652	F	0.6	2.5	2.8	5.7			4.4				31.3	117.52	6200072014140437	6200072015150528

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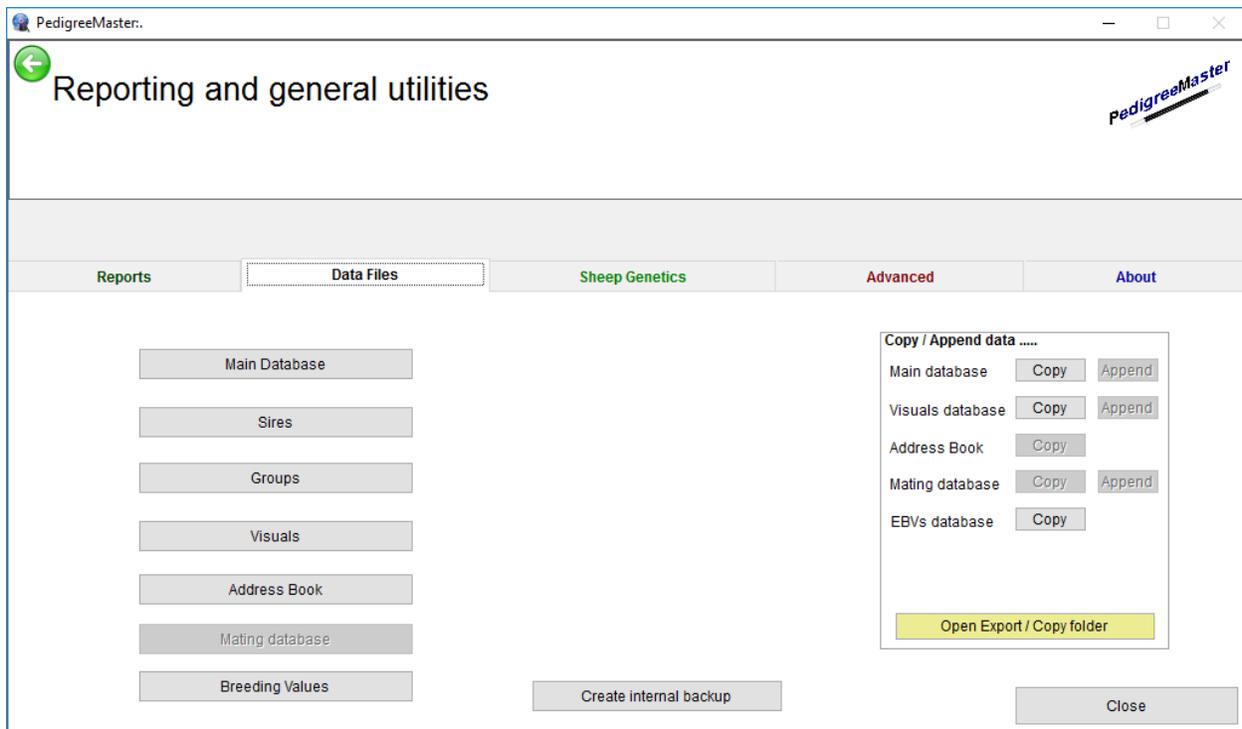
An interesting tab to hit is the **Graph Results** tab. Click on it and your progress over years will be shown in a graph.



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.



