# Chapter 4 – Data input

There are several situations in which you may find yourself involved when it comes to entering data. The different situations are separated here by letter with instructions following for that particular situation.

## A. Need to input previous NSIP data

If you have data from NSIP prior to the processing of data by LambPlan and would like to include that data, contact the NSIP coordinator, Rusty Burgett, at info@nsip.org or phone him at 515-708-8850. If you filled out the enrollment form (a link to the enrollment form is: http://nsip.org/nsip-become-a-member/) this situation should have been taken care of when you enrolled in NSIP. If, however, it was not and you find yourself with data that was previously submitted to NSIP prior to LambPlan processing and you would like to get that data into LambPlan, please contact Rusty Burgett. To input data that was previously in PM, as would be the case of getting a new computer or wanting the data on an additional computer, please refer to Chapter 7.

### B. Need to create or input an animal ID

Before proceeding, you need to know how to form animal ID numbers. Without proper IDs, flocks may not be connected, animals may be mistaken for others and data may not be meaningful. Be aware that animals who were enrolled in NSIP before LambPlan will have their IDs changed when converted to LambPlan. Do NOT try to change these or it may cause serious problems in regard to tying animals together throughout your flock and into other flocks. If you prefer to think of these animals by their previous ID, you can put that ID in the nickname blank to help you identify them by their old ID.

Animals in NSIP but not from your flock: Before you enter any animals into the dataset, you first need to take care of animals that came from outside your flock but were born into an NSIP flock and thus already in the system. You need to get their NSIP number from the NSIP breeder and the IDs of their sire and dam to be sure that you can use that animal to connect to existing NSIP flocks. The methodology of inputting the data is explained below.

Animals from a non-NSIP flock: These animals do not have an NISP ID and you will need to provide one for them when you enter them as a sire or dam. You do not need to enter them as an individual. When creating an ID for them, the 16-digit NSIP number for one of these animals starts with the same six digits of the NSIP code you use for animals you raised. Next input the year of birth in spaces 7-10, followed by the last two digits of the animal's year of birth, followed by a four-digit number that identifies the animal, usually some numbers from its eartag. Be absolutely sure that this number does NOT duplicate another tag already in your system. In these situations it is often handy to input something into the nickname area of the animal so that you can more readily identify it because the NSIP number you just entered may not seem familiar to you later.

Animals from your flock: NSIP animals have a 16-digit identification. The standard LambPlan ID for a lamb is to start with the first six digits of your NSIP ID. Of those six numbers, the first two are for the type of flock, such as terminal sire, maternal/wool, etc. The next four numbers are for your flock within that group. The six-digit code is unique for your flock. Following that, the next four numbers are the year of birth of the animal. Next, generally, are the last two digits of the animal's birth year. For example, an animal born in 2014 would have characters 7-12 as 201414. However, instead of those two numbers in places 11 and 12, you can input either CU or CO for animals that are culls, such as wethers or animals that may have a bad mouth, unsound feet or some other problem. Their production data will be used in helping predict the EBVs of close relatives but animals with CU or CO will not appear in printouts, thus not creating confusion by printing an EBV on a non-breeding animal. Also, you are not charged for data submittal on CU and CO animals. There is a limit to the number of CO and CU animals you can have, with no more than 25% of your flock labeled as CU or CO. Another possibility for identification is that if a lamb is born dead, the last six spaces can be DABxxx, where xxx is a number starting with 001, then 002 for the next dead lamb, etc.

In general, LambPlan does not like to have letters in animal identifications. If you routinely use letters in an animal's identification, it would be advisable to either switch to an identification system that does not use letters or have a system whereby a number represents a code for a letter. For example, perhaps you use the number 1 for the letter A and the number 2 for the letter B and so on. Then an animal whose tag is A331 would be coded in LambPlan as 1331. An animal with a tag of B879 would be coded in LambPlan as 2879. This system works well for those who use tags of various colors and want to somehow have that color included in the ID. Being unable to use letters in an animal's ID may seem like a problem at first to some producers, but it can be easily worked out with a little imagination and producers report that after a generation or two it is no longer a problem. If for some reason you absolutely must include a letter in the identification, contact Rusty Burgett at the NSIP office. He can contact LambPlan and see if it is possible to use that letter. Appendix C lists the combinations of letters that cannot be used in certain places in animal IDs as of November 2016. Never assume that a letter you put in an ID without permission from LambPlan will be acceptable!

