# Pedigree Wizard Instruction Manual



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SHEEP GENETICS

6



Department of Agriculture Government of Western Australia





### <u>Contents</u>

Contacting LAMBPLAN 3

Section Number Title Page Number

- 1. What is LAMBPLAN? <u>4</u>
- 2.---Breeding Objectives and LAMBPLAN 4
- 3. Units of EBV's 5
  - 3.1 How You Can Use EBV's 5
  - 3.2 Selecting for More Than One Trait using a Selection Index <u>6</u>
- 4. LAMBPLAN and Visual Appraisal <u>6</u>
- 5. Downloading Pedigree Wizard <u>7</u>
- 6. Starting Pedigree Wizard <u>7</u>
- 7. What does the Main Window Mean? <u>7</u>
  - 7.1 Finding out your Breed Code **<u>8</u>**
- 8. Defining your Management Groups <u>8</u>
  - 8.1 Adding Management Groups to the List **<u>8</u>**
- 9. Identifying your Breed and Flock Code **<u>8</u>**
- 10. Adding Breeder Details **9**
- 11. Pedigree Identification System **<u>9</u>**
- 12. Adding Your Data to Pedigree Wizard **<u>9</u>** 
  - 12.1 Sire data <u>9</u>
  - 12.2 Progeny data <u>10</u>
  - 12.3 Using Add/Change instead of Quick Add 11
- 13. Deleting Demonstration Data <u>12</u>

- 14. Indexing your New Data into Spreadsheets 12
- 15. Exporting Data to LAMBPLAN 13
- 16. Receiving Information Back from LAMBPLAN 13
- 17. Personalising your Logos in Reports <u>14</u>
- Using Pedigree Wizard and EBV's to Construct Reports <u>14</u>
  18.1 Pedigree Printing <u>15</u>
- 19. Using Pedigree Wizard to Graph Reports <u>16</u>
- 20. Browsing and Data File Backup <u>16</u>
- 21. Total Genetic Resource Management (TGRM) <u>16</u>
  - 21.1 How to Flag Animals in Pedigree Wizard 17
    - 21.1.a Flagging Groups of Animals <u>17</u>
    - 21.1.b Flagging Individual Animals <u>17</u>

21.2 How to Clear all Flags from Animals 18

- 22. Advanced Tab <u>18</u>
- 23. Displaying all Entered Information About Individual Animals 18
- 24. Function Keys 21
- 25. Pedigree Wizard Updates <u>22</u>
- 26. Utilising the top toolbar on the main menu 22

26.1 File Menu <u>22</u>

26.2 Utilities Menu <u>22</u>

26.3 Data browsers Menu 23

26.4 LAMBPLAN <u>24</u>

26.5 Help <u>24</u>

27. Known Problems <u>24</u>

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## Web Pages and Email Links

www.lambplan.com.au email links from Web Page for LAMBPLAN personnel

The program Pedigree Wizard only stores EBVs, the BLUP model used to obtain these values is OVIS. Please contact LAMBPLAN head office for information regarding OVIS or Index Values.

Manual written by Sandra Brown and Fiona Jones, April 2002

#### 1. What is LAMBPLAN?

LAMBPLAN is Australia's system for describing genetic worth of animals used in the sheep and goat meat industry. The system is based on estimated breeding values or "EBV's". LAMBPLAN EBV's are calculated from raw data collected by breeders and accredited LAMBPLAN Operators. LAMBPLAN does not oversee or audit the collection of this data. LAMBPLAN EBV's are designed to give the best possible estimate of an animal's true genetic merit from that data, i.e. the estimate that maximises the correlation between EBV's and true genetic merit.

#### 2. Breeding Objectives and LAMBPLAN

LAMBPLAN does not attempt to impose any breeding objectives on breeders - this is the choice of each breeder, who may have different objectives for all sorts of reasons. LAMBPLAN offers a range of ways to rank animals including that specific for your breeding program.

There are three breeding objective options in LAMBPLAN for terminal sire breeds. These represent different emphasis on growth and leanness. In addition, breeders can choose their own combination of these two traits. The breeding objective options are:

• **High Lean** - aims at maximum reduction of carcass fat cover with little change in the growth rate. This objective gives the highest rank to animals with the lowest EBV's for fat. This objective will result in progeny that grow at similar rates to those of present-day sires, but have leaner carcasses.

• **High Growth** - aims at maximum increase in growth rate. It will give highest rank to the animals with highest EBV's for growth. This objective will result in an increase in growth rate of animals, but little change in fat cover at maturity. Faster growth rates of lambs will result in leaner carcasses at any given carcass weight.

• Lean Growth - aims to increase growth rates and reduce fat cover. Animals selected using this objective will have high EBV's for growth and low EBV's for fat. This objective is a middle path between the previous two. Growth rates and mature size will be increased, but not as rapidly as under HIGH GROWTH. At the same time carcass fat cover will be reduced but at a slower rate than under HIGH LEAN.