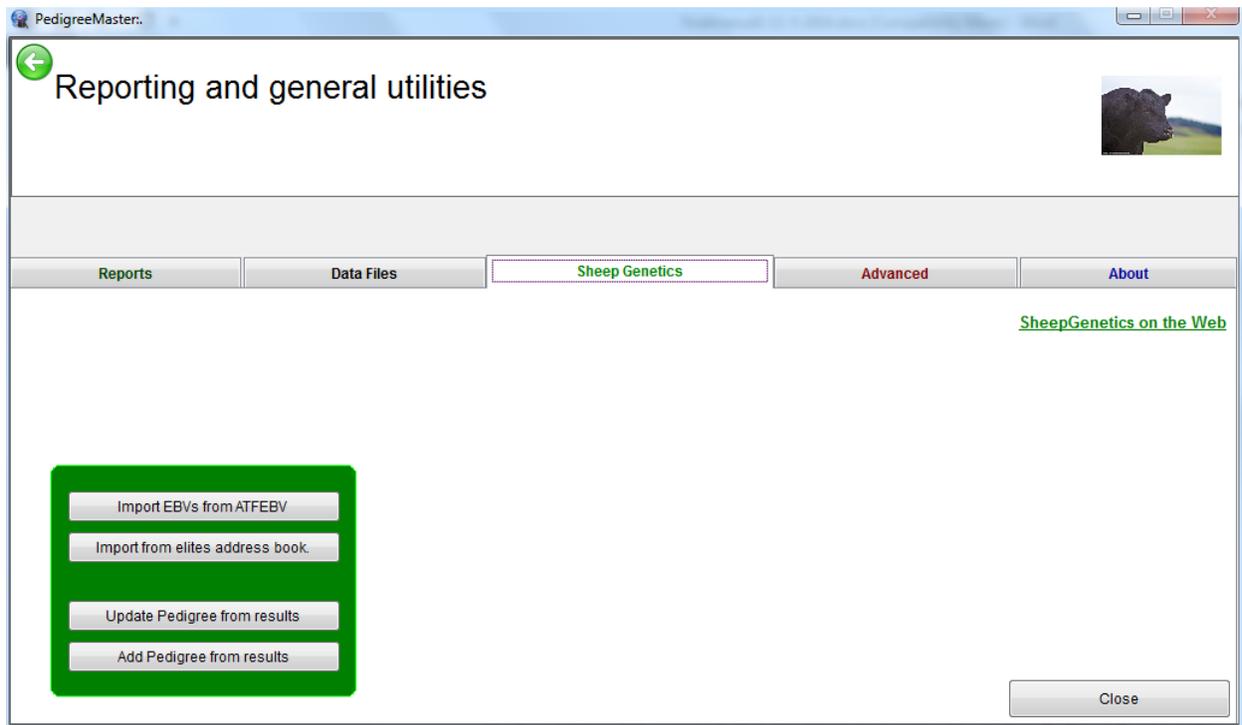
When you enter a new lamb, it will need to be assigned a group and the **Groups** tab will show you the names of the various groups from which you can choose. The groups come with pre-assigned names but you can customize these by selecting names that are more meaningful for you. Click on the **Groups** 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 mailing database is currently not in use. 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.

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. Thus it is advisable to keep backup datasets somewhere other than on your computer, such as on a cloud drive or a thumb/jump drive. 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.

Or, you can save the data by 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

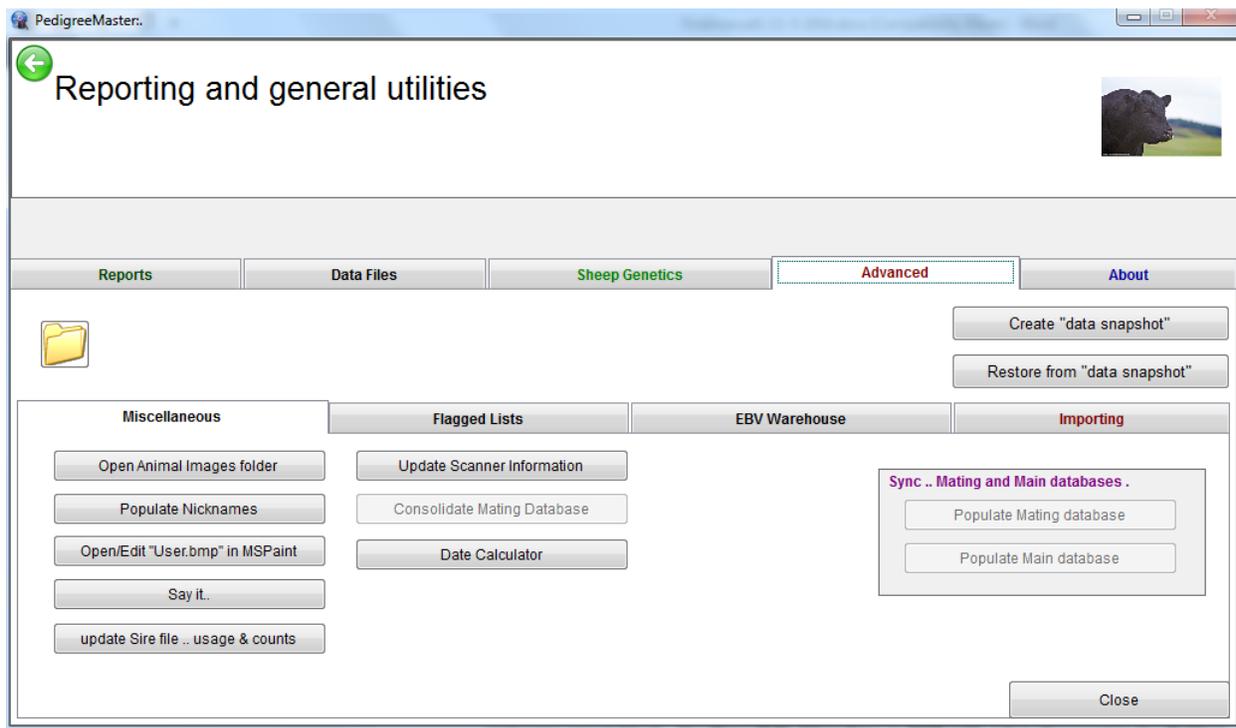
function is currently not available for Address book or Mating database. When you click on the copy tab you are given a variety of options for what data can be copied. After making your selection and clicking on the copy tab, a pop-up screen appears showing where your data copy resides. This will normally 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 ATFEVB** 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 discussed in the first section of this manual. It is also 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.

