



Genet- Assist

Beef Herd Genetic Analysis & Management System

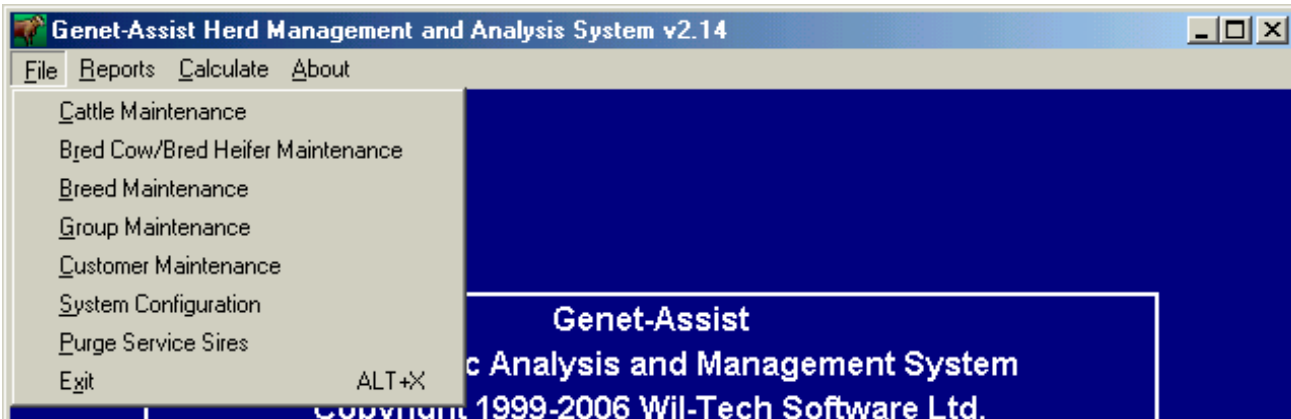
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Demo Instructions

The **Genet-Assist** Visual FoxPro® platform makes it one of the fastest, most powerful programs of its kind. Pull down menus make it easy to use - options are always clearly visible. Menu selections can be made with a click of the mouse or with the use of *hot keys* (underscored alpha characters).

The introductory screen (below) presents **File**, **Reports** and **Calculate** options. The **File** popup is shown below.

It offers **Cattle Maintenance**, **Bred Cow/Bred Heifer Maintenance**, **Breed Maintenance**, **Group Maintenance**, **Customer Maintenance**, **System Configuration**, the option to **Purge Service Sires**, and program **Exit**.



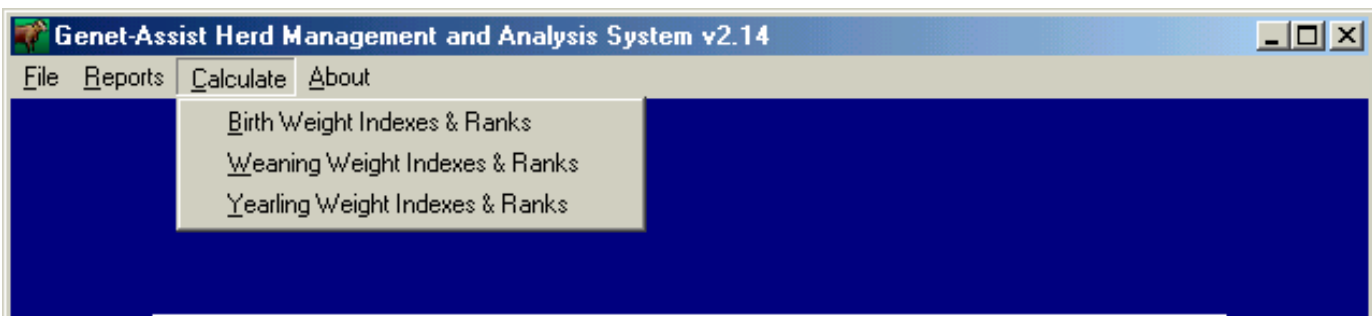
Each of the above options will be discussed in some detail below. The **File** menu popup is chosen by clicking **File** or by taking an <Alt> + <F> 'Hot' key combination. The individual options may be chosen by moving the mouse cursor onto them and clicking the leftmost button. Or they may be chosen by taking the option *hot key* which is the underscored alpha character in the name of the option. The use of hot keys tends to be quite a lot faster than selection with a mouse. If you wish to escape without making changes while in a screen or screen overlay, the easiest way out is to simply press the <Esc> key. If data has been entered into the overlay, it is sometimes necessary to take <Exit>, <OK>, or <Done>.

Commercial producers wishing to have all animals ranked and indexed as a single group, when entering the breed of each animal, should enter it as 'other'. This makes available a set of age of dam adjustments for breeds and crosses not specifically mentioned. The alternative would be to enter a new breed called 'Commercial' or change 'other' to *Commercial* in 'Breed Maintenance' (see page 3) and use this new breed for all animals. Preferred adjustment factors can be entered as well for this new breed. In either case, the actual percentage breed mix should be entered in the comments field at the middle of the 'Cattle Maintenance Screen'.

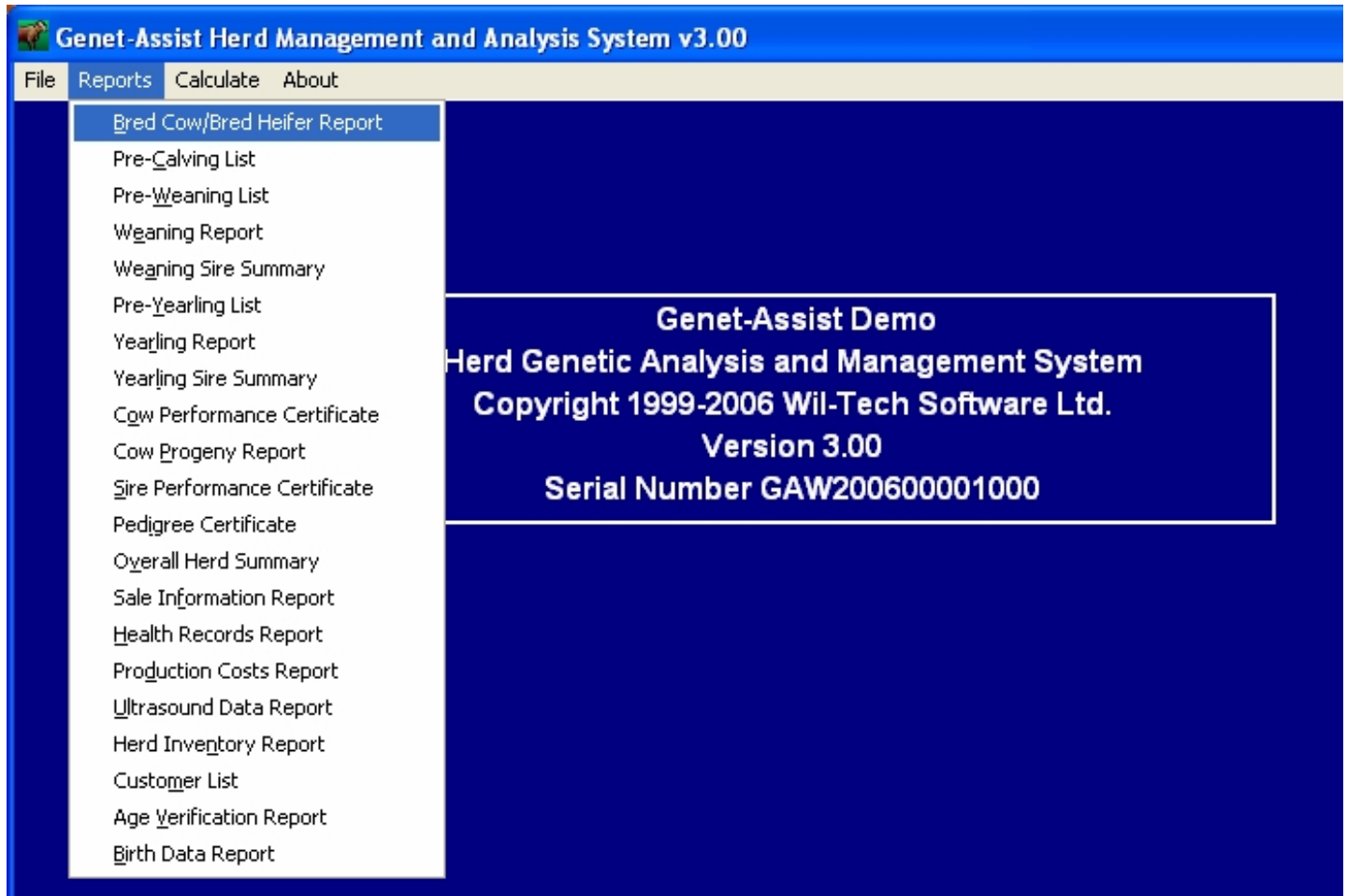
Note: The capabilities of the Demo are limited by the database. In the demo database are sires, reference sires and dams dating back a number of years, as well as Y, Z, A, B, C and D calves. Birth weights and dates only are entered for 'D' calves. Yearling weights have not been entered for 'C' (1993) calves. Bred Cow/Bred Heifer information for 'D' calves is still in the database.

Reports (page 7) should be printed before database changes are made - after SYSTEM CONFIG (Pg 2) would be a good time.