#### 3. Units of EBV's

An important feature of EBV's is that they describe genetic merit in the units of each trait. For example the EBV of an animal for weight is expressed in kilograms (kg). A ram with an EBV for weight of +1.0 kg has genes that are worth 1kg more than the average in the management group or flock.

Similarly for leanness, EBV's are expressed in terms of millimeters of fat (mm).

EBV's are produced across management groups within a flock when common sire links exist between groups. Where this is not the case EBV's can only be compared within a management group. The average EBV of all animals in a management group or flock for any trait is zero (0).

#### • 3.1 How You Can Use EBV's

EBV's are simple estimates of the genetic merit of each animal. There are three ways in which you can use them:

• EBV's can be used to help select genetically superior animals from your own flock. If the aim is to increase growth rate, then selecting the animals with the highest EBV's for weight should lead to the fastest genetic improvement in growth rate.

• EBV's are a powerful tool in buying breeding stock. Buying animals with above average EBV's from another flock means you should be getting that flock's genetically best sheep for those traits.

• EBV's can be used to estimate the genetic merit of the progeny of individual matings or of individual sires.

If a ram with an EBV for growth of +2.0kg is mated to a ewe with an EBV for growth of +1.0kg, the progeny is expected to be 1.5kg heavier (at 12 months) than progeny from parents with average EBV's, i.e.

EBV of progeny = 
$$\frac{1}{2}$$
(+2.0 + 1.0) kg = +1.5kg

Remember that the half is because each animal gets half its genes from the sire and half from the dam.

#### • 3.2 Selecting for More Than One Trait using a Selection Index

Selecting animals usually involves several traits. Traits can be combined in a Selection Index. A Selection Index combines EBV's for several traits to give the best overall basis for selecting breeding stock to achieve your breeding goals.

A Selection Index is constructed by weighting EBV's according to the relative importance of each trait. The three steps in producing a selection index are:

• Calculating EBV's for each trait

• Determining the Relative Importance (RI) of each trait. (section 2: Breeding Objectives and LAMBPLAN)

• Multiplying the EBV by its Relative Importance and adding for all traits.

A selection index for terminal sires would look like:

INDEX = [EBV(GROWTH) X RI(GROWTH) + EBV(FAT) X RI(FAT)] + 100

#### 4. LAMBPLAN and Visual Appraisal

LAMBPLAN gives you an estimate of your animals' genes for growth rate and fat depth (EBV's) and Selection Index values. These are powerful genetic tools to assist you in your selection decisions. Animals with economically important structural, reproductive or other faults should be culled. However if animals with high EBV's and Selection Index values are culled unnecessarily, genetic improvement in growth rate and/or leanness will be limited.

In selecting replacement breeding stock, a simple recommendation is to select slightly more animals than you need purely on the basis of their LAMBPLAN EBV's or Selection Index values. You should then go through this group and ensure that the final selections are visually acceptable.

#### **Beginning Pedigree Wizard**

#### 5. Downloading Pedigree Wizard

Go to the LAMBPLAN website at <u>www.lambplan.com.au</u> click on **DOWNLOADS** and click on **PEDIGREE WIZARD**. This may take over an hour to download onto your home computer so be patient. Follow instructions on the download page to install the program.

Alternatively a disk containing the program can be obtained from Fiona McLoughlin at the LAMBPLAN head office.

#### 6. Starting Pedigree Wizard

Once installed, click on START---PROGRAM---LAMBPLAN---PEDIGREE WIZARD 4. This will initiate Pedigree Wizard and update your data and program files. If it cant find existing program files it will start up with a demonstration data set.

#### 7. What does the Main Window Mean?

Below is the main screen menu (figure 1). You may have the heading "Demonstration Data", meaning that only demonstration data is contained in the program at this stage.

Marce Wizard for 482222							
<u>File Utilities D</u> ata browsers <u>L</u> AMBPLAN <u>H</u> elp							
48-2222							
Breeding & Pedigree Display	Today is Friday 01/02/2002						
Reporting & Utilities	C:\LAMBPLAN\PW4\						
Add/Change	Create backup Pack & Reindex						
LAMBPLAN EBVs and Indax v	alues are dated 10/05/1997 - analysis						
Quick Add	Groups Sire Pedigree Table						
Address Book	Validation & Data Quality						
Sires Locations Help	Close Pedigree Wizard						
Pedigree Wizard - Version 4.23 Nov 2001							

Later on when you add your own information in, the heading will change to your breed code and flock code, eg 48 (for Meat Merino) 2222 (for Joe and Mary Bloggs).

If you have entered your details into the address book (section 10) it will display your stud name.

Figure 1: Main window in Pedigree Wizard

#### • 7.1 Finding out your Breed Code

To find out what your breed code is, go to HELP on the toolbar (top left-hand corner of screen) and click on LAMBPLAN BREED CODES. Alternatively, go into ADD/CHANGE and click on BREEDs to find out this information.

