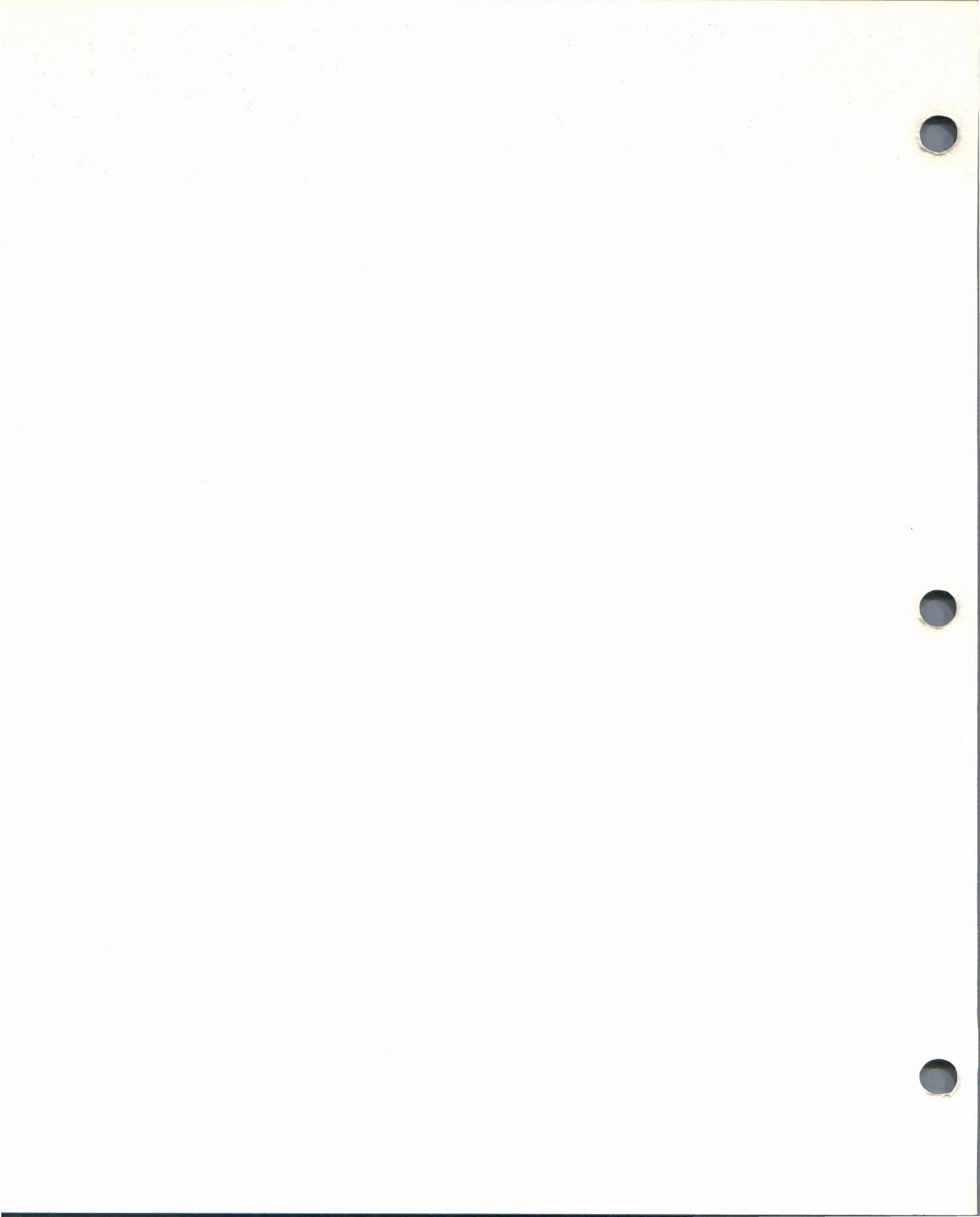


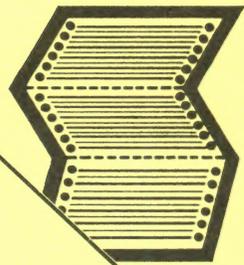
FARMIPLAN'S FARMFILER





FARMFILER

Data base pkg.



THE SCOPE OF THE PROGRAM

FarmFiler is a general purpose record filing system that allows you to manipulate and retrieve data with remarkable flexibility. With FarmFiler YOU decide what information you want kept, what calculations you want done, and what reports you want generated.