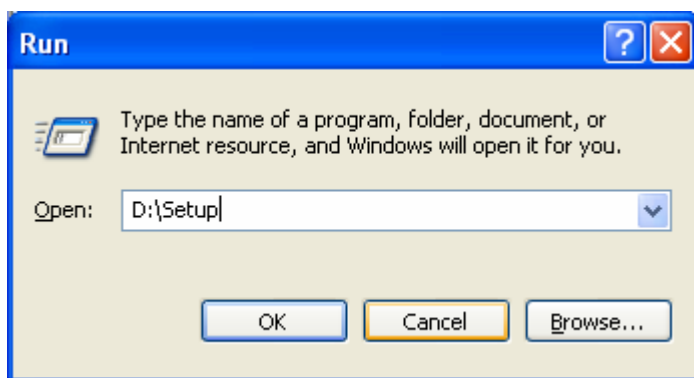
The '**Calculate**' options are shown below. Adjusted Birth weights, Weaning weights, or Yearling Weights together with their rank and index may be calculated at any time for calves born in any year.



Genet-Assist Reports provide a powerful tool for comparison and selection within the herd. Animals on summary reports are listed by group in rank order to simplify comparison. Guesswork is eliminated. With **Genet-Assist** anyone can scientifically manage a cow/calf operation. Reports offered at this time are shown in the screen popup below. Reports are available on the screen, the printer, or they may be sent to a file to be used in a particular way later on. Reports are accessed by clicking Reports at the top of the screen. The individual reports can be selected by clicking on them with the mouse or by taking the appropriate 'Hot Key'.



Program Setup: It is assumed the Demo CD will go into Drive D: If not, substitute the appropriate drive letter for D below.
In Windows 98, ME, 2000, XP: Put the CD into the CD-Rom. If the installation does not start on its own, take <Start>, then <Run>. In the "Run" window type D:\Setup and take <OK>. The installation will start and install the demo.



Running the Demo:

In Windows double click the **Genet-Assist** Icon or take <Start>, <Programs>, 'Genet-Assist Demo. That opens the introductory screen offering 'File', 'Reports' and 'Calculate' options. Before going any further it is necessary to configure the program for your particular operation.

SYSTEM CONFIGURATION: In the introductory screen take 'File', then '*System Configuration*' to reach the screen shown below. It is here that the program is configured to your needs.

The year should be set to the year in which you wish to work. This provides a default year for record entry and for report dates. Enter the name of your farm or ranch.

A check mark [√] in a checkbox signifies that the option has been selected. A selection may be toggled on or off by clicking a checkbox. Click "[√] Adjust Birth Weights for Age of Dam" to change the status of that selection (take out an existing [√] or put an [√] where there was none). The highlight bar can be moved from field to field with a cursor (arrow) key or to a particular field by clicking on the field.

De-select Age of Dam Birth Weight Adjustments. Move back and select it again. You can likewise select or de-select Age of Dam Adjustments for Weaning Weights.

If adjustments for Birth and Weaning weights were used, they would be the May, 1993 adjustments used by the Beef Genetic Improvement Program or the ones entered using the Breed Maintenance option. The adjustment tables used are included in the

Genet-Assist user guide.

System Configuration

Current Year 1996

Organization Flat Valley Farm Ltd.

Address R.R. #2

City, Province Hilda , AB **Code** T0B 3V3

Adjust Birth Weight for Age of Dam **CCIA PIN** 895462

Adjust Weaning Weight for Age of Dam **Date Format** 2006/04/08

Find only entries that match ALL input **Next Customer No** 81

ME200 Day Weight **Display ranks in increasing order**

ME205 Day Weight **Display ranks in decreasing order**

Report Defaults

Default Destination **Printer** **Screen** **File**

Default Filename REPORT.CSV

Default File Type Comma Separated Text

Age Verification Report Last Exported 2006/04/08

Birth Data Report Last Exported 2006/04/08

Done

To do a record search in the 'Cattle Maintenance Screen' you might put an 'F' for **Sex**, a 'Y' for **Twin**, and a 'Y' for **Creep Fed**. If you had selected "[√] Find only records that match ALL input" the females that are creep fed twins would be found. De-selecting this option would cause the computer to find all animals that are female, **or** twins **or** creep fed.

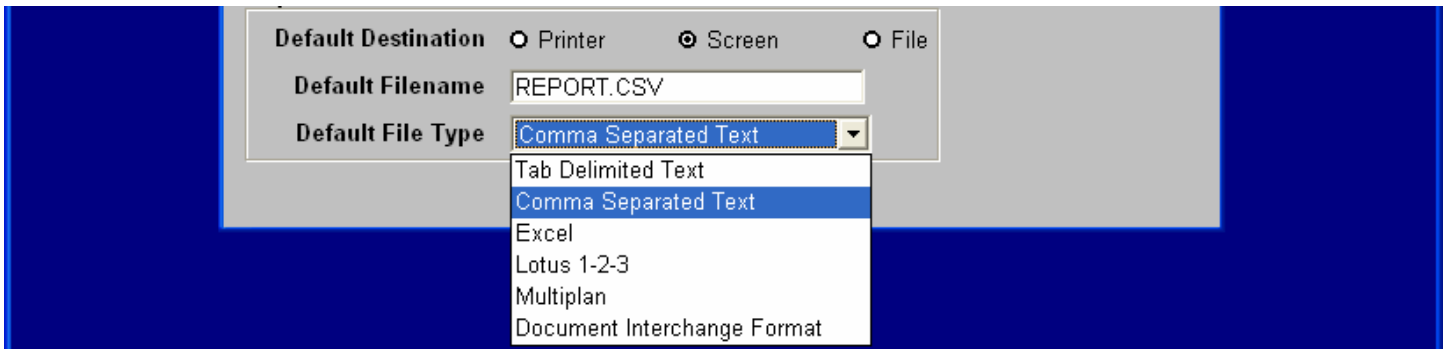
Press <Enter> when the highlight is on date format. The present date is shown in seven different ways. Select the one you prefer. All dates will now be shown that way and all dates entered will be entered that way.

You may choose to have the computer calculate adjusted 200 or 205 Day Weights. Make your selection.

You may choose to have animals in reports shown in increasing or decreasing rank order. Select the order you prefer.

The default destination for reports written within the program can be set to the printer, the screen or to a file. The preferred destination would likely be to the screen.

Reports may be sent to a file for subsequent inclusion in Excel, Ms Word, or some other program. If 'File' is chosen, the default type must be chosen as well. As the file type is changed, the default filename changes as well. Excel files for instance have a .XLS extension, comma separated files, the type used in Age Verification reports to the CCIA, have a .CSV extension. You might want to change the name of the report from Report.CSV to Age_Verification_Report.CSV.



As you will see, the <Options> button in the individual report screen can be used to select the destination and, if it's a file, the file type. At this stage it would probably be best to set the default destination to 'Screen'.

And finally, at the bottom of the System Configuration screen are the dates the 'Age Verification Report' and the 'Birth Data Report' were last exported to a CSV file. This will tell you when you last sent that data to the CCIA or to your breed association.

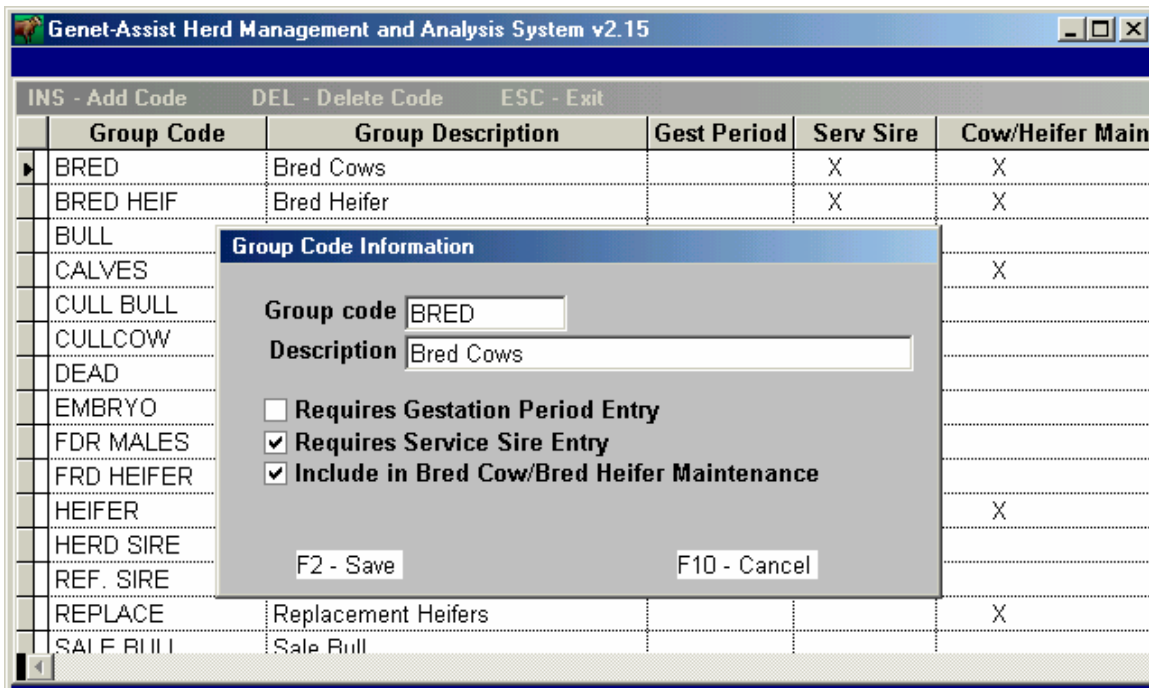
File Menu Options:

Select **File** to bring up the file options.

Click **'Purge Service Sires'** {<P>}. The next screen explains that this option takes out the service sire tags from last year's bred cow and bred heifer records in preparation for registering a new group of bred females. Since that option is chosen, exposure, observed, and due dates would also be removed. Press <Esc> or click <Exit> to exit without doing the 'purge'. We won't do anything more here for now.