#### 8. Defining your Management Groups

A management group identifies animals that are treated equally (e.g. you should not put hand-fed animals in the same group as flock animals as they are not in an equal environment). The same groups can be used for animals of different years and sex as the export procedure splits animals on year of birth and sex.

All animals should be recorded, even when animals are born dead (this will ensure that you create a record for each animal born and for each ewe having a lamb). Many people are using fictitious tag numbers for lambs which are born dead i.e. the first born dead is 029001 the next is 029002 (born in 2002 tag number 9002). See section 12.2 to learn how to add progeny to your database.

Note: LAMBPLAN does not charge for the input of dead animals onto the database.

#### • 8.1 Adding Management Groups to the List

Under the **GROUPS** button, either from the main menu or the Add/Change menu, you can view different management groups. Select **NEW** and enter the management group as required. Usually you should not need to delete any generic groups. Then exit back to the main menu.

#### 9. Identifying your Breed and Flock Code

Click on the UTILITIES MENU, and then USER PREFERENCE AND SETTING submenu. At USER, enter your breed and flock code. To work out your breed code, go to Section 7.1. You will notice (as pointed out in Section 7) that after entering your breed and flock codes the main menu title "Demonstration Data" has been replaced with your breed and flock codes. <u>However</u> this still contains demonstration data and will do so until you delete it. You will receive your flock code when you register with LAMBPLAN.

#### 10. Adding Breeder Details

Click on the ADDRESS BOOK button. On the right hand side select ADD, and then enter your client details under all sub windows POSTAL, BREEDER, CONTACT and any NOTES that are required. Exit back to main menu. To look up other studs click on LAMBPLAN on the toolbar and go to BREED AND FLOCK CODE DATABASE to find a list of studs (Not exclusive LAMBPLAN operators).

#### 11. Pedigree Identification System

The sire information needs to be a 16-digit code, which is the unique identification system for the animal.

As an example, animal 482222002020001 is:

48	is the breed code	for Meat Merino
2222	is the flock code	for flock number 2222 (i.e. Joe and Mary Bloggs)
2002	is the year of birth	for that animal
020001	is the tag number	1/2002

#### 12. Adding Your Data to Pedigree Wizard

#### • 12.1 Sire Data

Click on the SIRES button. If you would like to add new sires click on the NEW button on the toolbar and fill in the sire information. Otherwise edit your sire information here. Leave the PICKLIST field blank for sires not currently in use, and type the word "current" or a number greater than 1 in the picklist for current sires. To clear the picklists, go into UTILITIES and click on CLEAR SIRE PICKLISTS. PROGENY is the number of progeny that the listed sire has sired.

If you find that you have typed in all the information about a sire, but given him the wrong Pedigree identification number, you don't need to go through all the information to correct the mistake. To replace a sire number press the **REPORTS AND UTILITIES** button, click on the **ADVANCED** tab and click on **SIRE REPLACEMENT**. This will then update any references to the sire with his new number.

On the main menu there is a button called **SIRE PEDIGREE TABLE**. This displays pedigree information built from your records and is listed in generations, ie G1 is generation 1 etc.

#### • 12.2 Progeny Data

The easiest way to add progeny data is to click on QUICK ADD. Make sure that the prefix is correct for your information that you are about to type in. This needs to be 12 of the 16 letters, i.e. the breed code, flock code and year of birth. If it isn't correct place the mouse pointer over the information and left click on it, then type in the correct code.

Check that the TEST TYPE information is correct by clicking on the weaning title and reading the list of choices. Do the same for INFO TYPE. TEST DATE is automatically defaulted at today's date. If you weighed the lambs a week ago and that's the data that you want to enter today, then change to the date the lambs were weighed on (eg one week ago).

Place the cursor in the ID box and type in the 4 digit ID for the animal. However if the animal is number 1, then you only need to type in 1. Because you have already checked the prefix above, you only need to enter the tag number. Then hit the **OK** button. If you have not entered any data on this animal before it will ask you if you would like to add this animal as it was not found. Press **OK**.

Pick the sire either from the CURRENT SIRES, ALL SIRES OR ALL MALES picklists, this should also be completed for the dam. If this information is not in the picklist you should go back to the main menu, click on the Sires button and enter the sire details in.

Then type in the progeny information - sex, birth type (eg one of twin or triplet), rearing type (1 is reared alone, 2 is reared as a twin etc), DOB, conception and birthweight.

Select the **GROUPS** button and enter the management group in which this progeny has been running, then press **SAVE**.

When you next enter the animals tag number a new screen will come up (Figure 2).

There is space to put in a comment, press ENTER and you can type in the *weaning weight*, press ENTER and you can put in the *date that this weight was measured*.

You will notice that the *animals' age* is automatically calculated at the bottom of the page. You will also notice that the *status* for the animal in the example above is dead. If the animal has died after a birth weight was obtained and before a weaning weight

was obtained this is still valuable information. Or if the animal is a cull or sold, please change the status.