IMPORTANT: NEVER change the ID of an animal who might appear in the pedigree of another animal. If you change this ID, the ID would have to be similarly changed in the pedigrees of all other animals in which it appears. There is too much of a chance that you will miss one or more places. If it is absolutely essential to make a change like this, contact the NSIP office who can contact LambPlan to see if it is possible.

#### C. Need to input past data to get started on NSIP

The first thing you need to do is decide how many years of past data you would like to input. The more data you include, the more accurate the estimates will be on the animals currently in the flock. However, the increase in accuracy is less for each additional generation that is included.

It is important to note that all "historic" data needs to be submitted on the first data submission in order to not be billable. If you later submit additional historical data, you will be charged for it. So it's good to think about things a bit and get all the data you want in the first submittal. On the first submission of data, only the 2 most recent lamb crops are considered billable and anything older than 2 years old will not generate a billing. In general, the more data you submit, the better things will be as the accuracy value will be higher due to having more records per individual and having more animals involved that are related to those you currently have in the flock. At a minimum, you should certainly at least submit data for all lambing season that include the first lambing for any ewes you have in the flock.

It is important that ALL lambing records be included for those years. In other words, don't just include the lambing records of ewes that you currently have in the flock. The lambing records of their contemporaries must be included as well. This is because the basis of this type of genetic analysis is in comparing how an animal performs relative to the others in its group. Thus as you input historical data, if you only include lambing records on ewes you currently have and not on other ewes that lambed at that time, you will have a much poorer and somewhat biased comparison between the ewes.

If you have data on a spreadsheet, it can easily be input into Pedigree Master as explained below. If you are inputting the data from written records, remember that the first records you put on will take the longest as you will have limited use of the drop-down menus for sire and dam inputs. As the sires and dams are input, they should appear on the drop-down menus and speed the process up. This can be sped up even more by inputting the sires directly into the sire drop-down menu as described on page 27. Plus, in many cases, the first 10-13 digits of most IDs can be preset on one of the function keys as described on page 24, which speeds things up even more.

As with many things in life, the input process gets faster with each animal as the process becomes more routine. People who don't enjoy working with computers may tend to put in very little historic data as the work becomes tedious. However, it is much better to put the work aside if it becomes tedious, and input more data at a later date, than to give up because you're tire and submit what data you have. As you get data back from Lambplan, the benefits of putting in more historical data will become obvious. So, in summary, a) the more the better, b) be sure to input all historical data in the first run, and c) don't forget to use all of the available aids such as function keys and drop down menus, or spreadsheets, to make the process a lot faster. **Spreadsheet Entry:** There are three main ways to enter data into PM. One way to get data into PedigreeMaster is from a spreadsheet. In general, you want to use this option ONLY if you already have the data in a spreadsheet for some other program. Otherwise, it is much easier to input data directly into the program than to enter it into a spreadsheet and then transfer it. Before beginning, it is important to backup your current dataset as described on page 16.

To successfully transfer the data from a spreadsheet to PM, the spreadsheet must have the required columns headings with appropriate data under the column headings. The columns do not need to be in any particular order right-to-left as PM will find each one during the import.