With one FarmFiler system records can be kept on a number of enterprises and for dozens of applications. Livestock pedigrees, historical field records, mailing lists, animal production and health records, machinery service records, various household records, and innumerable others can be maintained and manipulated with ease with the help of FarmFiler. FarmFiler is so flexible that it is marketed with only minor modification to all kinds of other businesses. Yet it is loaded with features that make it particularly useful in agriculture.

PROGRAM SPECIFICATION

DATA ENTRY, RECORD DESIGN AND MAINTENANCE

Just as with a manual card index or filing system, the user first plans and decides what information he wishes to store and then "designs" the record format accordingly.

A maximum of 60 items of information may be held in each record which means that 250 records can be stored on a single disk. Naturally, the fewer items of information per record, the greater the maximum number of records per disk up to 1,000.

All relevant details relating to each record are then quickly typed in. A comprehensive Maintenance facility is available which allows new records to be added and existing records amended or deleted at any time.

CALCULATIONS

One of the most unique features of FarmFiler is its ability to calculate within each record. Items in the record may be used in complex formulae to produce other record items. Dates can be used to find a future or past date, or to find the number of days between two dates. This is very useful in developing data such as adjusted weaning weights. One of FarmFiler's most useful features, particularly for agriculture, is its ability to calculate ratios. That is, to compare one record with the average of all records in the file. So it is possible to rank your cattle, sheep, crops, or anything else according to their relative productive value. FarmFiler will rapidly produce the required report.

All the records on file may be sorted and listed in either alphabetical or numerical order, and where appropriate, figures totalled and averaged.

MAILER

FarmFiler also has a Search and Sort operation which will print out names and addresses or any other information on gummed labels to provide a very useful mailing list management facility.

HARDWARE REQUIREMENTS

Minimum configuration: 48K Apple II Plus, Video monitor, 80 column (132 column recommended) printer with printer control card, two 5-1/4" disk drives and disk control card.

To order the FarmFiler program, contact:

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FARMPPLAN

1055 Sunnyvale-Saratoga Road, Sunnyvale, CA 94087
Telephone (408) 746-0636 / Telex 172352

Free Message Number (800) 325-6000 — Give operator I.D. Number N1431 and message.



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COMPUTER SYSTEMS INC.

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PLEASE COMPLETE POSTCARD AND RETURN TO ENSURE YOUR WARRANTY RIGHTS.

Name: _____ Purchased From: _____
Address: _____ Date of Purchase: _____
City: _____ State: _____ Zip: _____
Telephone: (_____) _____

ENTER DISKETTES NUMBERS ON LINES BELOW

- FINANCIAL _____
- CROP _____
- DAIRY _____
- PIG _____
- LEAST COST RATION FORMULATION _____
- FARMFILER _____
- FARMCALC _____
- FINANCIAL UTILITIES _____

YES, I AM A MEMBER OF THE FARMPLAN USER'S GROUP.

PLACE
STAMP
HERE

FARMLAN™ COMPUTER SYSTEMS INC.
1055 Sunnyvale - Saratoga Road
Sunnyvale, CA 94087



FARMPPLAN EXTENDED WARRANTY

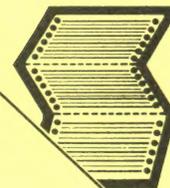
Congratulations! You have purchased a quality software package from Farmplan Computer Systems, Inc. As a new user of one of our software packages, you have a 90-day warranty, which protects you against program failure.

Farmplan would like to continue serving you, and because we value our customers we have a program which will protect you against future problems. This program is called the FARMPPLAN EXTENDED WARRANTY. The price of this warranty is 8.5% of Farmplan's suggested retail price of your program(s). Under our Extended Warranty you receive FREE updates, and repairs of data problems when possible.

If you do not wish to purchase an Extended Warranty, the rate for programmer time is \$75.00 dollars an hour with a one hour minimum. As you can see, the cost of the Extended Warranty is a bargain.

We hope you will consider purchasing the Extended Warranty which will cover you for a one year period, at which time you will have the option to renew.

If you would like to purchase the Extended Warranty, contact your local Farmplan agent, or to contact Farmplan directly, use our toll free number - (800) 325-6000. Give the operator I.D. number N1431 and your message.