GROUP MAINTENANCE:

Click **File** then **Group Maintenance** {<G>}. This brings up the group maintenance screen shown below. The highlight is on 'Bred Cows'. Press <Enter>. The screen below appears.

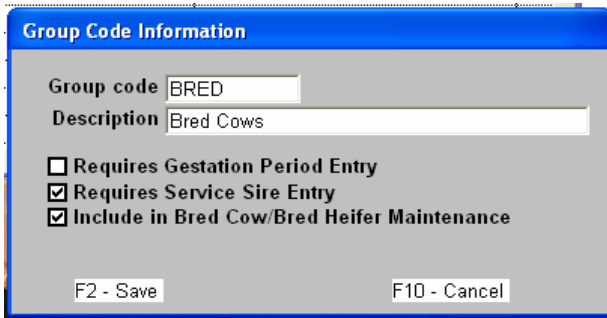


The Group Code Information screen overlay above shows the information required when a new group is added. The Group Code can be any string of 10 characters or less. The description must fit into the highlighted area.

Press <F10> to cancel. You will see some 'X's in the three columns to the right of the screen on the left. They signify that as an animal is registered as a herd sire, his gestation period is requested. As an animal is registered as a bred cow or bred heifer, the herd sire tag number is requested. And they show which groups will be included in the Bred Cow/Bred Heifer Maintenance procedure. (ie: all those that qualify as bred females). Any time a new group is added, you are asked to signify which of these are true about the animals in the new group.

Now, let's delete EMBRYOS. Move the highlight to that line. Press the computer key. You are asked to confirm the deletion of this group. Click <Yes>. It is gone. (**You need to be careful about deleting groups because when you do so, all the animals in that group are deleted as well**). Let's put it back. Press the <Ins> key. Type group code EMBRYOS and description 'Embryos'. Since this

is not a herd sire, members of this group do not have 'Gestation Periods' entered in their records. Since the group is not registered as animals to be bred (bred cow, bred heifer) members of this group will not have a 'Service Sire' tag entered in their records. For the same reason, members of this group are not included in the Bred Cow/Bred Heifer Maintenance procedure. Do not select any of the check boxes. Press the <F2> key to save the new group. You will note that it is back even though we have no use for it.



Group Code Information

Group code BRED

Description Bred Cows

Requires Gestation Period Entry

Requires Service Sire Entry

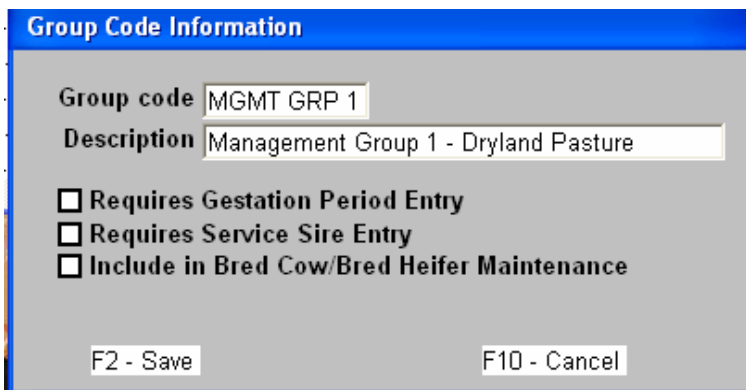
Include in Bred Cow/Bred Heifer Maintenance

F2 - Save F10 - Cancel

Now let's add some management groups. Suppose that after weaning some calves were put out to dry-land pasture while others were fed on irrigated hay land. They would not have the same potential for weight gain so they would be grouped separately for the purpose of rank and index calculation.

Press the <Ins> key. Enter **group code** MGMT GRP 1 and **description** Mgmt Grp 1-Dryland Pasture. Press <F2> to save. Press <Ins>. Then enter **group code** MGMT GRP 2 and **description** Mgmt Grp 2-Irrigated Hay. Press <F2> to save. You may have to keep a separate record of the details of the management groups.

Now, after weaning, the calves will be placed into the appropriate management groups for the purpose of rank and index calculations. Press <Esc> to exit group maintenance



Group Code Information

Group code MGMT GRP 1

Description Management Group 1 - Dryland Pasture

Requires Gestation Period Entry

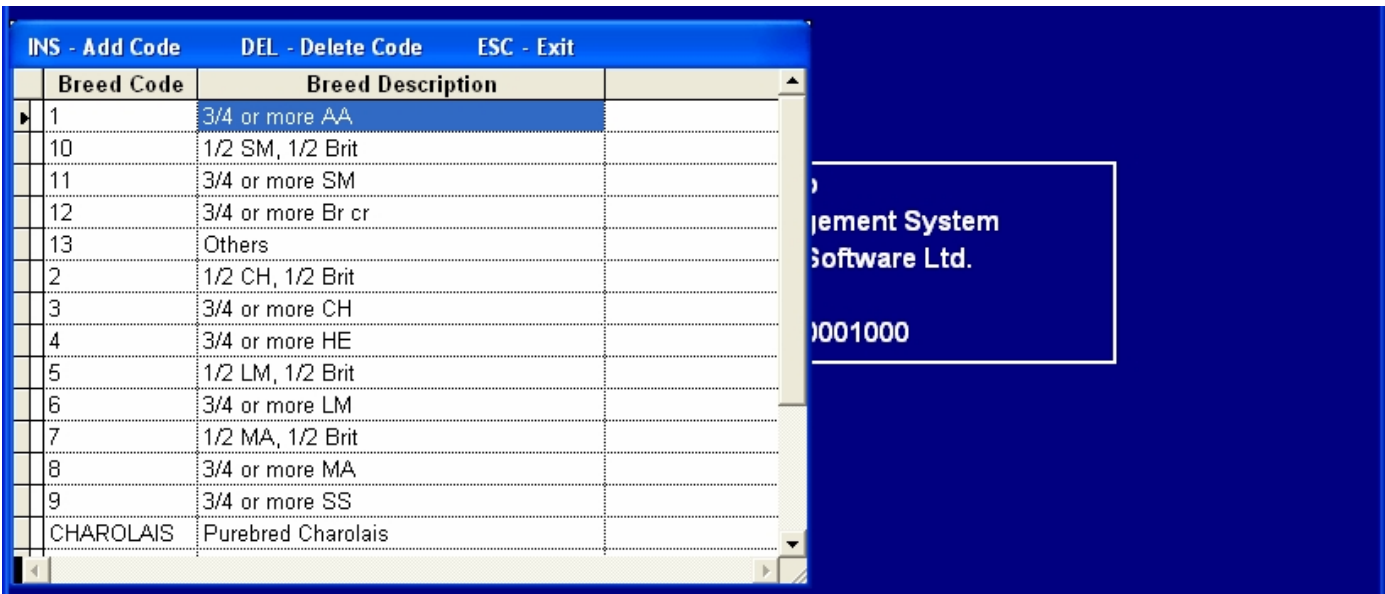
Requires Service Sire Entry

Include in Bred Cow/Bred Heifer Maintenance

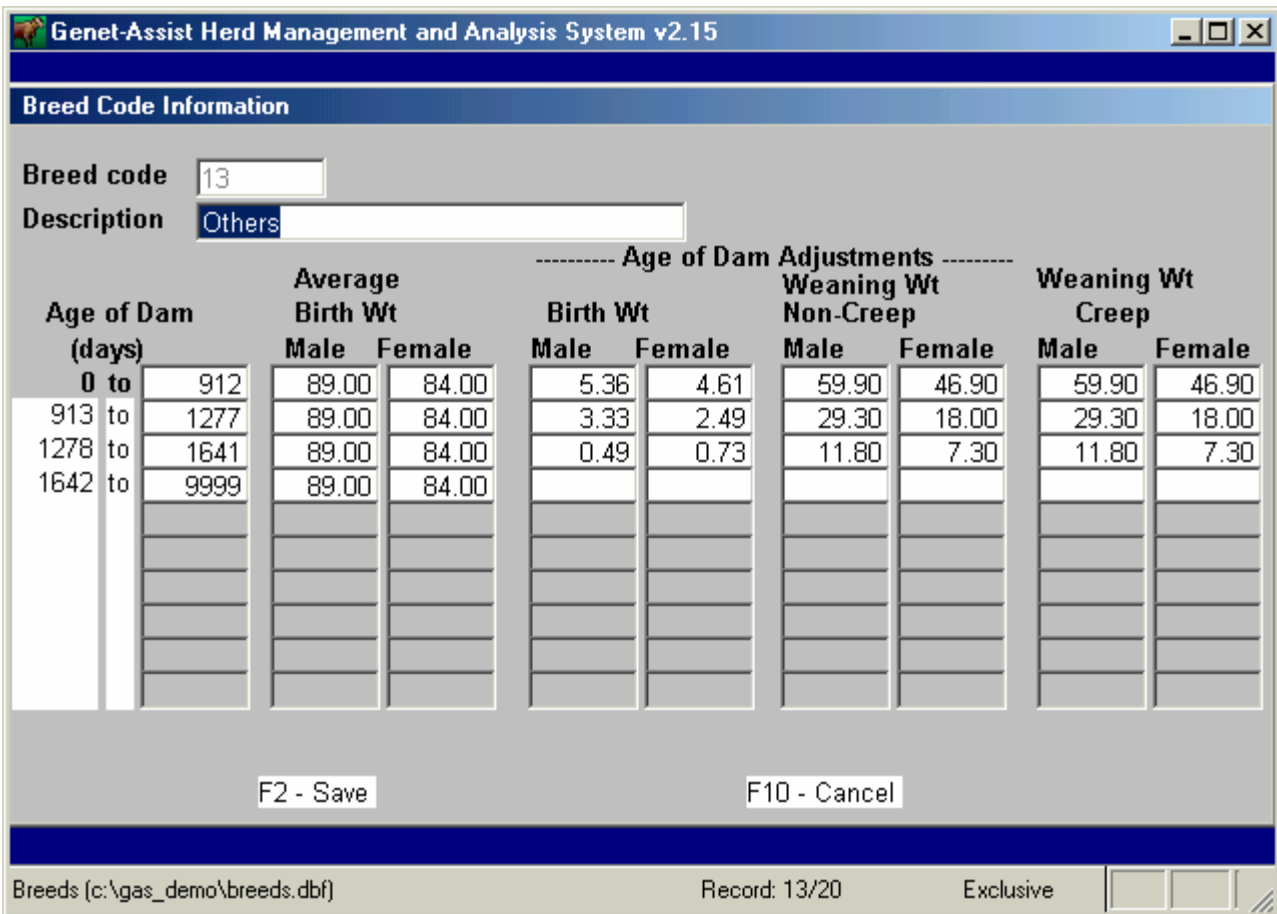
F2 - Save F10 - Cancel

BREED MAINTENANCE:

Click <File> then Breed Maintenance. The 'Breed Maintenance' screen appears showing the breeds already in the Demo. ¾ or more AA is highlighted. Move down to 'Others' and press <Enter>. The 'Breed Code Information' screen for the group known as 'others' is shown on the next page.