Column Heading	Description of Data
ID	This is the 16-digit NSIP ID for the sheep you are adding.
Sex	1 for male, 2 for female
BT	Birth type, 1 for single, 2 for twin, 3 for triplet, and so on, up to 9.
RT	Rear type- how many lambs were raised on the ewe with this lamb
CM	Conception method – 1= Natural, 2= ET, 3= AI, 4= JivET
LAMBEASE	Lambing ease for this birth. 0 – Unobserved, 1 - No Assistance, 2 - Some
Assistance, 3 -	- Hard Assistance, 4 - Abnormal presentation, 5 - other
Status	Current, Culled, Dead, Missing, Reference, Sold , Unknown
BWT	Birth weight value
DOB	Date of birth
Sire	This is the 16 digit NSIP ID of lamb's sire.
Dam	This is the 16 digit NSIP ID of lamb's dam.
GRP	Group number of birth group
WDDMM	Date of weaning weight (in MM/DD/YYYY format)
WWT	Weaning weight
EPDDMM	Date of early post-weaning weight (in MM/DD/YYYY format)
EPWT	Early post-weaning weight (120 d)
PWDDMM	Date of post-weaning weight (in MM/DD/YYYY format)
PWWT	Post-weaning weight [this may be PWT; WFEC puts it in WWT time]
FEC	Fecal egg count

Other headings can be obtained at: http://kidplan.mla.com.au/PedigreeWizard/. At that site, click on **General Importing** on the left side menu. You do not need all of the above columns if you do not have data for that trait on any animal. After all of the column headings are in place you can then enter data. Be sure there are no blank cells or the fields may become offset when imported. If there is no data available for a particular trait for an animal, put a \* in the cell. If the sire of an animal is unknown, you can input UNKSRE. Some people find it helpful to use a fixed –width font such as Miriam Fixed to help spot errors in fields with a set length to them, such as the ID fields.

After all of the data is entered, save the file as you normally would so that you have a base set of data. Then do a **Save as** and save the file as a Text (tab-delimited) file. An alternative is to open Notepad as a blank file. Highlight all of the Excel Sheet's data and column headings and copy and paste the file into Notepad. Save the file and remember where you saved it and what you named it. Next go to PM's main screen and click on the **Reports and Utilities** button. Then click on the **Advanced** tab and then on the **Importing** tab.

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Reports	Data Files	Sheep (	Genetics	Advanced	About
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Miscellaneous	Flagge	ed Lists	EBV	Varehouse	
Import PedigreeMaster	er archive r directory	General importing	g - Main database - Mating database	In	nport EBVs from ATFEBV.DBF file
Import PedigreeWizar	rd archive				Close

Next click on **General Importing** and then on **Select file.** Be sure the import defaults are correct. You will be asked if you have a backup. If you do, then click on **yes.** If not, click on **no** and backup the file as described earlier in this manual. Again click on **Select file** and proceed. Choose the file you want to work with and click OK.

Then click on **View file to Import** and look at the file to see if you detect any errors. If an error appears, do not proceed to import. Go back to the spreadsheet and correct the error. If everything looks OK, click on **Import file** and then **OK**. Then click on **Check Main Data Table**. Check through the data carefully, especially ID inputs. If no errors appear, click on Check Visual Table if your data has any visual traits. After checking that data, click **Update to main database**. Your data should be successfully onboard. You can use this same procedure to update data after the initial data is in place to combine new data with your original data. Also, if you notice an error after importing a file, you can go through this process again only making a change the next time when you view the file prior to importing. It will overwrite the incorrect file. If you see some serious mistakes and want to start all over, you can click on the **Undo import** button to get you back to where you were before you started the import.

**Data transfer from Pedigree Wizard:** The first thing you need to do, of course, is to back up your PW data so that your data is secured should some computer malfunction occur. It is a good idea to frequently backup your data and back it up on different media in case your computer someday decides to die. There are several ways you can back up your data but the easiest way to do this is to open PW and click on the **Utilities** button on the bar at the top of the screen.



Click on **Force monthly backup** and the program will do its job. A popup screen will appear telling you that the process is completed and you should click on OK. Another popup screen will then appear telling you where your backup file is located. Write this down as you will need it later. Normally the file is located in the PW4 folder and the dataset is named YYYYMMDD where YYYY is the current year, MM is the current month and DD is the day. If you will be using PM on a computer different from the one that has PW, you will need to get the backup file on cloud storage or other type of transferrable storage such as a thumb drive so that the other computer can access it.