FARMFILER

The Scope of the Program

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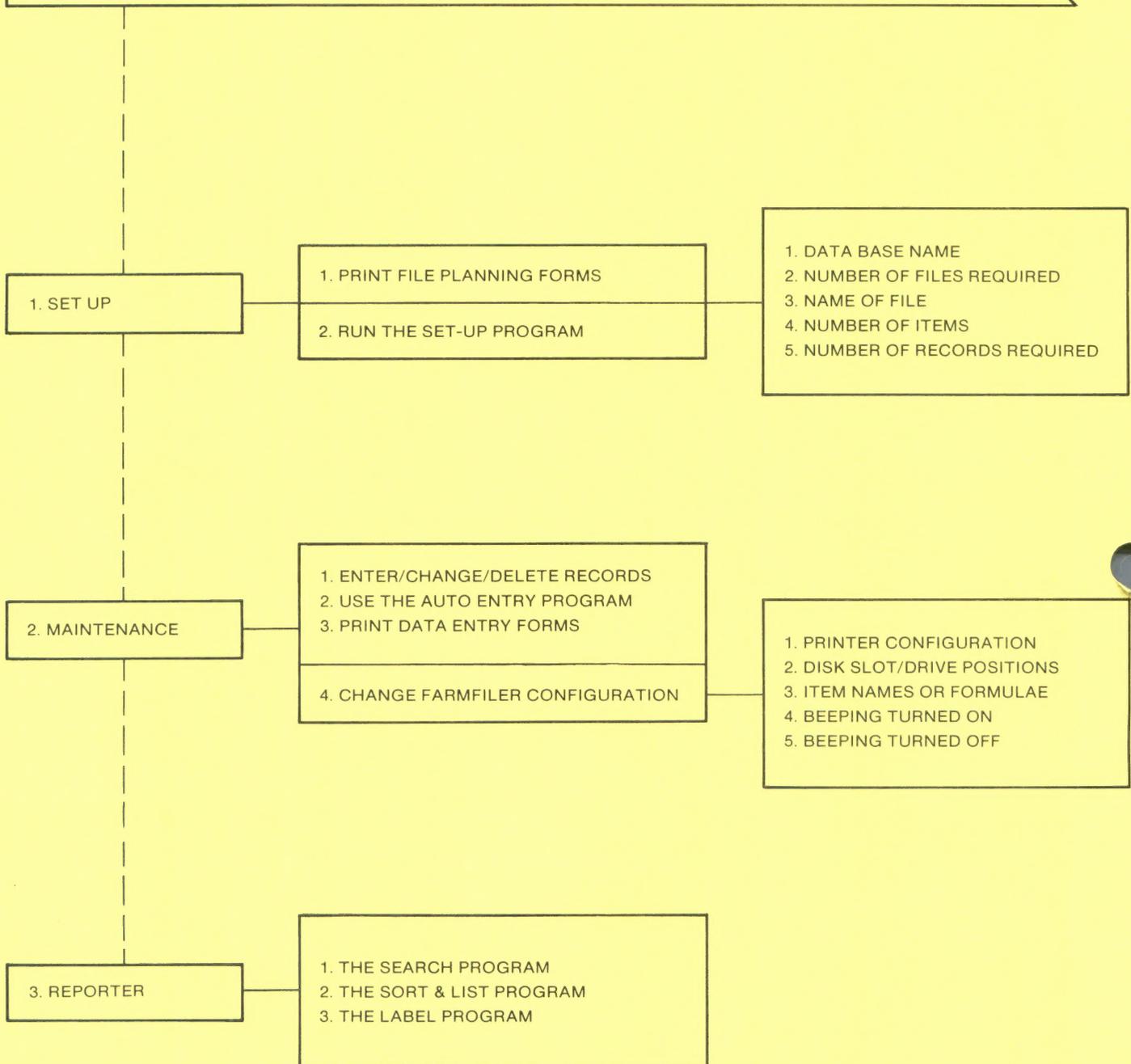
Hardware Requirements

Minimum configuration: 48K Apple (II Plus or Apple //e), 80 column printer, and two 5¼" disk drives.