Genet-Assist comes with a number of breeds and cross-breeds, along with their Average Birth Weights, and Age of Dam Adjustments for birth and weaning weights programmed into it. It is impossible to include ALL breeds and crosses. Furthermore, adjustment factors change as time goes on. For these reasons, a breed maintenance option has been included in the program. The Breed Maintenance option allows the cattle producer to enter any breed or cross breed not preprogrammed into the computer. The Breed Code (of up to 10 characters), Description, Age of Dam (0 to 912, 913 to 1277, 1278 to 1641 and over 1642 days which represents up to 2 ½ years, 2 ½ to 3 ½ years, 3 ½ to 4 ½ years and over 4 ½ years), Average Birth Weight, Birth Weight adjustment factors, and Weaning Weight adjustment factors for creep and non-creep fed males and females may be entered for any breed or cross. Birth and weaning weight adjustments are calculated on the basis of the age and breed of the dam. Weights and factors are available from the various breed associations. Commercial producers may wish to change 'Others' to 'Commercial' and use this breed and its adjustment factors for all calves in the herd.



BRED COW/BRED HEIFER MAINTENANCE:

Take **File**, then **Bred Cow/Bred Heifer Maintenance**. This option is used after breeding is done, to register the current group of bred females. You are taken to a screen (shown below) displaying all females that will qualify as Bred Females, starting with Tag 53P which is the oldest of the lot. The particular groups presented here are the ones that have a check mark in the Cow/Heifer Maint column of the 'Group Maintenance' screen shown previously on page 4 (Bred Cows, Bred Heifers, Current Calves, Heifers, Replacement Heifers).

Tag	Tattoo	Group	Exp From	Exp To	Observed	Due	Sire
53P	EUG 53P	Bred Cows	//	//	1993/05/01	1994/02/12	MC
25R	FVX 25R	Bred Cows	1993/04/19	1993/07/11	1993/04/21	1994/02/03	SD
31R	FVX 31R	Bred Cows	1993/04/19	1993/07/11	//	//	CF
57R	FVX 57R	Bred Cows	1993/04/19	1993/07/11	1993/04/30	1994/02/12	CF
73R	EUG 73R	Bred Cows	1993/04/19	1993/05/17	//	//	CF
62S	FVX 61S	Bred Cows	1993/04/19	1993/07/11	1993/04/21	1994/02/02	MC
64S	FVX 64S	Bred Cows	1993/04/19	1993/07/11	//	//	
212T	PKL 212T	Bred Cows	1993/04/19	1993/07/11	1993/04/20	1994/02/02	SD
14T	FVC 14T	Bred Cows	1993/04/19	1993/07/11	1993/04/28	1994/02/10	SD
18T	FVC 18T	Bred Cows	1993/04/19	1993/07/11	1993/06/17	1994/04/01	SD
18U	EUG 18U	Bred Cows	1993/04/19	1993/07/11	//	//	SD
32U	EUG 32U	Bred Cows	1993/04/19	1993/07/11	//	//	SD
44U	FVC 44U	Bred Cows	1993/04/19	1993/07/11	//	//	SD
52U	FVC 52U	Bred Cows	1993/04/19	1993/07/11	1993/04/19	1994/02/01	SD
5311	FVC 5311	Bred Cows	1993/04/19	1993/07/11	1993/05/09	1994/02/21	SD

The highlight is on 53P. Press <Enter>. An input screen overlay (below) appears showing the 53P's breeding information for 1993.

Bred Cow/Bred Heifer Information

Tag **53P** Name **LADY EUG BLASTOFF 53P**

Current Group **Bred Cows**

Service Sire Tag **MC** **P-3 MONTE LAD 0-42Z**

Gestation Period **287**

Exposed **//** to **//**

Observed **1993/05/01** Due **1994/02/12**

F2 - Save F10 - Cancel

The **Purge Service Sires** option could have been used to clear all sire tags, exposed and observed breeding dates from all records for females bred in 1993.

Click on the down arrow to the right of the field showing 'Bred Cows'. The 'Groups' popup appears. Press <Enter> to register 53P again as a Bred Cow.

Put SD into the Service Sire Tag field and press <Tab> or <Enter>. The name FVC SKYDIVER 902Y appears and the gestation period changes from 287 to 288 days.

Move down to the Observed date field and put in 1993/05/02. The due date 1994/02/14 appears. Press <F2> to save.

Use the cursor key to move down one line to Tag 25R. Press <Enter> and click on the down arrow again to bring up the 'groups' popup. Move the highlight to 'Cull Cows' and press <Enter>. We have changed the group for 25R to 'Cull Cows'. Use the key to take out the sire tag and the dates that follow, Save the changes. You will note that 25R no longer exists on this screen as she is no longer a bred female, nor is she a candidate since she has been culled.

If you were doing this for the next group of Bred Females (bred in 1994) you would 1) *Purge Service Sires* to get rid of all previous tags and exposure and observed breeding dates. Then you would 2) use the *Bred Cow/Bred Heifer Maintenance* function to go through the records of all eligible females and update their current group (to register them as bred cows, bred heifers, cull cows, sold or dead).

Still in *Bred Cow/Bred Heifer Maintenance*, you would enter the Service Sire Tag, exposure dates and observed breeding dates for those registered as bred females.

If you wish to do this, use Service Sire Tags MP, MC, CF, SD, and TG as those are the herd sires in the database.

When all records have been updated it would be possible to get a 'Bred Cow/Bred Heifer Report' and a 'Pre-Calving List' from the reports menu.

CATTLE MAINTENANCE:

Select the 'Cattle Maintenance' option in the File menu popup. This brings up the cattle maintenance screen which offers a wealth of information about the animal on display.

Shown on this screen is the Bred Heifer 1B,

Click <Find>. Type 25B and click <Find>. 25B (FVC SD'S PLD PRIDE 25B) is shown along with her Tag, Reg NO., Tattoo, Sire, Dam, Sex & Breed. Her CCIA Tag# is 124000922200021.

She is grouped as a Bred Heifer, exposed to SD/MP from 93/03/19 to 93/05/15. Observed breeding date was 93/04/28. The due date is 94/02/07. If you find 22D, you will note she was born on 94/02/08 - just as expected. Birth, Weaning and Yearling weights (actual & adjusted) are given along with their rank and index. Ranks are 17/30 (17th in a group of 30), 22/30, 20/20,20/20, 17/30 and 20/20. The highest would be 1/20 or 1/30. The lowest 20/20 or 30/30.

Clicking < Ancestry > shows the last two generations in the ancestry for 25B on a screen overlay. Click <Done> or press <Enter> to exit the screen. The <Esc> key can be used as well.

Paternal Grand Sire	RAVEN	WILDOR RAVEN 6M
Sire	SD	FVC SKYDIVER 902Y
Paternal Grand Dam	RUSH	AFS RUSH 30R
Maternal Grand Sire	SCKO	SILVER CREEK KNOCKOUT
Dam	18U	EUG LADY KNOCKOUT 18U
Maternal Grand Dam	70S	EUG LADY BLASTOFF 70S

Done

Genet-Assist Herd Management and Analysis System v2.15

Cattle Maintenance

Tag 25B Name FVC SD'S PLD PRIDE 25B Order Birth Date

Sire SD FVC SKYDIVER 902Y Reg. No. PFC 182516

Dam 18U EUG LADY KNOCKOUT 18U Tattoo FVC 25B

Sex F Age of dam d/m 2193 / 73 CCIA # 124000922200021 < Ancestry ><Sale Info>

Breed 3/4 or more CH <Health> <Ultrasound>

< Groups > Bred Heifer <Costs> 141.75

Calving Ease Slight Assist

Horn Condition Polled Exposed 1993/04/19 to 1993/05/15

Twin/Embryo N Creep Fed N Observed 1993/04/28 Due 1994/02/07

Comments Exposed to MP/CF Scrotal Circumference Date / /

Period	Weight	yy/mm/dd	Adjusted	Index	Rank	
Birth	103	1992/02/14	103.00	0.99	17/30	Add
205 Day	620	1992/09/07	617.490	0.98	19/30	
365 Day	820	1993/02/13	818.748	0.84	20/20	Modify
Current	1215	1994/03/20				
Mature			Average Daily Gain 1.25	0.63	20/20	Delete
			WPDA @ Weaning 3.00	0.97	17/30	
Age d/m	5151 / 171		WPDA @ Yearling 2.24	0.86	20/20	

Comments

Find Prior Next Exit Save Quit

Cattle (c:\g-assist_dem\cattle.dbf) Record: 53/620 Exclusive NUM

The Cattle Maintenance screen above also shows the age of the Dam (18U – EUG LADY KNOCKOUT 18U) at the time 25B was born (2193 days or 73 months). 25B's present age (on March 23, 2006), shown near the bottom left on the screen is 5151 days or 171 months. This will change day by day as time goes on.