If you have not already downloaded and setup PM, you need to do that before proceeding. See the section at the beginning of this manual that has instructions on how to install and setup PM. If all is OK, then click on **Reports & Utilities.** Next click on **Advanced** and then on **Importing.** 

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Reports	Data Files	Sheep Genetics	Advand	ced	About
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Miscellaneous	Flagge	d Lists	EBV Warehouse		Importing
Import PedigreeMaster	r archive directory	General importing - Main databa General importing - Mating datab	ase	Import EBV	s from ATFEBV.DBF file dress book from Elites
Import PedigreeWizard	l archive directory				Close

If you backed up your data as described above, you need to click on the **Import.. Pedigree Wizard directory** tab. If you used some other method of backing up your data, you will likely need to click on the **Import..Pedigree Wizard archive** tab. After clicking on **Import..Pedigree Wizard** directory, you will be asked if you backed up the data and you should click on yes, assuming you backed up the data. A screen will then come up asking you to find the backup file which you made earlier. A warning will appear that you are going to overwrite the file in PM but it is OK to do so, so click on yes. When it is done moving the data, close PM and then reopen it. Everything should be complete – check to see that your flock ID and name are on the main screen. Click on Pedigree Display and see if your animals are there. Also, the black bar in the middle of the main screen should say that you are in NSIP mode. If not, try re-transferring your data. If you are still experiencing a problem, contact Rusty Burgett at info@nsip.org.

**Direct input into PM:** Most producers will input their initial data directly into PM and certainly most will input additional data by this method. A recommended way to begin with this process is to click on the LambPlan ID number located at the upper left of the opening screen. That will open a screen displaying the option of changing the values associated with various function keys. Changing those values will make data entry much easier.

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J	Pedigree Mas Setup	ter )			~~~	PedigreeMaster
SheepGenetics	Bree [ Auto F5 [ F6 [ F7 [ F8 [ Date	d & Flock code for p           [62]         0007           typing text           620007201616           6200072016cu           07/14//2016           620007201313           Format           DD/MM/YYYY           MM/DD/YYY           YYYY/MM/DD	program to use	Communications Port Information RFID reader setup Port No COM1 Mode Read View Port details Test read		Help lay 15 Friday 11 November 16 TICS\PEDIGREEMASTER mmaries, Validation & Database Backup lps Sires Reindex database are in Standard International Units. TERNAL
	Version 2.3	32 - 11 Nov 2016		Save & Clo	se	Close

The best use of the function keys that PM uses (F5, F6, F7 and F8) is to reduce the amount of work needed to input the first ten digits of an animal's ID. As shown in the graphic, different function keys can be used for years covering the data to be input, such as with F5 above, and CU or CO can be used in places 11-12 of the NSIP ID for animals that are to be culled as shown in F6. The use of CU and CO was previously discussed in the section on animal identification numbers. Setting and re-setting these when data from various years is to be entered can save a lot of time and greatly reduce errors.

Remember, the data entry will go much easier if you start with the oldest animals first. This is because as you enter new animals, previously entered animals that are sires and dams can be entered with a few keystrokes, rather than needing to type in the entire ID. After the function keys are set to what you want them to be, click on **Save & Close** to return to the main screen.