Press ENTER until you reach the bottom of the screen and it will ask you whether or not you want to save the details. Press ENTER again to save and return to the previous page.

On the initial QUICK ADD screen you will notice that in the bottom left hand corner you can select extra information such as *EBV's, scan or fleece data*. In the example above (Figure 2), the other information selected was the **EXTRA AS WEIGHTS AND SCAN DATA** option. Click this option and press **OK**. This information is presented in the coloured bands at the bottom of the screen (Figure 2). To exit from this screen you can either press **ESCAPE** or press **ENTER** until you have completed the screen.

Next time you want to put in the early post weaning data for the progeny, from the main menu choose QUICK ADD  $\rightarrow$ TEST TYPE (EARLY POST WEANING) $\rightarrow$ Change date and type in animal id.

0199	991995	5950	005										-   🗁 🛛 🕊   2
ID	01		9999	-199	95-	95	000	15	ire am			929200 929200	_
	Sex		1	DOB	22,	/04/9	5	Birth	wt	3.5	Statu	5 Dead	I
	Com	men	t <mark>HIGH F</mark> Weig Date Grou	Weanin ht 12. 01/0	Gro 9	up 1	<u> </u>	CONFIR ID Drop		EBV T	O BE C	ORRECT	<b></b>
-		or 01	Age 40 3999199595000 9 - 93 2		Yfd		0.000			40.00	-00 -	01. 540	
	Ywt Yfat		0.032 3.329				0.000			60:20 80:10		94.510	
	Yend		1.034		Nlw		0.030				Purp :	99.200	
	Wwt	:	-0.900		N1b	:	0.043				orth :	0.000	9
	Bwt	1	-0.019		Ycfw	:	0.000			Corrie	dale :	0.000	3

Figure 2: Quick add screen 2

• 12.3 Using Add/Change instead of Quick Add

Instead of using the QUICK ADD button on the main menu, you can enter progeny data by clicking on the ADD/CHANGE button. There are drop down menus for Breed, flock and ID. Once on the Add screen you can select the sire and management group from the picklist. You have to type in the entire 16 digit code in the ID box. To shortcut this process, click on F5 to F8 (see section 24) and then type in the animals tag number. You

can also enter in basic measurements for the animal, using the tab or enter key to move onto the next record.

#### 13. Deleting Demonstration Data

Before deleting the demonstration data, make sure you have at least one of your own records in the program. If you don't and you delete all the data from the file, an error message will come up and you won't be able to use the program anymore. Once back at the main menu, click on BREEDING AND PEDIGREE DISPLAY. Click on BROWSE. Click on the record you wish to delete. Go through and delete all lines not relevant to you by clicking with the mouse on that row and pressing DELETE from the toolbar. There is no undo button so be careful!! After deleting all the records you do not need, go back to the main menu and click on PACK AND REINDEX. Alternatively you can go to the UTILITIES menu on the toolbar and click on PACK AND REINDEX there. Without packing and reindexing the files, the program will have marked certain files as deleted, but they will still be in the program taking up space.

#### 14. Indexing your New Data into Spreadsheets.

After entering all your progeny into the database you now have to validate the data. Choose the VALIDATION AND DATA QUALITY button on the main menu. You will notice a TRAIT RANGES button, which gives you the minimum and maximum values for all traits. Now press VALIDATE DATA. This is important because it ensures your data entry has been entered correctly. There are five possible errors you may get.

- **Code 1** All problems with a 1 are serious and must be fixed before exporting data.
- **Code 2** Outside range and should be checked as may cause problems.
- Code 5 Unable to locate basic extended pedigree (Sire of sire)
- Code 6 Unable to locate basic extended pedigree (Sire of dam)
- Code 9 Outside range and should be checked.

The program will ask you which year, group age spread, dam inconsistencies etc you want checked. Press **DO IT** to the categories you want checked. Notice that the Problems Found Table has the first column devoted to the error status (i.e. code 1,2, 5, 6 or 9). To print out Pedigree and data warnings press **EXIT** and the program will ask if you want to print out the error table, press **YES**. It will then ask you if you want to print only the serious warnings, so answer that question.

Go back and fix any problems the validation has found. To fix codes 5 & 6 enter information on the sire of a sire or dam. Ignore the error message if you don't have the

information, or the animals are not in use anymore. Then validate the data again. Do not export data using the EXPORT DATA button on the EXPORT AND DATA VALIDATION screen. This is because there is an easier way of exporting data. Press EXIT EXPORT AND DATA VALIDATION button and on the main screen press the CREATE BACKUP button.

You will also find on the VALIDATION AND DATA QUALITY screen a DATA QUALITY button. This calculates your data quality grade. However these grades are only a guide.

#### 15. Exporting Data to LAMBPLAN

Create a backup either onto a floppy disk, cd or hard drive. Select a destination for the backup, ie a: drive if you send your information to LAMBPLAN on disk by mail, or c: drive if you are going to email it as an attachment. Use the default file name of the flock code, for example Joe and Mary Bloggs would name their file 482222. Write down the location of the file so when you email it as an attachment to LAMBPLAN you can remember where you stored it. This is an easier way of exporting the data than using the exporting key. Then press the PACK AND REINDEX button, which will rebuild the index files.