Clicking <Sale Info> will display the details of the sale of the animal on display (if it is sold). Press <Esc> to exit this screen.

Clicking <Costs> will bring up a screen overlay with the details of the costs relating to this animal. Total cost of all such transactions is shown on the main screen.

Clicking <Modify> then <Groups> will show what group the animal was in at birth, at weaning, at yearling, and at present.

ADDING RECORDS:

-Click <Add> while in the Cattle Maintenance screen. A blank input screen appears - the cursor is in the Tag field. Let's add a record. Type in the following, *using the <Tab> key to go on to the next field.*

Tag: 25E , <Tab>

Name: FVC GOLDEN DANSEL 26E

Sire: SD The computer puts in FVC SKYDIVER 902Y

Dam: 25B The computer gets the name of the Dam.

Sex: F

CCIA # 124000922200590

Reg No.: <Tab> as there is none at this time.

Tattoo: <Tab> as there is none

Breed: Click in the blank 'Breed' field - the entire breed popup is displayed. Move the highlight down with the mouse pointer to *Purebred Limousin* and release it. Press <Tab> to select this breed.

Selections in a popup such as this can be made by clicking the left mouse button in the input field (to bring up the popup), by dragging the highlight up or down to the desired selection and releasing the button. Press <Tab> to make the selection.

<Groups> You are in the current group field. Click <Groups>. The group history screen overlay is displayed. This screen is used to keep track of the group this animal is in at birth (current calves), at weaning (Bull, Heifer, or Steer, or a management group), at yearling, and at present (after yearling for older animals). This information is stored along with each calf record as part of its history. All animals are registered automatically as 'Current Calves' at birth. They are assigned to a default group of Bulls, Steers, or Heifers depending on their sex (M,S,F) when weaning or yearling dates are entered. When a weaning or yearling date is entered the group history overlay pops up for entry of a management group. If no management group exists, the default group is accepted with the <Tab> or taking <OK>. Press <Tab> to move to the current group field. Click in the field to bring up the 'Groups' popup. Move down to 'Current Calves' and press <Enter> to make the selection. This selection is not really necessary as the default value 'Current Calves' would be assigned at this time if you simply moved past the field with the <Tab> key.

Calving Ease: Move down with the cursor to 'Slight Assist' and press <Tab> to make the selection.

Horn Condition: Move down again with the cursor 'down' key to 'Polled' and <Tab> to select.

Twin: Press <Tab> for 'N'

Creep Fed: <Tab> for 'N'

Comments: Comments may be entered here if you wish

Birth Weight: Put in 105 pounds.

Birth Date: 1995/02/21

At this time you may wish to click the following fields to see what is in them

<Ancestry > The last two generations in the ancestry is displayed. Click <Done> or press <Enter>.

<Sale Information>: None at this time – the input screen shows what goes into the 'Sale Information' screen when an animal is sold.

<Health Records>: Information relating to the health of the animal would be entered here. Date, Illness Treated, Medication, Cost and unlimited comments can be entered. The Health Records Report can be written any time later on to report on matters relating to the health of the herd. This report offers a great variety of options. We'll examine it more closely later on. For now, click <Health> and when you get the Health Records screen overlay, press <Ins>. Now you see the Health Records entry screen. Take a look at it, then press <Esc> and <Esc> again to exit the two screens.

To avoid having to enter the same data twice, all Health Records with a cost associated with them automatically go into the <Costs> database as well.

The <Costs> and the <Health> records push buttons work exactly the same way. Press <Enter> to get the <Costs> overlay. Press <Ins> to get the production costs entry screen. As you can see, this option provides for entry of Date, Cost Description, and Amount. The Production Costs Report can be written later on to summarize production costs. Again, a great many variations of the report are offered. We will examine these more closely when we get to reports.

<Ultrasound> Data: There will be none until the animal is about one year of age, so use then <Tab> key to skip that field.

We've entered all the data for this animal that we will at this time so take <Save> to save the record to the database.

DELETING RECORDS: Caution!! When a cow is deleted, her offspring are also deleted.

Find the record with Tag 26E (just entered)

Let's delete it. Click <Delete>. You are asked to confirm - take 'Yes'. It's gone.

MODIFYING RECORDS: Find Tag 25B

Let's make some changes. Click <Modify>. Move down to 200(205) Day Weight.

Change it from 620 to 640. Notice the adjusted weight also changes. Change it back to 620.

Go up and change the sire from SD to CF. The name changes. Change it back to SD.

Any of the information in the record screen, except calculated values can be changed at any time using the <Modify> function.

Click <Save> after modifying the record to make changes permanent.

SCROLLING THROUGH THE DATABASE:

We have the record for 25B on the screen. We can get the next record by taking an 'N', the prior record by taking a 'P'. We can page through the entire database if we wish.

ORDER: We can change the order in which the records are presented by clicking the field next to the word 'Order' at the top right of the screen. The choices are shown on an overlay. The most useful is definitely 'Birth Date'. Select it. Then click (.) **Starting Value** and put in 1992/01/02. Take <Enter> or click <OK>. The computer displays the first born calf in 1992. The main screen shows Tag 1B. We can scroll through the entire 1992 calf crop by taking <N> for the next record, and edit the records as we wish. If we select the 'Current Group' and begin with a BRED HEIF, we can click (N) repeatedly to scroll through the entire group of animals currently classed as Bred Heifers.

USING A PDA (handheld computer) TO GET HERD DATA;

An Excel spreadsheet on an office PC can be set up to gather herd data. The spreadsheet is transferred to a PDA. The following Birth data Excel template as well as the Weaning & Yearling data templates are included with the demo data. Calf tags are in Column A, CCIA numbers in Column B. In the 'Birth Data Template' Birth Weight is in Column C, and Calving Ease, Horn Condition and whether the calf is a Twin or Embryo in Col D, E, & F. The PDA is taken into the calving barn or corral for entry of birth, weaning or yearling data. When done, the PDA is taken into the office and data transferred to the office PC. The photo on the right below shows the same Birth Data spreadsheet in an Excel Mobile spreadsheet on a Dell Axim X51v handheld computer (PDA). Birth weight for calf with tag 1E goes into column C (cell 6C) and the other birth data for 1E in cells 6D, 6E, 6F. If RFID tags are applied later, leave column B blank for now. The first 4 digits of the RFID number would be known to you prior to tagging so they could be entered into column B advance. That would leave only the last two to be entered at the time tags are applied.

Microsoft Excel Birth Data Spreadsheet

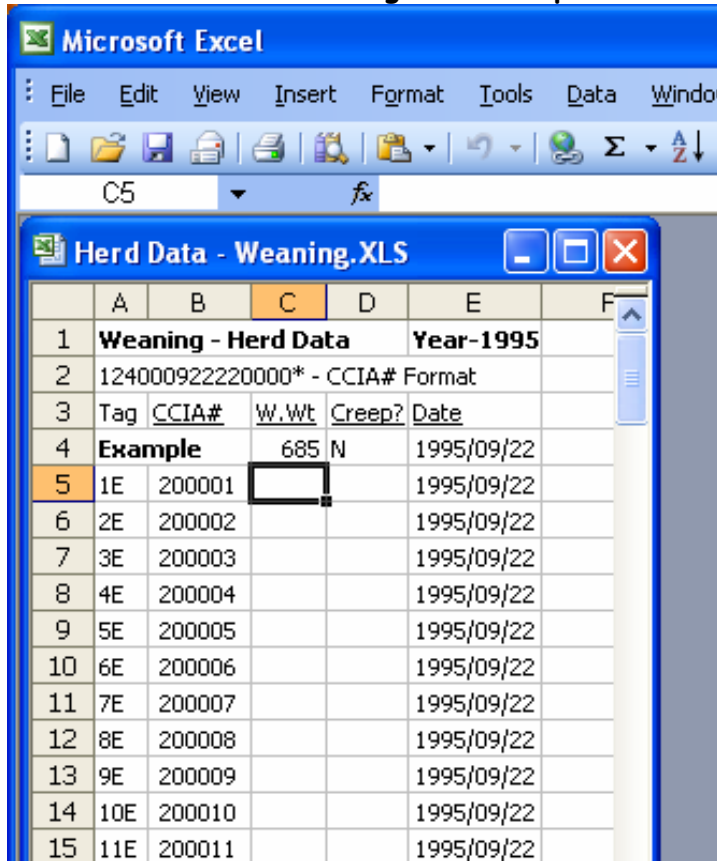
A	B	C	D	E	F	G
4	No. 6-digits	Wt.	Date	Ease	Twn, Em	E-Easy assist
5	Example --	89	1/22/95	U	P / N	H-Hard Pull
6	1E					S-Caesarean
7	2E					M-Malpresentation
8	3E					
9	4E					Horn Cond
10	5E					D-Dehorned
11	6E					H-Horned
12	7E					P-Polled
13	8E					S-Scurred
14	9E					Twin, Embryo
15	10E					Y or N for yes or no
16	11E					YearCode(1995) - E
17	12E					YearCode(1996) - F
18	13E					CCIA# format
19	14E					124000922220000*
20	15E					Enter last 6 digits
21	16E					
22						
23						

Excel Mobile Birth Data Spreadsheet

A	B	C	D
1	HERD DATA - BIRTH		
2	Tag Calf	CCIA#	B. Wt. Ease
3			Hp,Sa,Su
4		124000922220000*	CCIA#
5	Example -----	89	Sa
6	1E	200001	
7	2E	200002	
8	3E	200003	
9	4E	200004	
10	5E	200005	

Your own RFID numbers will have to go into column B in place of the ones in the spreadsheets shown below. Be sure to save the spreadsheets after data is entered into them. A good plan would be to save them with the name shown followed by the year code, like WeaningS.XLS for 1996.