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**FARMPLAN**
COMPUTER SYSTEMS INC

FARMFILER PACKAGE



Farmplan's Farmfiler has been developed carefully, to with the user in mind. Every effort has been made to ensure that the system is intact and error free. Farmplan will use all reasonable means to satisfy its customers. However, neither Farmplan Computer Systems, Inc. nor any of its employees will be liable for this product or any decisions made using information therefrom. While the system is an invaluable aid in recording and manipulating data, it is intended only to assist in making business management decisions, and its output must be utilized with reason.

Throughout this manual the term Apple is used as a registered trademark of APPLE COMPUTER, Inc. The term Farmplan is a registered trademark of Farmplan Computer Systems, Inc.



1



FARMFILER
(3.11.83)

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Section 1 - INTRODUCTION

Overview

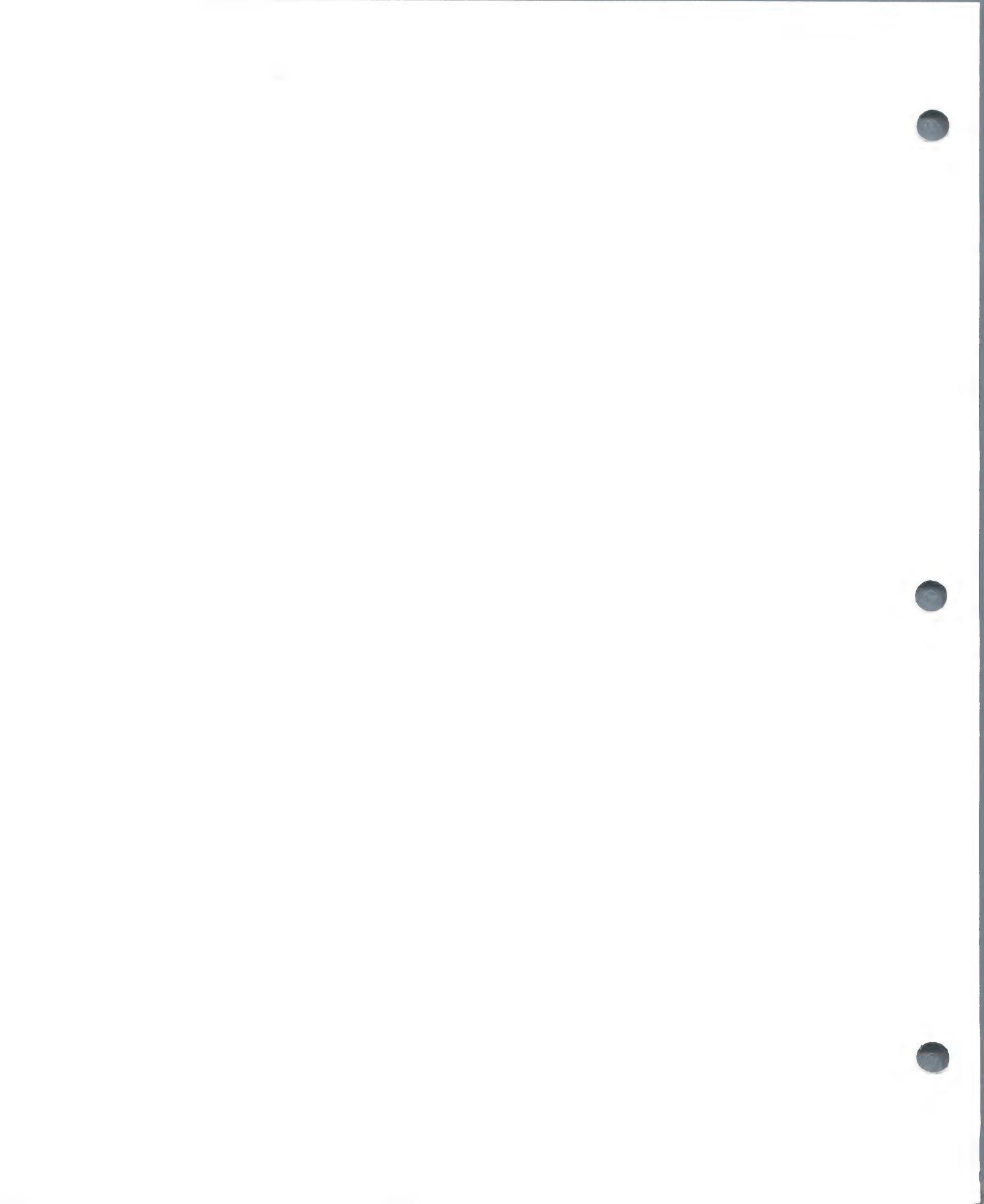
FARMFILER was developed to cater to the many requests from existing and potential microcomputer users to write programs for a variety of applications. The principle of FARMFILER is that YOU, the user, decide what YOU want.