#### 16. Receiving Information Back from LAMBPLAN

LAMBPLAN only need to send back the EBV's, because everything else the producer should already have. It will be sent back as an executable file (\*.exe), so be aware of viruses (You may be able to download a virus scan from the Internet). Double click on the executable file (attachment) and as it opens it will automatically update the EBV's in Pedigree Wizard. If you don't have email, LAMBPLAN will send you a disk containing your EBV's.

Once you have updated your files on Pedigree Wizard you don't need to keep the email/disk anymore.

Then go into Pedigree Wizard. Select **REPORTING AND UTILITIES** 

 $\rightarrow$ Select the LAMBPLAN tab

->Select UPDATE PEDIGREE FROM LAMBPLAN ATFEBV FILE

→Select ADD PEDIGREE FROM LAMBPLAN ATFEBV FILE

The UPDATE ATFEBV. DBF FILE button is obsolete.

This will give alerts so press yes to the ones you agree to. These alerts add in any missing information. For example if you have a sire but don't know about its ancestors it will add this information from the national LAMBPLAN database. Some people want this information, others don't. It's up to you, however it will add value to your data set.

The CONTACTING LAMBPLAN button is an HTML link to the email addresses. Press CLOSE when completed.

#### 17. Personalising your Logos in Reports

To insert your logo into the reports, you must save your logo over the generic logo already in the reports. Press START  $\rightarrow$  PROGRAMS  $\rightarrow$  WINDOWS EXPLORER  $\rightarrow$  LAMBPLAN FOLDER  $\rightarrow$  PW4  $\rightarrow$  USER.BMP. Minimise this screen and then open up your logo document so that both documents are open. The report can only handle logos that are 200x200 pixels.

If your logo <u>is</u> a .bmp format go back to the user picture (FILE  $\rightarrow$  USER) and press EDIT  $\rightarrow$  SELECT ALL  $\rightarrow$  CUT. Then go to your logo (FILE  $\rightarrow$  YOUR LOGO) and press EDIT  $\rightarrow$  SELECT ALL  $\rightarrow$  COPY, FILE  $\rightarrow$  USER, EDIT  $\rightarrow$  PASTE, FILE  $\rightarrow$  SAVE. The computer will ask if you want to overwrite the existing file, say YES.

If your logo <u>is not</u> a .bmp format go to the user picture (FILE $\rightarrow$ USER) and press EDIT $\rightarrow$ SELECT ALL $\rightarrow$ CUT. Then go to your logo and press EDIT $\rightarrow$ SELECT ALL $\rightarrow$ COPY, FILE $\rightarrow$ USER, EDIT $\rightarrow$ PASTE FROM, Select your file name from windows explorer, FILE $\rightarrow$ SAVE.

Because the report can only handle a picture 200 x 200 pixels you may need to fiddle around with IMAGE—ATTRIBUTES to see how big your logo is and then the IMAGE—STRETCH/SKEW to reduce the size of your logo (e.g. by half). Close down both the new user document and your old logo document. Your logo will now be incorporated into any requested "Pedigree Printer" reports that you make.

#### 18. Using Pedigree Wizard and EBV's to Construct Reports

NOTE: EBV's must have been downloaded from LAMBPLAN (Section 16) before you can go any further.

On the main screen (figure 1) press the **REPORTING AND UTILITIES** button. Click on the **REPORTING** tab to bring up the **REPORTING AND GENERAL UTILITIES** screen (figure 3). The scroll down menu is a list of all the reports you can construct from the data. There are over 100 reports to choose from. Select a report by clicking on the desired report then click on **PREVIEW REPORT BUTTON**. To refine your report a list of data sets will appear on the screen, you can choose from these options to construct your report. The following data sets will narrow your selection; year, sex, group, flagged animals, status (ie dead, cull), breeding, location and sire.

Use the toolbar in the top left-hand corner to zoom in, zoom out, print pages and skip to next pages of the report. You will have to close the window containing your report before you can continue with another report. To view your logo, choose from reports 47 to 55 (Pedigree Printer reports). Reports 2 to 38 are EBV reports, reports 40 to 46 display Pedigrees for different characteristics, 57 is data quality and so on.

		gen	eral	ntilities
Reporting	EBV's Data files LAMBPLAN	TGRM	Advanced	About
2	Pedigree Printer - Meat EBVs			
3	Pedigree Printer - Wool EBVs			
4	All Test information			Preview report
5	Weaning Test information			
6	Post weaning Test information			
7	Yearling Test information			
8	Hogget Test information			
9	Adult Test information			
10	Body Weights			
11	Visual score information			
12	60:20:20			
13	60:20:20 ID			
14	Dual Purpose			
15	Dual Purpose ID			
16	Coopworth			
17	Coopworth ID			



#### • 18.1 Pedigree Printing

The pedigree of an animal may be printed from within the program. There are 2 types of pedigree printing.