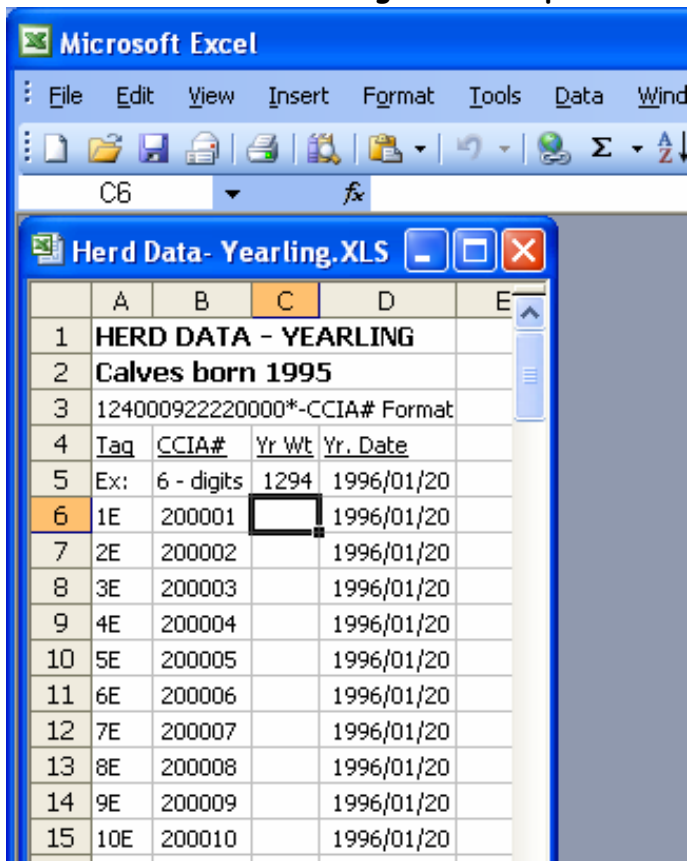
Microsoft Excel Weaning Data Template



The screenshot shows a Microsoft Excel spreadsheet titled 'Herd Data - Weaning.XLS'. The spreadsheet has columns A through F. Row 1 is 'Weaning - Herd Data' with 'Year-1995' in column E. Row 2 is '124000922220000* - CCIA# Format'. Row 3 has headers: 'Tag' in A, 'CCIA#' in B, 'W.Wt' in C, 'Creep?' in D, and 'Date' in E. Row 4 is an example: '1E' in A, '200001' in B, '685 N' in C, and '1995/09/22' in E. Rows 5-15 follow a similar pattern with increasing Tag IDs (2E to 11E) and CCIA numbers (200002 to 200011).

	A	B	C	D	E	F
1	Weaning - Herd Data				Year-1995	
2	124000922220000* - CCIA# Format					
3	Tag	CCIA#	W.Wt	Creep?	Date	
4	Example		685 N		1995/09/22	
5	1E	200001			1995/09/22	
6	2E	200002			1995/09/22	
7	3E	200003			1995/09/22	
8	4E	200004			1995/09/22	
9	5E	200005			1995/09/22	
10	6E	200006			1995/09/22	
11	7E	200007			1995/09/22	
12	8E	200008			1995/09/22	
13	9E	200009			1995/09/22	
14	10E	200010			1995/09/22	
15	11E	200011			1995/09/22	

Microsoft Excel Yearling Data Template



The screenshot shows a Microsoft Excel spreadsheet titled 'Herd Data- Yearling.XLS'. The spreadsheet has columns A through E. Row 1 is 'HERD DATA - YEARLING'. Row 2 is 'Calves born 1995'. Row 3 is '124000922220000* - CCIA# Format'. Row 4 has headers: 'Tag' in A, 'CCIA#' in B, 'Yr Wt' in C, and 'Yr. Date' in D. Row 5 is an example: '1E' in A, '200001' in B, '1294' in C, and '1996/01/20' in D. Rows 6-15 follow a similar pattern with increasing Tag IDs (2E to 10E) and CCIA numbers (200002 to 200010).

	A	B	C	D	E
1	HERD DATA - YEARLING				
2	Calves born 1995				
3	124000922220000* - CCIA# Format				
4	Tag	CCIA#	Yr Wt	Yr. Date	
5	Ex: 1E	200001	1294	1996/01/20	
6	2E	200002		1996/01/20	
7	3E	200003		1996/01/20	
8	4E	200004		1996/01/20	
9	5E	200005		1996/01/20	
10	6E	200006		1996/01/20	
11	7E	200007		1996/01/20	
12	8E	200008		1996/01/20	
13	9E	200009		1996/01/20	
14	10E	200010		1996/01/20	

ENTERING WEANING WEIGHTS: Click File, then select Cattle maintenance. Set the 'Order' to 'Birth Date' (see above), and take (.) Starting Value and enter 1994/01/01. The date 1994/01/22 of the first born calf in 1994 appears near the top of the screen and <<OK>> is highlighted. Press <Enter> to bring up the record for 1D. Press M to <Modify>, move down to 205 Day, put in 645, press <Tab> and put in 1994/09/22. The 'Group History' overlay pops up showing 'Heifers' as the default group at weaning. If 1D was in a particular management group prior to weaning you would click on the down arrow to show the 'Groups' popup, make your group selection, press <Enter> to get back to the main screen. Notice that WPDA @ Weaning shows a value now. Click <Save>.

Take 'N' to show 2D. Take 'M' to modify. Put in 622 and press <Tab>. The date is entered for you (it is assumed all calves are weaned at the same time) - you can change it if you wish or press <Tab> to accept it. The 'Group' defaults to Bulls. Press <Tab> to accept the default and click <Save> to save.

Take N to show 4D. Enter a weaning weight. When you have weaning weights for all the 'D' calves you can exit this section, go to 'Calculate' and do the Weaning Weight Index & Rank Calculations. The 200(205) Day Indexes and Ranks and the WPDA's @ weaning will show on the Cattle Maintenance Screen.

At this point you can go to Reports and print a Weaning Report, a Weaning Sire Summary, and a Pre-Yearling List for the 1994 calf crop.

ENTERING YEARLING WEIGHTS: Yearling weights for 'C' calves (born in 1993) have not been entered into the demo database. To enter them:

Set the Order to 'Birth Date'.

Take (.) **Starting Value** and put in 1993/01/01. The date 1993/01/17 comes up as the date of the first born (1C).

Press <Enter> to show the record for 1C.

Take an M to modify, enter 1020 and the date 1994/01/23.

Accept the default group, take <Save> to save.

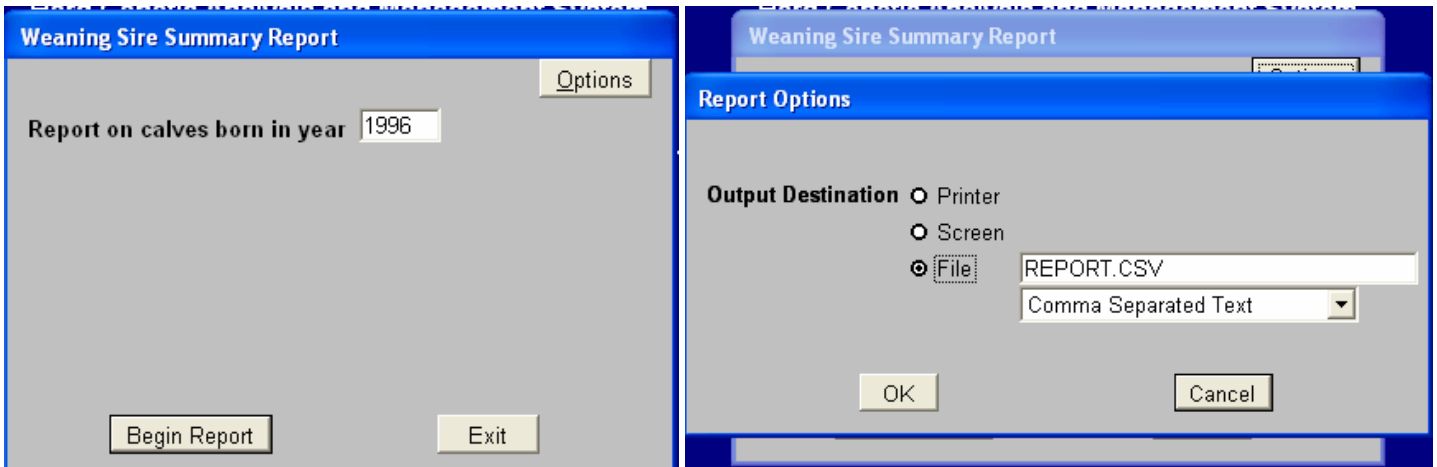
Take an N to show 2C and an M to modify.

Enter a yearling weight - again, the date is entered for you. When all 'C' calves have yearling weights entered, the Yearling Weight Index and Rank calculations can be done. The grouping and calculation is very complex and unless you have a very fast computer it will take a while, but unless you've made a data entry error, it only needs to be done once. At this time as well, a Yearling Report, a Yearling Sire Summary, and an Overall Herd Summary Report for 1993 can be printed.