When you click on the **Advanced** tab, several new tabs appear.



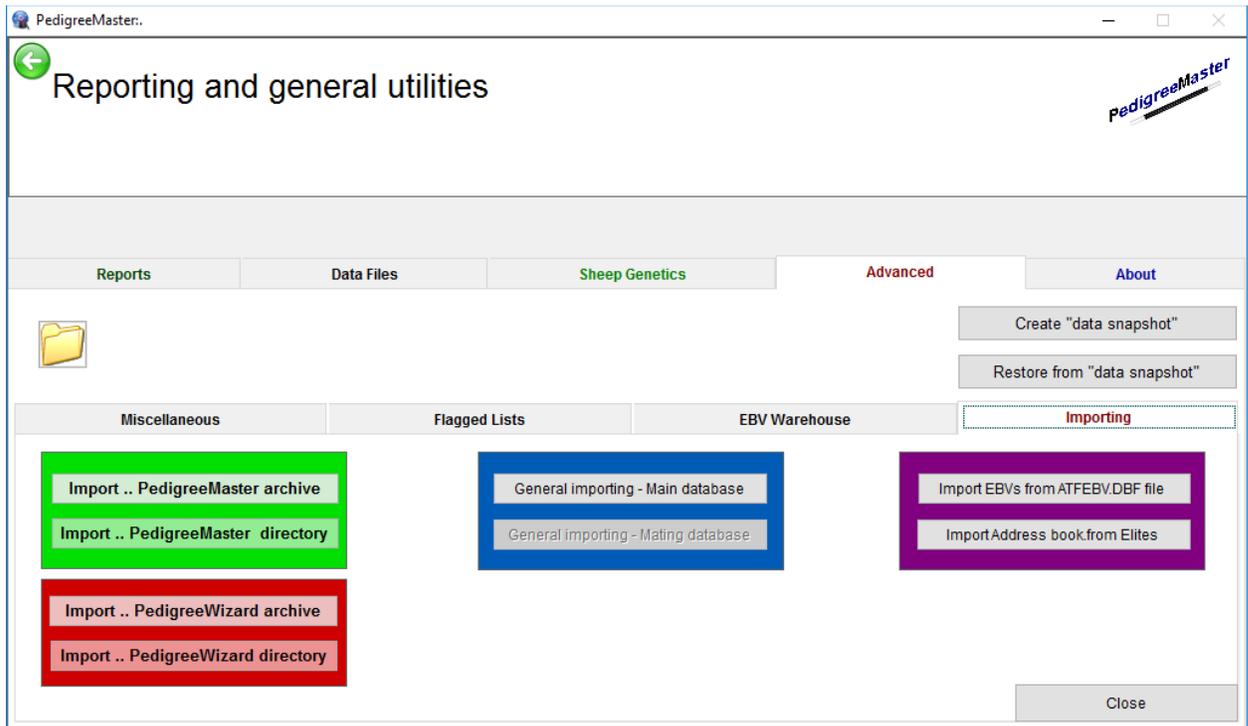
Clicking on the **Advanced** tab will produce four new tabs to appear: **Miscellaneous, Flagged Lists, EBV Warehouse and Importing**. Under **Miscellaneous** are five tabs.

The first is **Open Animal Images Folder**. Clicking on this will take you to where some images of sheep and PedigreeMaster 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 **Say it** 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 **Say it**, 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 **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 on, a report appears with animal IDs, EBVs, and accuracies of those EBVs. This report is for viewing only. The **New Record** and **Delete Record** tabs are currently not working. **WARNING** – you rarely, if ever, want to delete animals. Deleting them is not the route to take if you have animals no longer in the flock or ones that you just don't want to see. If you delete them, their data is deleted also and this data is important in determining the subgroup values, which is the basis for the entire analysis. 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.