- PRINT SCREEN this is a basic screen dump of the pedigree screen to the printer. Press the PRINT SCREEN button on your keyboard. It's next to the Scroll Lock and the function (F) keys. Then open a new word document or works document and press EDIT then PASTE or just hit the PASTE Icon. You can then print the Word document.
- 2) **PRINT REPORT** This will invoke the reporting program to print the pedigree in Landscape mode on the printer. While you are previewing the report you will notice that the 2 icons in the top left hand corner allow you to print out the whole report, or print the current page.

#### 19. Using Pedigree Wizard to Graph Reports

On **REPORTING AND UTILITIES** screen click on **EBV** tab. This will give you a choice of different graphs, which can be printed off.

#### 20. Browsing and Data File Backup

Click on DATA FILES TAB (Figure 3) to browse all background tables including data, groups, EBV's, sires, traits, breed codes and make backup files.

Like most programs Pedigree Wizard uses a data file to store your information on the hard disk inside your computer. If the hard disk fails or your computer is stolen the data files for PW can be rebuilt from the latest backup. If you have not made a backup for 6 months then after restoring your data files the program will be the same as it was when the backup was made.

A backup to a floppy disk should be stored away from your computer, maybe in another location or building. When storing floppy disks wrap in tin foil and place in a plastic bag for greater protection.

To restore from a previous backup click on the UTILITIES menu from the toolbar, go to **RESTORE FROM PREVIOUS BACKUP**, select file location and press okay.

To do monthly backups go to the UTILITIES menu and click on FORCE MONTHLY BACKUP, this will backup quickly onto the hard drive. Alternatively go back to the MAIN MENU and click on CREATE BACKUP.

#### 21. Total Genetic Resource Management (TGRM)

Press the **REPORTING AND UTILITIES** button and then click on the **TGRM** TAB. TGRM is a tool available to LAMBPLAN clients to assist with mating decisions. TGRM enables breeders to capture both immediate and long-term benefits by optimising mate allocation decisions. These include maximising progeny index value in the next generation at the same time as minimising inbreeding. LAMBPLAN clients need to contact their local TGRM operator (Bronwyn Clarke in WA) and organise a TGRM run. The cost of a TGRM run can be found on the LAMBPLAN website.

The information that needs to be supplied to the TGRM operator includes:

- Number of matings (including AI)
- Level of inbreeding desired

- List of female candidates
- Selection of sires (including home bred and/or AI)
- Number of mating paddocks
- Breeding objective

The output supplied from the TGRM run includes:

• The list of sires chosen for breeding and the number of times each ram is to be used

• The full mating list, indicating which rams should be mated to which ewes and the predicted index and EBV values for the resultant progeny

LAMBPLAN clients wishing to use TGRM should flag female and male candidates for use in their TGRM run.

#### • 21.1 How to Flag Animals in Pedigree Wizard

There are two methods of flagging animals. Either flagging a group of animals or flagging animals individually.

#### 21.1.a Flagging Groups of Animals

To select a group of animals such as all males or all females, go to:

- Reporting and utilities (Main screen)
- Advanced tab
- Sale printing button
- Quick Flag button
- Choose desired flags i.e. all, male or female by year of birth

#### 21.1.b Flagging Individual Animals

There are 2 methods of flagging animals individually. Select:

- Breeding and Pedigree Display button
- Browse button
- Change flagged column (column 2) Yes or no

OR the alternative is to select:

- Breeding and Pedigree Display button
- Flag tick box (top right hand corner)
- Select to flag that animal

#### • 21.2 How to Clear all Flags from Animals

To clear all the flagged animals return to the MAIN MENU TOOLBAR and click on UTILITIES. Then click on CLEAR ALL FLAGS ON ALL ANIMALS.

#### 22. Advanced Tab

The final tab under the **REPORTING AND UTILITIES** button is the advanced tab.

**Index calculator** - build up your own selection index. Make sure you are aware of economic values of EBVs before doing this.

**Sire Replacement** - Enter the incorrect Sire Id and then the correct ID. This will change the ID throughout the program.

**Calc. Gfw** - Calculates greasy fleece weight if missing and the clean fleece weight and yield are present.

Calc Cfw - Calculates cfw if missing and gfw and yield are present.

Calc yield - calculates yield if missing and gfw and cfw are present.

Calc Ema - Calculates eye muscle area if missing and depth and width are present.

Build flag file - creates a dbf file that contains only animals that are flagged

Replace ?? with "??" or "Exp" - used here to move or manipulate data.