There are different ways data can be directly entered into the PM software, but the easiest way to enter at least the pedigree portion of a new animal is through the Add & Change records button. First review the buttons at the top of the page. The Edit Auto Build text button will greatly speed up data entry. It is similar to the function keys but a bit faster. If you have the first ten digits of an animal's ID set in the Edit Auto Build text area, then all you need to do when you input the animal's ID is to put in the last four characters and either click on the Edit Auto Build text button or press the tab key or the enter key and the first twelve characters are automatically set in place for you. If, however, you want either CO or CU in places 11 and 12, you can enter the last six characters of the ID and when you click on Edit Auto Build text, the first 10 digits will be automatically entered. Edit date 1 and Edit date 2 are valuable items when entering data on a set of animals in the data input section. For example, if you are want to enter the weaning weights on a group of animals, you should set the **Edit date 1** to the weaning date for the group of animals. Then as each animal's weaning date needs to be entered, you can simply drag the **Edit date 1** value into the appropriate date blank. Edit date 2 functions the same way. Or, if you have set the date in one of the available function keys (F5, F6, F7 and F8), you can use them to enter the date by holding down the fn key while pressing the appropriate function key. The next button limits what age areas can be used for data entry. The areas that are then allowable appear in white and the non-allowable are in grey. Thus if you are only going to be entering weaning weight, you might want to specify that in the limits. This would keep you from entering data in one of the other areas by mistake. If you check the box for wool and fleece data, then you can input data for wool

and fleece traits that are in the age range you previously checked in the button to the left. The last area on the top bar is a drop-down menu that tells you to what the various function keys are currently set.

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Birth	11				_		Grou	up								L	ast anim	nal saved	l/added.
Weaning	11						~	/											
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P Weaning	11						~	/	11										
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	NSIP mode	Body and F	Fleece W	eights, ur	nits are Ibs	all ot	ner inf	forma	tion should	be Stand	ard Intern	ational uni	its (Metri	c)					
	Save Record E_ID								Set		Di	scard cha	nges				Exit	no sav	e

You are now ready to start entering an animal ID, the 16-digit ID. You can either enter all sixteen digits, or, if you have the first ten digits of the animal's ID set in the **Edit Auto Build text** area, then input the last four characters of the animal's ID and either click on the **Edit Auto Build text** button or press the tab key or the enter key and the first twelve characters are automatically set in place for you. If, however, you want either CO or CU in places 11 and 12, then you should input the last six characters and click on **Edit Auto Build text**, or press tab or enter, and PM will put the first ten characters in place for you.

There are several ways that you can input the sire identification. The quickest way is that if the animal you are entering has the same pedigree as the previous animal (for example, you are entering an animal that is a twin or triplet to the animal just entered) then click on the **Repeat last animal's pedigree** button and the sire and dam identifications will automatically fill in. You MUST have the animal ID entered before you click the **Repeat last animal's pedigree** button or you will have to click that button again after entering the animal ID. Note: A sire must be at least 297 days of age when offspring are born for him to be accepted as the sire.

If, however, the sire and dam are not the same as the previous animal, then you will need to use another method. The first button at the end of the Sire blank will give you a drop down list of all males who have "current status" and you may be able to find the sire there. This button is particularly helpful to find sires that are animals you raised yourself but have not yet been entered as sires. The next button with a drop down menu provides you a list of animals already identified as sires. So if the sire of the lamb you are entering has already been identified as a sire, it should appear in this drop down list.

If the sire is an animal that has not yet been entered or not identified as a sire, the quickest way to get it into the system is to directly enter its 16-character ID into the sire input area. After you do so and press the ENTER key, a question will pop up asking you if you want to add it to the Sire picklist/database. You should click on Yes unless you are absolutely sure you will never enter another animal with that sire. By having sires in the database, data entry is greatly sped up. The dam portion works the same way as the sire input.

Another way to enter sires, but which takes more time, is to click on the **Sires** tab at the beginning screen.

😭 Pe	digreeMaster:.				
C	lose window	New record Delete record	A A Lock		1 of 16 - PMSIRES
	Picklist	Sire	Sire_ref	Progeny	Sire_note
		6200782009009379	09009379	72	
		6200072011110126	110126	19	
		6200752012E2041B	12E2041B	75	
		6200252011W1030C	11W1030C	5	
		6200622010L0024B		1	
		6200072013130315	130315	2	
		6200622010L0024B		1	
		6200072013130343	130343		
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Click on the **New record** tab and enter the new sire's ID and nickname, if it has one, under the Sire\_ref column. When finished, click on **Close window.** 

You can tab to most of the other fields on the **Add & Change records** input screen. The sex, birth type and rearing type menus are self-explanatory, as are the conception area inputs. It is important to know that lambs reared artificially should have their type of rearing be input as a single. Lambs that die before weaning should, of course, be input as 0 for type of rearing. Choosing a pedigree method is optional. For pedigree method, choose normal management unless some DNA type of analysis was used. Lambing ease is selfexplanatory and optional.