As the name suggests, FARMFILER is a general purpose filing system. It provides for many aspects of record keeping, and MORE:

1. With the calculation modes the data can not only be stored but can also be manipulated within a record.
2. Once you, the User, have determined what you wish to record, YOU set up the FARMFILER format to YOUR OWN specifications.
3. DATA ENTRY: easy process to enter new records or change or delete parts of existing records at any time.
4. SEARCH PROGRAM: provides an intensive reporting facility, allowing YOU to determine the parameters for searching.
5. SORT & LIST PROGRAM: lists selected items from each record in the file, sorted in ascending or descending order on one user specified item. Column totals and averages are also available.
6. LABEL PROGRAM: allows searching and sorting of files producing mailing labels, either single or double column with 10 items per label.

Equipment Required

This program is designed to run on an Apple II Plus microcomputer with 48K memory, at least two disk drives (with controller card), a video monitor, and an 80-column printer with interface card (although a printer with more columns expands the report capability). Up to eight disk drives may be used to increase capacity. Additional disk controller cards are required if three or more disk drives are used. If you are not already familiar with the Apple and its peripheral equipment, consult the manuals supplied to set up your system correctly. Insert the Disk Controller Card in slot 6 and the Printer Interface Card in slot 1, as the Apple manual recommends.



The POWER of FARMFILERUSER DEFINED SETUP:

During SET-UP YOU decide the contents of the records in each file. Each record may contain a maximum of 60 descriptive items; each file may contain a maximum of 1000 records and the whole operation may use a maximum of 10 files. YOU are no longer limited by the size of a file cabinet, or by someone else's preconceived notions of how to organize YOUR records.

CONFIGURATION CHANGE:

You can change the printer configuration, disk drive configuration, item descriptions or formulae at any time, a great asset if, when you begin working with FARMFILER, you realize you need to make modifications.

CALCULATION MODES:

In FARMFILER YOU can carry out calculations within a record. YOU can formulate as YOU choose, evaluating the data in your records instantaneously, using real numbers and the values contained in other items of the records.

DATE RECOGNITION:

Dates are recognized on entry and a check is carried out to ensure that any date entered is valid. Dates can be included in calculation functions, to derive periods between dates or new dates resulting from adding days.

AUTO-ENTRY:

For those items which require regular updating, an AUTO-ENTRY program allows data on file to be replaced or modified by arithmetic operations. You have the option to store this AUTO-ENTRY format for future use.

SEARCH:

The SEARCH MODE allows you to examine an individual record or all records which match specifications that YOU have established. The results are available for screen viewing or by printout. This provides immediate access to your files, enabling you to analyze specific information selected by YOU.

USER CUSTOMIZED REPORT FORMATS:

Each time you establish a data entry format in Auto-Entry or a report format in Search you have the option to preserve that form under a name chosen by you, providing instant recall of YOUR standard report formats.

SORT AND LIST:

This program allows you to print selected items from each record in alphanumeric order of any one item specified.

TOTALS AND AVERAGES:

In both Search and Sort and List you have the option to print not only the selected data in the file but to request specified item totals and averages from all relevant records. Averages are presented in two ways; the real average and the average of only those items containing entered data.



THE LABEL PROGRAM:

This incorporates Search and Sort routines so that you can select records from the files and produce labels in either single or double column format with spacing to suit individual requirements. Addresses or labels can be presented in either alphabetic or numeric order of any one item.

MULTIPLE DATA DISK USE:

With the use of multiple disk drives the system can hold large volumes of data, limited only by the memory of the computer. (See Section 5 on MULTIPLE DISK USE).



DEFINITIONS

Throughout the documentation and screen instruction certain words are used and it is important to define these at the start. Some of the definitions are unique to their use in FARMFILER, and should be understood accordingly.

BOOT*

When you wish to use a program on a diskette you must switch on the Disk Operating System (DOS). This process is called "booting the diskette". Specific instructions on how to do this will be provided at the appropriate time in the manual.