#### 23. Displaying all Entered Information About Individual Animals

Click on the **BREEDING AND PEDIGREE DISPLAY** button (figure 4). At the top of the screen the current animal id along with its Sire & Dam Id's and Birth Management Group information are displayed. Buttons along the bottom of the display screen are described as follows: (figure 4)

PREV	Previous animal in database
NEXT	Next animal in database
PEDIGREE	Pedigree display window, gives you the option of clicking on the animals id number to check out the animals measurements. See Figure 5.
PICKLIST	Text search for required ID. Allows you to choose a sire or dam and the corresponding progeny will be displayed.
PRINTING	Gives you the option of only printing a certain report for the current animal.
BROWSE	Browse data base (use the delete menu item with caution as there is no undo feature).
EXIT	Close Breeding & Pedigree Display and return to the main screen.
Visuals	Displays the 12 visual traits with stand classing values. The last 3 Visual traits names can be changed for your needs in the UTILITIES $\rightarrow$ USER PREFERENCES AND SETTINGS menu.

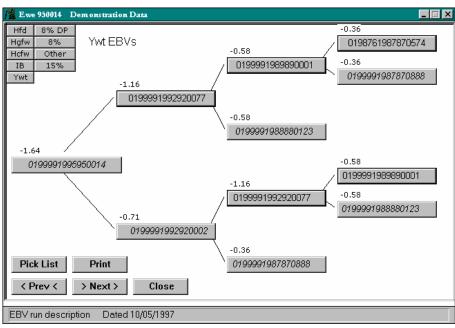
Grp Identifies all animals in the group that the current animal is in.

Counts the number of animals in the current animals' management group, and works out the average, standard deviation, minimum and maximum values for a number of traits for the group.

/ Display					
Q <mark>36222</mark>	22000000	0002 0199991992920077 Help			
Sex: 2	23 Generals or				
Breeding Lamb	Adult Wool Woo	ol+ EBVs Misc eXtra Note Physical % Visuals			
Sex	2 Female 💌	Change Group Change Sire Grp			
DOB	06/04/2000	Conception 1 Natural 🗾 Lamb %			
Birth weight	2.5	Conception date / / Gest			
Birth type	1 Single 💽	Breeding Pure Breed %			
Reared as	1 Single 💌	Lambing ease 1 no assistance 🔹			
Location	1 Home Property	Ewe joining wt 0.0			
Status	Current 💌	Recip ewe			
Comment					
Prev <					

Figure 4: Breeding and Pedigree Display page

%



**Figure 5**: Pedigree display window. Click on the individual animal Ids for more information.

There are 9 buttons across the center of the screen for *Breeding, Lamb, Adult, Wool, Wool +, EBV's, Misc, eXra, Note, and Physical* that are referred to in the pages below.

#### Tab 1 Breeding

- Individuals basic breeding information
- Options to CHANGE GROUP or CHANGE SIRE of current displayed animal
- **GEST**ation period in days (once date of birth and conception date have been entered)
- LAMB % button is for that years drop
- LOCATION of animal can also be entered here.

#### Tab 2 Lamb

- Weaning, Post Weaning and Yearling meat trait information
- **GROUP AVERAGES** button will calculate averages for meat sheep information for the current group of animals
- GROUP PRINTING opens the report module for the current group of animals
- SCROTAL CIRCUMFERENCE and FECAL EGG COUNT measurements can also be added
- DOB SPREAD button for the current management group

#### Tab 3 Adult

- Hogget and Adult meat trait information
- Same information can be recorded as Tab 2 Lamb

#### Tab 4 Wool

- Yearling, Hogget and Adult wool trait information (excluding length and strength)
- **GROUP AVERAGES** button will calculate averages for wool information for the current group of animals

#### Tab 5 Wool +

• Record of fibre curvature, staple length and staple strength measurements for yearling to adult.

#### Tab 6 EBVs

- Display current animals EBVs and Index values from LAMBPLAN supplied data file
- EBV data file can also be browsed at this stage ( no edit )

#### Tab 7 Miscellaneous

- Data entry for registrations and brands of the current animal
- Browse address book by STUD, PROFILE or BREED & FLOCK CODES
- Quick reference browser for current animals IDs , this animals Sire or Dam
- Display Full / Half Siblings
- Breed codes by name or number
- Alternatively, to determine progeny of a particular sire or dam, go back to MAIN MENU →DATA BROWSERS→PROGENY OF SIRE/DAM→SELECT SIRE/DAM to choose parent, then click on browse which will table the progeny.

#### Tab 8 eXtra

- Enter dag scores throughout life
- Teat count, Bodylength, staple length, wool grade, quality and colour measurements
- Animals electronic id

#### Tab 9 Note

- View notes to edit or add comments for current animal or its Sire or Dam
- Comment for current animal
- Dam breeding history (If Current animal is a breeding ewe )
- If you want to find an animal that you have written a comment for using a key word go back to MAIN MENU→UTILITIES→BROWSE FOR TEXT IN COMMENTS→enter your key word.

#### > <u>Tab 10 Physical</u>

• You can record the following measurements here; Bodylength, mouth, face cover, shoulder width, front feet, hocks and pasterns characteristics and muscle score and testicle number.