CUSTOMER MAINTENANCE: This option maintains a customer database containing relevant data about customers. This is particularly useful when filling in <Sale Information> in the Cattle Maintenance screen. All you do is enter the first two or three letters of the customer name, press <Enter> to bring up the customer list. If the highlighted customer name is the correct one, pressing <Enter> will fill in all the required customer data in the Sale Info. screen. If the customer is a new one, and it cannot be found in the database, the new customer can be added to the customer database by taking the <Ins> key. The customer maintenance input screen appears for input of the new data. Taking the <F2> key to save the data also puts it into the Sale Info. screen. Selecting 'Customer Maintenance' brings up the maintenance screen. It will be blank at first. You may Insert new customer data, Delete a customer record (unless it is linked to an animal record), or you may escape, by pressing the <Ins>, , <Esc> keys respectively.

Having entered the customer data in the screen, saving it will put it into the list. A customer record may be modified by highlighting the customer name and pressing <Enter> to bring up the data input screen. Once modified, the new data may be saved by taking the <F2> key, or you may escape without saving the changes by pressing the <F10>key.

REPORTS: Reports presently available on the system are shown on the screen popup on page 1. Unless signified otherwise, all reports are shown first on the screen if that is the default destination chosen in the 'Configuration' screen. Click 'Reports', then choose the report you wish to print. At this point, using the <Options> button at the top right, it is possible to choose the report format and destination. If the printer is chosen, the report will go directly to the printer instead of showing first on the screen. If 'File' is chosen, the file format must be chosen as well. If 'Excel®' is chosen, the file extension will change to .XLS as that is the format used in Excel. 'Comma separated values (CSV)' (comma delimited) text is accepted by many breed associations and also by the CCIA Age Verification site. The format will depend on where you wish to use the report after it is generated. The report destination most often used will be the screen or printer.



Shown below is part of a 1993 Weaning Report. The 'Print Preview' at the top of the report gives us control of the report. Going left to right, |< takes us to the first page, < takes us to the previous page, if you click on the icon showing sheets of paper you can go to any page you wish. The right arrow > goes to the next page, >| goes to the last page. The % box that now shows 100% allows us to zoom in as far as we want. The next icon to the right closes the report, and the rightmost icon (the printer) begins the print process. Here we can print the entire document or choose the first and last pages to print.

Genet-Assist Herd Management and Analysis System v2.15

Report Designer - wreport.frx - Page 1

Print Preview

Genet - Assist

Flat Valley Farm Ltd.

1993 Weaning Report

Calf Tag	Birth Date	Adj Birth Sex	Birth Weight	Calve Ease	Horn Code	Weaning Date	Actual Weight	ME Weight	205D Index	Rank	WPDA Index	WPDA Rank	WPDA CCIA #
Core CH/Bulls/Male/B/No Creep/45 members													
91C	1993/03/22	M	112.00	U	D	1993/09/14	540.00	610.52	0.83	45	3.07	0.88	43
57C	1993/02/18	M	125.67	A	P	1993/09/14	570.00	630.21	0.86	44	2.74	0.79	45
3C	1993/01/27	M	95.00	U	D	1993/09/14	730.00	660.98	0.90	43	3.17	0.91	38
75C	1993/03/01	M	112.00	U	P	1993/09/14	640.00	661.44	0.90	42	3.25	0.93	34
70C	1993/02/26	M	116.57	U	D	1993/09/14	640.00	661.80	0.90	41	3.20	0.92	37
5C	1993/01/29	M	89.00	U	D	1993/09/14	730.00	665.34	0.90	40	3.20	0.92	36
33C	1993/02/10	M	117.00	U	P	1993/09/14	700.00	670.31	0.91	39	3.24	0.93	35
89C	1993/02/22	M	109.00	U	D	1993/09/14	680.00	682.80	0.93	38	3.33	0.96	30
39C	1993/02/12	M	98.67	U	D	1993/09/14	640.00	683.70	0.93	37	2.99	0.86	44
---	---	---	---	---	---	---	---	---	---	---	---	---	---

The Bred Cow/Bred Heifer Report lists bred cows and heifers, their exposure periods, the sires to which they were exposed, the observed breeding date (if any) and the due date for those with an observed date. Cows may be listed in order of exposure dates or due date. Report for females bred in 1993 will be printed.

The Pre-Calving List (worksheet) is a list of all animals that have a 'service sire tag' in their records. Service sire tags are entered as animals are registered as Bred Cows or Bred Heifers or any other group that requires a 'service sire entry'. Space is left on the worksheet for birth information. Cows may be listed in several orders. Worksheet for entry of 1994 calving information is printed.

The Pre-Weaning List (worksheet) is a list of all current calves in order of birth date. Spaces are left for typical weaning information. Sire and Dam are provided as are calf Tags. Put 1994 for the year of birth of calves in this report.

The Weaning Report lists all males in each management group in rank order, then all females in each group in rank order. All weaning information for each calf is given Put 1992 for year of birth of calves on this report.

The Weaning Sire Summary lists each of the herd sires along with the number of male and female calves, average birth weights, calving ease, average 200Day weight and index, WPDA average and index. Put 1992 for year of birth of calves.

The Pre-Yearling List (worksheet) is a list of all current calves in order of *birth date*. Spaces are left for typical yearling information. Put 'calves born in 1993'.

The Yearling Report lists all male calves in each management group, their adjusted 200 Day and 365 Day weights, ADG and WPDA, ranks and indexes. The order is by rank of 365 day weight. Put 'calves born in 1992'

The Yearling Sire Summary lists each herd sire along with the number of male and female calves, average yearling weights and index, average WPDA and index, ADG and index. Put 1992 for year of birth.

The Cow Performance Certificate shows the cow's TagId, Tattoo, Reg No., Ancestry, the cow's own performance and the performance of her sons and daughters. Certificates can be printed for one dam or all dams, for all progeny or the progeny for one year only. Try Tag 54Y or Tag 53P.

The Cow Progeny Report is somewhat the same as the Cow Performance Certificate except it shows different data. Much of the data shown on this report deals with sale information and as such, even though it will be of interest to all cattle producers, it would more likely be of interest to commercial producers. To see the report, choose different report options to get an idea as to the variety that is possible. If you want a report of the progeny for one year only, choose 1989 as the demo data is more complete for that year.

The Sire Performance Certificate is similar to the Cow Performance Certificate. It can be printed for one sire or all sires, listing all progeny or the progeny for one year only. Try Sire Tag CF. Take Tag SD if you want to see or print a 7-page report.

The Pedigree Certificate shows any number of generations in the ancestry of any animal in the herd. Five generations can be shown in a one page report. Any more than that requires a multi-page report.

The Overall Herd Summary summarizes the performance of the entire herd. It shows average Birth Weights, Weaning Weights, Yearling Weights, and ADG's for males & females, as well as information about calving ease for the herd. The summary is useful for comparison purposes as individual calf, sire, and dam performance can be compared to the average for the herd.

The Sale Information Report shows all the details of the sale of 1) All animals, Bulls & Steers, or Heifers for 2) All years or One year only, and 3) ordered by Date of Birth, Buyer, or Sale Date. The name of the buyer may be specified. In this report the CCIA number is given as well.

The Health Records Report shows the details of the Health Records database. It can be written to show the health records for One animal or All animals, for those born in One year or All years, to show the health records for One year or All years, to show One illness or All illnesses, To show One medication used or All medications. The report can be ordered by animal TagId or Date of Birth. Since there are only a few health records entered, let's report them all. Select All for each option presented, and order by Date of Birth,

then set <Options> to printer and commence writing the report. When you have this report you may wish to change the options and print specific reports. You will note that any time One is selected, you are asked for the details and a field marker is provided for entry. If you select One Animal you are asked for the TagId, if you select One Illness, you are asked for the name of the illness, and if you select One Medication you are asked for the name of the medication used. If you are not sure exactly how the information was entered in the database, use partial strings for responses. For instance, if you used Blacklegol 7 and you are not sure of the spelling or exactly how it was entered, put in Black. The report will include all medications with the 'Black' string in the name-likely only one, Blacklegol 7.

The Production Costs Report is used to report details of the <Costs> database. It can be used to report on All animals or One animal, for those born in One year or All years, to show cost records for One year or All years, and to show All cost descriptions or One cost description (type). The report can be written to show All costs, Production costs only, or Health related costs only. The report can be ordered by TagId

or Date of Birth. Again, since there are just a few cost records in the database for demonstration purposes, let's show them all in this report. Go down through the options and select All for each option. Order the report by animal Date of Birth. Click the <Options> push button and take 'Printer Report', and commence printing the report. Now that you have this report you might like to print specific reports choosing certain animals, years, cost descriptions, or production or health reports only. Since it would be difficult to describe these exactly as they were entered, use key words and partial strings in descriptions used. If mineral supplements were used and you wanted a report of the cost of all such supplements, you might use the word 'Vitamin' or 'suppl'.

The Ultrasound Data Report, like all others, can be written in a variety of ways. Data available is limited because it has been entered for calves born in 1993 only, for Ultrasounds taken in 1994. That means if you wish to choose one birth year only, it will have to be 1993. And if you wish to see data taken in one year only, it will have to be 1994. Please note that the data you see may not be realistic as numbers were put into the records for Demo purposes only.

The Herd Inventory Report can be used to list a particular group of animals in the herd. You may choose to include one group or all groups, one breed or all breeds, animals born in one year or all years. The primary and secondary order for the report can be chosen in a great variety of ways. If 'One Group' is chosen, a green input field opens for the group name. Press <Enter> to change it to brown. Then press <Enter> again or click in the field to bring up the groups popup. Highlight the group you want and press <Enter> to make the choice. Click << Begin Report >> to commence writing the report. If 'One Breed' is chosen, the choice is made using the same routine as the one described above for one group.