The nickname is automatically set to the last six digits of the animal's ID but you can change that on this screen to something that is more meaningful to you if you wish to do so. For example, maybe the animal has been retagged with a new tag number or color and you wish to have the nickname area with the other ID. To the left, choose the group that the animal is in. See page 11 for instructions on how to change group names so that they are meaningful to you. It is EXTREMELY important that you select an appropriate group as all comparisons in the analysis are made within a group. See page 11 for information about the importance of selecting a group. The comments section can be used if you have something significant to input on an animal and status of the animal has a self-explanatory drop down menu. At that point you can save the record if you have no other data to enter. For most animals, however, you will want to enter the birth date, birth weight and other data. The other data entries and the Save Record button are fairly obvious. The E\_ID input area is if you have an electronic ID that you wish to input. The **Discard changes** button id to be used if you came into this screen to make changes but then decided the changes weren't appropriate. See Appendix A for information on the other data input areas as to what the abbreviations stand for and the limits of the various values.

Another way to enter data is to click the Pedigree Display button on the main screen.

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	/			Previous	Next	620007-	-2015-150502	
620007-2015-150508						620007-	-2015-150503	_
				Brows		620007-	-2015-150504	_
				Diows		620007-	-2015-150505	_
	620007-2	2012-120243				620007-	-2015-150507	
Sex 1 V Date of Birth 01/02/2015				Pedigr	ee	620007-	2015-150508	
						620007-	-2015-150509	
Group 1 early lambs					Flagged	620007-	-2015-150510	
						620007-	-2015-150511	
Comment						620007-	2015-150512	
						620007-	2015-150513	
Breeding Carcase Fleece	Reproduction	Miscellaneous	Br	eeding Values	Visuals	620007-	-2015-150514	_
				Status	Current	620007-	-2015-150515	_
Change Group 1 V Change / Edit	Sire			Clarado	Sold	620007-	-2015-150516	_
					Culled	620007-	-2015-150517	_
Add new animal + Change / Edit	Dam				Reference	620007-	-2015-150518	_
					Dead	620007-	-2015-150519	_
Delete animal X Nickname 150508					Missing	620007-	-2015-150524	_
					Active	620007-	-2015-150525	
					*	620007-	-2015-150526	
						620007-	-2015-150528	_
						620007-	-2015-150529	_
Didh Tuna D		Testicles	Ja	w		620007-	-2015-150530	_
Birdi Type 2 V	nception					620007-	-2015-150531	_
Rear Type 2 🗸	Date / /	Foster Ewe				620007-	-2015-150532	
Lambease	Method 🗸	Recip ID				<pre>1620007- </pre>	2015-150536	
							Close	

Click on the **Breeding** button and the screen that appears allows you to do editing and enter new data as well. Across the top of the screen is the animal's pedigree along with its sex, date of birth and group. You can change the sex and date of birth at this point if you so desire. To the right of the pedigree is a filter if you only want to look at a certain group. The **Previous** and **Next** buttons move you to different animals. Or, you can click on the **Browse** button which will open up a spreadsheet of animals. Move the cursor on the far left side to the animal you want to see and then press the ESC button. The selected animal will now appear in the pedigree. Or, you can go up and down on the column of animal IDs on the far right side to select the animal you want. Clicking on the pedigree button will display an extended pedigree of the animal as explained in the Reports section of this manual. By clicking on the **Breeding** button, you can see how to change groups, edit the sire and dam, add a new animal, delete an animal or change the nickname. **CAUTION:** When you delete an animal you are also deleting all of its data and thus changing the group comparisons. There are very, very few instances where you will want to delete an animal. Changing their status from current will keep them from appearing in the sire and dam lists but their data almost always needs to be in the database. Think more than twice before deleting an animal – they should rarely be deleted for the reasons just stated. Contact Rusty if you think that it absolutely must be done.