MENU

As in a restaurant, a menu provides a list of choices. In the case of the computer menu, the screen displays a question with a list of possible answers. In FARMFILER the possible responses are displayed in inverse video; ie. black on white.

INITIALIZE*

Prior to entering information onto a new diskette, that diskette has to be prepared to accept the data. This preparation process is called initializing and will be explained in detail later in the manual.

COPY*

As a standard precaution a copy of the data diskette should be maintained on a "back-up" diskette. This protects you in case of damage (a spilled cup of coffee?) to the working version. The procedure for copying will be explained at the appropriate time in the manual.

CURSOR

The flashing white box on the video screen is called a cursor, and is signaling for you to give the computer instructions as per the options displayed on the screen.

TYPE

This is an instruction to enter data or instructions into the computer by spelling out those instructions on the typewriter style keyboard.

PRESS

When you see "press" you are being instructed to push down a special key located on the keyboard.

*NOTE:

Before proceeding you may wish to consult with the Apple DOS Manual for further explanations of booting, initializing, and copying.

Booting the diskette: Pages 11 and 12

Initializing the diskette: Pages 13, 14, 24, 25, and 166

Copying: Pages 38, 39, and 40



CHARACTER

A character is an individual letter, number, punctuation, or space.

ITEM

An item is a detailed descriptive piece of information, such as name or age.

RECORD

A record is a complete set of items which describes an individual event, thing, or transaction.

FILE

A file is a collection of records containing different information but of identical format.

DATE

Any item whose description commences with the four characters "DATE" will require the standard date input: MM/DD/YR.

REAL NUMBER

Real number in this text refers to an actual numeric value as opposed to the index number of an "item". Real numbers are preceded by the # sign.

ESC

The ESCAPE key is located on the left hand side of the keyboard, labeled ESC. When this option is presented, it is used to interrupt the running program. ESC should not be followed by pressing another key until the next menu is presented.

RETURN

The RETURN key is located on the right hand side of the keyboard, just under the RESET key. This key is used either to define the end of an entry of a piece of data or the end of a program sequence. Pressing RETURN will either take you to the next entry or the next menu.

TO QUIT

This option will take you out of the program, and you will have to turn off the machine and re-boot before proceeding, with the resultant loss of any data entered.

QUIT

This option is used when you do not wish to continue with a particular program section. Selecting this option will take you back to the previous menu.

RETRACE

In the Set-Up program, Retrace allows you to go back to review data previously entered, while holding the data you have just entered.

REJECT

This cancels your entry and allows you to start that particular entry again. It may be followed by a Quit option.



DEFAULT

There are certain circumstances in which the computer answers the question for you and displays the results on the screen. This is noted as a Default.

& (CALCULATION)

& is used to define an item which contains a formula: this calculates the answer using the contents of other items and/or real numbers. The calculation options available are addition(+), subtraction(-), multiplication(*), division(/), and a special sum function(\wedge) for adding long lists of consecutive items.

RATIOS

Ratios may be calculated during the Search program, if a calculation item has been reserved for the purpose. Ratios are expressed as the value of a selected item in a single record, divided by the average value of that item from all records found during the search.

FARMFILER BEEPS

In this program you will hear three sets of beeping sounds. The first is one beep, which signals that there is a special instruction on the screen. The second is three beeps, which means that you have made an incorrect entry and must re-enter the data. The third is multiple beeps, signalling the end of a search or print routine, especially handy when you want to leave the machine while running a report but want to know when that report is completed.

FARMFILER "ILLEGALS"

Operations or entries which are not acceptable within the framework of the FARMFILER program.

Do not press RESET.

Do not use semi-colons, colons, or commas.

Do not interrupt the program with CTRL C.

Do not use Applesoft's scientific number notation. (eg. the letter E in a number sequence may cause error code 69 and program termination. When using numbers adjacent to letter E make sure you have an alpha character before the first number or E in the sequence.)

Do not switch off the computer during the ENTER/CHANGE/DELETE program. Make sure you use the Quit option.

Do not enter decimal values to the thousandth. (eg., .033 is fine, but .003 would be displayed in scientific notation)

FARMFILER will prevent you using Control characters, commas or semi-colons, and will not allow you to use a space as the first character in an item entry.