The Customer List will show a list of customers in the customer database maintained using the 'Customer Maintenance' option. Again, you are given a choice as to how extensive a list is shown, and the manner in which the list is ordered.

The Age Verification Report is used after the current calf crop has been tagged with RFID tags, to create a Comma Separated Text (comma delimited) file for upload to the Age Verification Website of the Canadian Cattle Identification Agency (CCIA). This report will meet the reporting requirement of the CCIA.

The Birth Data Report may be generated on screen to show the birth data for the current or any other calf crop born after any date you choose. This report, like all others, may be written as a comma separated (CSV) text file and is particularly useful for reporting birth data to breed associations as many of them will accept birth data in comma delimited text files.

Entering Ultrasound Data: Clicking <Ultrasound> on the Cattle Maintenance screen brings up the Ultrasound data screen. At this stage you may insert data by taking the <Ins> key. The input screen appears. Today's date appears by default. Type the actual date the test was taken. The age of the calf appears. Enter the data into the fields provided. Some of the fields may remain unused - that's no problem. Use the ones you require for input of the data available. If ultrasound data is to be entered for an entire calf crop, set the order at the top right of the cattle maintenance screen to 'Birth Date'. Set the 'Starting Value' to the first day of the year in which the calves were born. The date of birth of the first born will be shown and the first calf born in that year will appear on the cattle maintenance screen. Take <Next> when you are ready for the next calf record.

You will note that provision has been made for the entry of any number of ultrasound tests and the corresponding data. All tests are reported on the 'Ultrasound Data Report' when it is written. When in the Ultrasound data screen, you may delete test data by taking the key. Test data is deleted only after confirmation that it is to be done. You may exit the Ultrasound data screen, or any screen, by taking the <Esc> key.

CALCULATE OPTIONS:

The 'Calculate' options allow us to do a calculation of Birth Weight Indexes and Ranks, Weaning Weight Indexes and Ranks, or Yearling Weight Indexes and Ranks. Any or all of these calculations can be done as often as we wish for cattle born in a particular year.

Birth Weight:

After this year's calf crop is entered as 'current calves' into the computer and birth weights and dates are recorded, the birth weight calculation option is chosen. You are asked for the year of birth for calves to be included in the calculation. The computer shows the progress of the calculation on a horizontal scale. The entire group is divided by breed and by sex (M,F). Then the median age of all

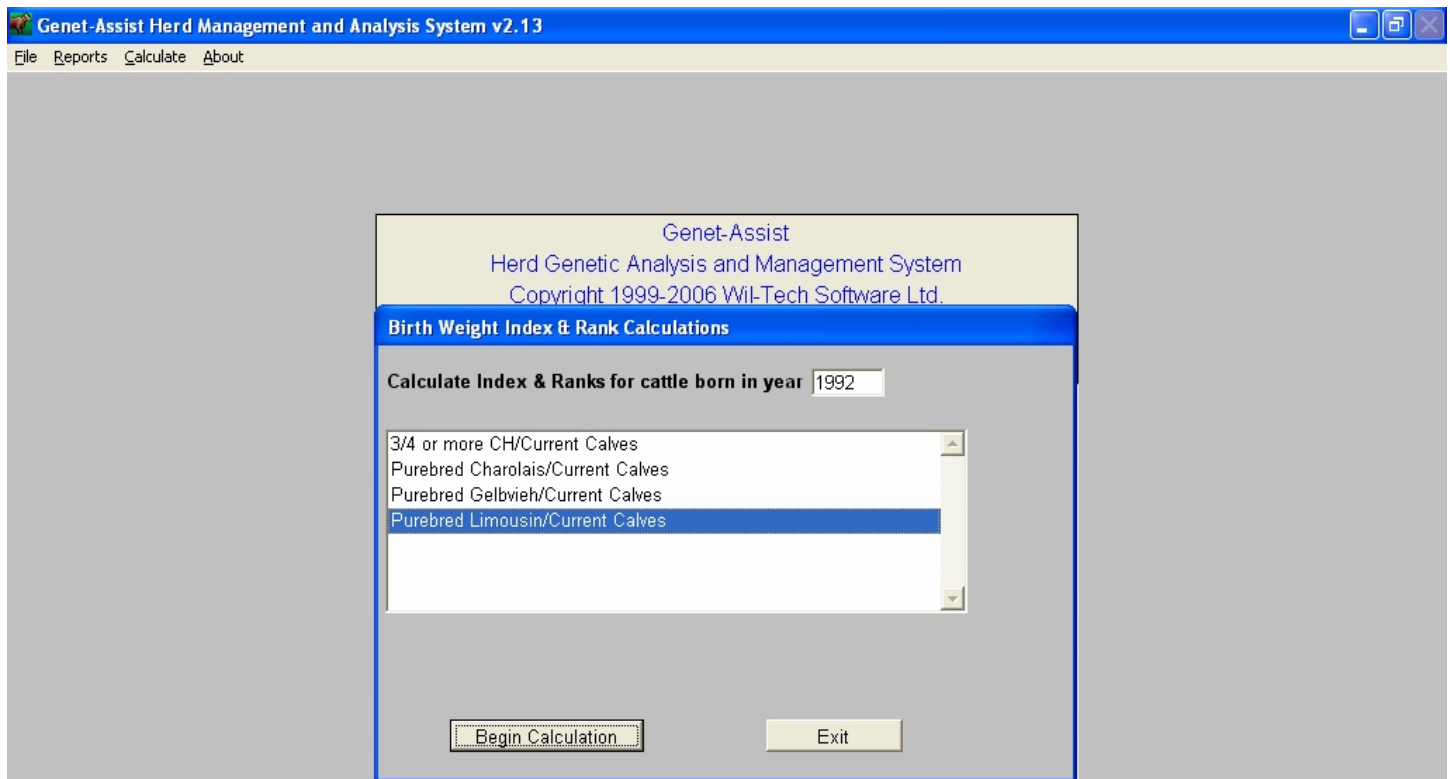
calves in each group is found. This is the middle age (or date of birth) - there are as many calves born before as there are calves born after the median date of birth. All calves at most 45 days older and 45 days younger than the median are grouped together as group 'B'. A second group is made of the calves born more than 45 days before the median date of birth - this is group 'A'. A third group, group 'C', consists of all calves more than 45 days younger than the median. The calculation is done, indexing and ranking the calves within their groups, by age and sex. Birth weight adjustments are made if specified on the configuration screen.

Weaning Weight:

Weaning weights and dates are entered at weaning time. By weaning time, some of the bulls will be classified as steers. There will likely be three groups by sex (M,F,S). The 'group history' is done automatically by the computer as it was at birth. When the weaning weight calculations are done, calves are grouped by breed, then by sex (Bulls, Heifers, Steers), then by age as before. Indexes and ranks are calculated within these groups. The groups are shown as the calculations are done. A permanent record of the group each calf is in at birth, at weaning and at yearling is kept as part of the calf record. Clicking <Groups> shows the group history for the animal on display on the cattle maintenance screen.

Yearling Weight:

Grouping for this calculation is done as it was for the others, except now, in the 'Group History' screen there may be management groups like MGMTGRP1 (Irrigated Pasture), MGMTGRP2 (Dryland Pasture), MGMTG3 (FeedLot) and so on. No problem, the breed, age, sex, and management group splits are made, then the calculation is done. The screen below shows the progress of a yearling weight rank and index calculation. Groups formed as the calculation proceeds are shown in the background. Grouping and rank and index calculation by group is an incredibly complex procedure and may take a while.



MORE ABOUT CALCULATIONS:

Formulas used:

200(205) Day Weight = (Actual weaning weight - Birth weight) / (Age in Days) x 200(205) + Birth weight + Age of Dam Correction. If actual birth weights are not available, a standard breed average birth weight for the particular breed is used in the formula.

ADG = (Actual yearling weight - Actual weaning weight) / (No. of days between taking weaning and yearling weights)

Adjusted 365 Day Weight = [ADG x 165(or 160)] + adjusted Weaning Weight. 160 is used along with 205 Day Wt.

WPDA @ Weaning = Actual weaning weight / Age in days when weaning weight is taken.

WPDA @ Yearling = Actual Yearling weight / Age in days when yearling weight is taken.

INDEX = the ratio of the weight or gain of an animal over the average of all other animals of the same breed and sex in the same age and management group. An animal has a yearling weight of 1224 lbs and the average of the group is 1120 lbs. Its yearling weight INDEX is 1224/1120=1.09

RANK : Every Index is accompanied by a Rank. Calves are ranked as to weight or gain within the group they are indexed with (see above). All ranks are relative. Some Genet-Assist reports give the number of animals in the group and the rank is given as a number. In other reports the rank is given as RANK/COUNT. A animal with a rank of 2 in a group of 29 is the second highest in the group of 29.

HARDWARE REQUIREMENTS

- IBM® or Compatible Computer – Pentium 400 minimum.
- CD-Rom or CD-RW drive for program installation
- Hard Drive, 3-1/2 or CD-RW drive for data backup.
- 32 Meg RAM (64.0 Meg or more recommended)
- Mouse, Printer, VGA or SVGA Monitor.
- 50 Meg of Hard Drive space available.

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Order Form

Genet-Assist

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\$249.95 + GST & PST (Sask) \$209.95 US

Upgrade from the Dos Version for \$129.95 + Tax,

Name: _____.

Street: _____ City: _____.

Prov: ____ Code: _____ Phone: _____ Fax: _____.

E-mail: _____

Program Order: _____ Demo Serial Number GAW _____
(Required to generate a Validate Key)

Computer Make: _____ Pentium: _____. Hard Drive Space available: _____ Megs

Operating System: Windows 98 ____ Windows ME ____ 2000 ____ NT ____ XP ____

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