This is the screen to use if you have cross-fostered a lamb. In the Foster Ewe input area, type in the ID of the ewe to whom you gave an extra lamb. By doing so, the foster ewe will get credit for all of the lambs that she raised and their weights. Also, if a lamb is the result of an embryo transfer, input the ID of the recipient ewe that raised the lamb. Otherwise, the computer will assume that the ewe identified in the dam column is the ewe that raised it. This will not only give inaccurate values for some EBVs but may result in conflicts in lambing dates from other embryo transfer lambs from the same dam. If you click on the **Add new animal button**, you will see a different way to add animals. Autoprefix is there and, while they function keys do not appear on the screen, they work on this screen as well. The remaining input areas are similar to what is discussed above. It usually takes longer to input animals through this screen as the sires will appear in a drop-down screen only after you type in the first few characters and you must type in the entire dam ID. Click on **Save** when done.

Clicking on the **Carcase** button will bring up a screen allowing you to enter weights, carcass, scrotal and egg count data. The **Fleece** and **Reproduction** tabs will bring up screens to allow you to enter data in those areas. The **Miscellaneous** tab brings up a screen to allow you to change identification data. While there is a

button on this screen to retag animals, it is advisable to **NOT** retag animals because of the possibility of losing missing an animal and thus losing connections in pedigrees. If you feel strongly about retagging an animal, contact Rusty Burgett at info@nsip.org to get explicit directions on how to proceed. There is a major difference between retagging an animal and simply changing its ID because it was input incorrectly. Retagging means that all animals with the original ID will have their ID changed to a new value. If you are using the Retag option to change a number on a lamb because it was input incorrectly, you could be making a catastrophic error because there might be an animal already in the system with that ID. If you simply have an incorrect ID for the animal, its sire or its dam, it is best to click on the Add & Change records, pull up the animal to which you need to make changes, make the changes and then save the results. Then delete the animal that has the incorrect ID. By making the change this way, you do not have to be concerned about disturbing the pedigrees that might occur in a retag. However, the retag option is a viable way to change the 11<sup>th</sup> and 12<sup>th</sup> characters to CO or CU if you want to do so and for some reason did not enter them initially. In case of a tag change, you can use the nickname function to keep things more clear for you on who is who.

The **Breeding Values** and **Visuals** tabs do not allow you to enter data but are very valuable as they display the EBV information on the animal and visual factors that have been entered. The EBV values will change each time data is returned from Australia if you follow the protocol outlined in the Receiving Data section. It is always a good idea to validate your data after entering it. Click on the Summaries, Validation & Export/Backup button and validate all of the data that you have just entered. Then backup the data – **always backup your data after entering it.** 

#### D. Need to input new data into an existing database

The procedures described above in section C can be used to input additional data to update your system. Whenever inputting new data, is it highly advisable to back up your past data so that your data is secured should some computer malfunction occur. If you are not entering data via a spreadsheet, it is a good idea to backup your data before beginning to add more. In addition, before beginning to add new data, it is a good idea to run through the animals via the Pedigree Display tab and make sure that animals which will no longer be sires or dams are not listed as Current. That will give you fewer animals to have to wade through when you are selecting sires and dams for the new lambs that you are going to enter. When you have done that, you can add data as described above in the **Spreadsheet Entry** and **Direct input into PM** sections.

Another way to input additional data is via the **Master Database**. This is a very slow option for entering new animals as it lacks some of the quick inserts available with the options described above. However, it can be a good way to input update data on animals whose pedigree and base data has already been input. For example, weaning weight data and ultrasonic scan data can be easily and quickly entered here. To input data into the **Master Database**, click on **Records & Utilities** at the opening screen. Then click on **Data Files** and then on **Main Database** and go to the first animal for which you have data to input.