The INITIALization Process

FARMFILER uses at least two diskettes. One is the program diskette which is purchased from Farmplan. It is labeled "FARMFILER" and is used in disk drive 1. The other diskette required is a data diskette, which is used in disk drive 2. Eight total data diskettes may be used to increase capacity if desired. Data disks can be any 5 inch diskettes of good quality, including the one supplied with FARMFILER, labeled "DATA DISKETTE". Data diskettes must be initialized with the standard Apple DOS 3.3 format. Therefore, the first step in preparing to use FARMFILER is to initialize one or more diskettes. This process prepares the disk surface to accept your information in a form the program can read and understand. (Never initialize FARMFILER program diskette or any other diskette that contains valuable programs or data as the initialization process destroys all existing information on a diskette.) To initialize a diskette, follow these steps:

1. Boot the system using your DOS 3.3 SYSTEM MASTER disk in drive 1. (The word "boot" is a common computer term which means to insert the diskette in disk drive 1 and switch the computer on.)
2. Type: NEW <RETURN>; Remove the SYSTEM MASTER diskette from drive 1.
3. Insert a blank disk in Drive 2.
4. Type: INIT FARMFILER DATA DISK,D2 <RETURN>
5. Wait for the drive to stop whirring.

NOTE: <RETURN> refers to the RETURN key as explained below.

The disk is now INITIALized. This could have been performed in drive 1, but since your data disks will be running in drive 2, it's better to initialize in that drive.

<RETURN> vs. <RESET>

The expression <RETURN> refers to the RETURN key on the right side of the Apple keyboard. Do not confuse this with the RESET key just above it. The RESET key should never be pressed during use of FARMFILER as it will cause a sudden and irreversible exit from the program, resulting in the loss of any work in progress.

In fact, we recommend that the RESET key be disabled. You can do this if you have a fairly new Apple II Plus by switching off the computer and removing the top cover. At the front of the machine, just behind the keyboard, you will see a printed circuit board hanging there like a balcony. On the left side of that board (as you face the Apple) is a small sliding switch with a diagram identifying it as switch S1. Slide the switch to the left and replace the Apple's cover. The RESET key will only work now if used in conjunction with the CTRL (control) key adjacent to the "A" key. In order to use the RESET key, press it while holding down the CTRL key.



Booting the Program Disk

To use FARMFILER:

1. Switch OFF power to the Apple.
2. Insert the PROGRAM DISKETTE in drive 1.
3. Insert your DATA DISKETTE or newly INITIALIZED DISKETTE in drive 2 (and additional blank or data diskettes in drives three, four, etc., if applicable).
4. Switch ON power.

Drive 1 will then begin to operate and the first part of the program will be loaded into the computer's memory. This process is called "booting" the system. The red light on drive 1 will go off and instructions will appear on the screen.

After you have finished using FARMFILER, typing Q <RETURN> from the main menu will cause the cursor to appear at the bottom of the screen. At that point, remove all disks and then turn the computer off. The disks are removed first to prevent any stray current from altering the data on the disks during the shutdown process.

NOTE: A disk drive is in operation when its red "in use" light is on. Do not insert a disk into the disk drive or remove one while the red light is on.

Entering Data

Every entry you make must be followed by pressing the RETURN key. This permits correction of the entry prior to total commitment. You can edit the entry before pressing <RETURN> by using the left arrow to backspace and typing over the previous attempt. The right arrow will move the cursor to the right and accept any characters passed over.

Every data item entered has a maximum length allocated. When you reach that length the computer will beep and will not accept any more characters. You may edit the data if you wish, or press <RETURN> to accept it.

In some cases, acceptable responses to data requests are indicated by HIGHLIGHTING the initial letter(s) of the appropriate word. For example, in the line:

MAKE SELECTION OR QUIT...

the letter "Q" is highlighted. Any other response will prompt a beep, and the system will wait for you to make the correct entry.

This program is written in a language that uses various punctuation marks and other "control characters" for special purposes. Therefore, in many places you will be unable to enter colons, commas, leading spaces or CTRL characters. The computer will identify these, give a beep, and wait for an acceptable character.