#### 24. Function Keys

- F1 Go to help screen
- F2 Print screen
- F3 Double vision

**F5 - F8** These keys can be set up under user preferences to automate data entry fields is press UTILITIES—USER PREFERENCES AND SETTINGS. This allows you to have

your breed code, stud code and year of birth automated so you only have to type in the animals tag number in QUICK ADD.

F10 Menu

Special keyshortcuts in Breeding & Pedigree Display onlyF3Pick ListF9copies basic pedigree to clipboard (text)Page UpPrevious recordPage DownNext record

#### 25. Pedigree Wizard Updates

Pedigree Wizard is updated about 5 times a year. When Pedigree Wizard is updated a description of the updates is put onto the web. You can find the latest copy of Pedigree Wizard and the actual updates by doing the following:

Go to www.lambplan.com.au Click on **DOWNLOADS** Click on **PEDIGREE WIZARD** Scroll down the page until you reach the updates.

#### 26. Utilising the top toolbar on the main menu

You will notice the headings *File, Utilities, Data Browsers, LAMBPLAN and Help.* These are handy drop down menus that may already be described throughout the manual. However they are grouped here for your convenience.

- 26.1 File Menu
  - Browse dbf data file This command allows you to access all separate data files that are used in Pedigree Wizard. You should not need to change these.
  - > eXit Exits the program.
- 26.2 Utilities Menu
  - Clear sire picklist Clears all sires placed in extra lists. From the main menu go into SIRES. Note that the first column (named picklist) has some animals with a 1 or 2 next to them. If you clear the picklist these values will be cleared.
  - > Restore from previous backup This is another avenue to back up your work.

- Pack and reindex all files Do this after you have completed all validations and fixed all errors. See section 15.
- > Edit dbf This is for editing dbf files. A password is needed to access this.
- Browse for text in comments Any comments that you have added can be quickly referenced from here. For example type in the word you wish to find in the comments column (ie BBQ) then press BROWSE, and all entries with the word BBQ in the comments column will appear. In this example the whole comment was "high fat EBV 2.9, BBQ confirmed EBV to be correct".
- User preferences and settings F5 to F8 are prefixes that can be used as shortcuts in the Quick Add section. From the main menu click on QUICK ADD, then highlight the prefix area and press F5. A new prefix is typed in for you.
- Advantage Pak 1 You can rearrange test data, however be careful with this command, or at least have recent backups. You can also calculate averages of group information, and find out about the reproductive history of a certain dam. You can't do subsequent steps until step 1 is completed.
- > Advantage Pak 2 This hasn't been written yet.
- > Clear all flags on all animals See section 21.1 in the manual
- Force monthly backup This is another way of backing up your data. It doesn't automatically back up every month.
- Text importing If you get data from an outside source that you want to include and it is in a spreadsheet format it can be imported using this function. For advanced users, use with caution.
- > Date calculator Input the start and end dates and the calculator will work out how old the sheep is in days, weeks, months and years. Also handy to work out how old you *really* are!!!
- > Calculator Access to a normal calculator. Either position the mouse over each number to enter or press the keyboard numbers to do the calculation.

#### • 26.3 Data Browsers Menu

To use any of the following options select how you would like to browse the lists. If you wish to browse by date of birth then select this, or sire or dam etc. you can also select a certain year or all years to go through. By choosing HOGGET INFORMATION and selecting on the basis of DATE OF BIRTH the table will be in placed in this order for hogget information.

Progeny of Sire - Press SELECT SIRE and choose the sire, then press BROWSE and all progeny from that sire will be displayed.

- Progeny of Dam Press SELECT DAM and choose the dam, then press BROWSE and all progeny from that dam will be displayed.
- 26.4 LAMBPLAN
  - LAMBPLAN elite animals' reporter You need to download this program off the LAMBPLAN website before this function can be used.
  - > Breed and Flock codes database lists all breeds and flock codes, and the corresponding stud address details. Not just LAMBPLAN breeders.
  - > Contacting LAMBPLAN Details provided to access LAMBPLAN
  - > LAMBPLAN on the web If you want to connect immediately.
- 26.5 Help
  - > Pedigree Wizard Help If you have web access.
  - About Gives details about the Pedigree Wizard Version you have installed, web site address, Stephen Fields e-mail address and phone number, and the double vision homepage.
  - > LAMBPLAN breed codes A list of the breed codes.
  - > Updates from previous versions of ATF or PW For when you want to copy old data files to current program data.
  - > Trait ranges and codes Gives you the minimum and maximum values for the ranges as well as their abbreviations.
  - > Index Type in the subject you wish to find.
  - > Contents Go through the alphabetical subject listings for extra information.

On most screens you will find a help menu for that screen. You will also find on the **MAIN MENU** a **HELP** button for an index of topics.

#### 27. Known Problems

In some fast computers an error box will appear when the user has pressed the escape key to exit (close) a browse window. Pressing the Ignore button three times at this stage will not cause a problem.