<u> </u>	PedigreeMaster:.					- Conservation		-		
Г	Close window New record	Delete record A A Lock							2 of 79	3 - PMDATA
	Id	Sire	Dob	Sex	Dam	Bwt	Wddmm	Wwt	Wcf	Wemd 🔺
T	6200071987000003	6200241983000223	09/11/1987	2	6200241985000103		1 1		0.0	0.0
Þ	6200071987000004	6200241983000223	09/13/1987	2					0.0	0.0
	6200071988000001	6200241985000059	02/20/1988	2	6200070000QD0001		/ /		0.0	0.0
	6200071988000002	6200241985000059	02/20/1988	2	6200070000QD0001		/ /		0.0	0.0
	6200071988000005	6200070000QS0078	03/07/1988	1	6200070000QD0078		/ /		0.0	0.0
	6200071988000078	6200070000QS0078	02/25/1988	1	6200070000QD0078		/ /		0.0	0.0
	6200071989000006	6200071988000005	02/05/1989	1	6200071987000003	9.9	/ /		0.0	0.0
	6200071989000007	6200071988000005	03/20/1989	1	6200071987000004	11.0	/ /		0.0	0.0
	6200071989000008	6200071988000005	03/20/1989	1	6200071987000004	9.0	/ /		0.0	0.0
	6200071989000009	6200071988000005	03/20/1989	2	6200071987000004	9.0	/ /		0.0	0.0
	6200071989000010	6200071988000005	02/18/1989	1	6200071988000001	7.9	1 1		0.0	0.0
П	6200071989000011	6200071988000005	02/18/1989	2	6200071988000001	7.1	1 1		0.0	0.0
П	6200071989000012	6200071988000005	03/14/1989	1	6200071988000002	7.9	1 1		0.0	0.0
П	6200071989000013	6200071988000005	03/14/1989	1	6200071988000002	9.9	1 1		0.0	0.0
П	6200071989000028	6200070000QS0030	10/05/1989	1	6200070000QD0028		1 1		0.0	0.0
П	6200071989000030	6200070000QS0030	10/03/1989	2	6200070000QD0030		1 1		0.0	0.0
	6200071990000014	6200071988000005	01/15/1990	1	6200071987000004	13.0	/ /		0.0	0.0
	6200071990000016	6200071988000005	01/29/1990	1	6200071987000003	11.0	/ /		0.0	0.0
	6200071990000017	6200071988000005	02/02/1990	1	6200071988000001	11.0	/ /		0.0	0.0
	6200071990000018	6200071988000005	02/02/1990	2	6200071988000001	11.0	/ /		0.0	0.0
П	6200071990000019	6200071988000005	02/03/1990	1	6200071988000002	13.0	1 1		0.0	0.0
	6200071990000020	6200071989000013	03/10/1990	2	6200071989000011	9.0	/ /		0.0	0.0
	6200071990000021	6200071989000013	03/10/1990	1	6200071989000011	11.0	/ /		0.0	0.0
	6200071990000022	6200071989000013	03/27/1990	2	6200071989000009	11.0	1 1		0.0	0.0
	6200071990000023	6200071988000005	10/01/1990	1	6200071987000004	11.0	1 1		0.0	0.0
	6200071990000031	6200071988000005	01/29/1990	2	6200071987000003	12.1	1 1		0.0	0.0 🚽
I.										Þ

You can use the function keys to input dates, as described earlier, which will speed up the process. Then input the data, such as weaning weight, and repeat the process for all lambs in the group. When finished, click on **Close window** in the upper left corner. While possible to add records by clicking on the New record tab, it is a much slower process to input new records this way because the aids in repeating pedigrees and choosing sires and dams is not available with this screen. There is also a tab for deleting records but rarely will you want to use this. Remember that deleting an animal takes its data out of the group comparison which is the basis for the genetic analysis! If you have data that needs to be changed, you can easily do it in the **Main Database**. This is preferred to deleting a record and starting completely over.