Entering Dates - The Standard Format

Throughout this and other Farmplan packages, entry of dates requires a set, standard format. When a date entry is required by the system, the screen will usually display:

MM/DD/YY

The system is requesting a date entered with the number of the month (1-12), followed by a "/", the number of the day, followed by another "/", and the last two digits of the year. Leading zeros need not be entered (although they can be), but the "/" is essential. Therefore, to enter July 18, 1982, enter: "7/18/82". All date entries are verified to ensure that such a date exists. If, for example, "18/7/82" had been mistakenly entered, the system would realize that a mistake had been made because there is no 18th month. The computer would have beeped and awaited re-entry. The system will accept only valid dates. Of course, it is impossible for the system to recognize some errors. For example, if you intended to enter March 10, 1982, (3/10/82) and actually entered "10/3/82", the system would assume that you meant October 3, 1982 and would have acted accordingly.

Insurance - The Back-up Data Diskette

Diskettes have a limited life and can be damaged by a variety of accidents, such as fingerprints on the magnetic surface, spilled coffee, or magnetic fields (from TV sets, for example). It is therefore essential that when you have completed your initial set up, and whenever you have modified the information on your data diskette, you MAKE AT LEAST ONE BACK-UP COPY.

We also recommend that if you are entering or modifying much data, you stop periodically and copy your "working" data diskette onto the back-up. That way if anything goes wrong you will never be too far from recovery.

Use the following procedure for backing up data diskettes:

1. Complete the present routine and Quit the program.
2. Remove diskettes from all drives.
3. Switch power OFF to the Apple.
4. Place the Apple DOS 3.3 System Master in drive 1.
5. Switch power ON to the Apple to boot the System Master.
6. Type: RUN COPYA <RETURN>
7. When drive 1 stops, remove the System Master.
8. Place the disk FROM WHICH you wish to copy in drive 1.
9. Place the diskette TO WHICH you wish to copy in drive 2.
10. Make sure both drive doors are closed.
11. Read the information on the screen to check that diskettes are in the correct drives, pressing RETURN to confirm each slot and drive number as they are presented.
12. The screen will display: -PRESS RETURN TO BEGIN COPY-
13. Press RETURN and wait while the copy is made.
14. Label the new copy clearly, including date copied. At this point, the newly copied diskette is an exact copy of the original. All information previously on the diskette has been destroyed and replaced with the copied data.



Two Step Back-Up

For proper security, you should have two data diskette copies and label them Copy 1 and Copy 2. To update your copies, first copy Copy 1 onto Copy 2, then copy your current data diskette onto Copy 1. Therefore, if there is any corruption of the diskettes or the copy process fails, you will never be more than two steps from re-entering data. As an additional back-up, you should store your audit trail of data input through the past two data entries, so that if there is loss through corruption, the replacement of data is available.

NOTE: The foregoing procedure is used for copying data diskettes only. If the program diskette is damaged or corrupted, repairs must be made by FARMPLAN. Be sure to investigate warranty possibilities BEFORE this happens.



Section 2 - FARMFILER SET-UPOverview

Look at the screen. FARMFILER is designed to assist the user in making correct entries.

Do not worry about making mistakes. They can always be corrected.

The screen will frequently display helpful messages on the bottom line.

Permissible responses to FARMFILER menus are displayed in inverse video; that is, black characters on a white background.

When the system asks for ITEM NO. it is expecting the number of one of the index numbers shown on the screen beside the item name.

Most of your questions will be answered when you LOOK AT THE SCREEN.

Do not be frightened by FARMFILER or the Computer. It is almost impossible to damage the system through the keyboard. It protects itself.

Accidents can happen, but it is nearly always possible to recover. Make sure you are familiar with the sections on Insurance - the backup Data Disk and Recovery from Disaster.

PRINTING THE FILE PLANNING FORM

Now that you are familiar with the terminology that we will be using in the manual, and you know how to boot and initialize, it is time to set up a FARMFILER model.

First let's run an equipment check. Both disk drives should be connected to the disk controller card in slot 6 on the computer. Your printer should also be connected to its controller card, which should be in slot 1 or 7. Make sure the printer is on and on-line.

Place your FARMFILER PROGRAM MASTER diskette in Drive 1 and the new DATA diskette that you have just initialized in Drive 2. Close both of the doors. Boot FARMFILER and you will see the following menu on the screen:

FARMFILER

DO YOU WANT.....

1. FARMFILER SET-UP
2. FARMFILER MAINTENANCE
3. FARMFILER REPORTER
- Q. TO QUIT

ENTER.....



You will notice that the numbers and the letter Q are in inverse video, black on a white background. Possible responses are always indicated in this manner. Therefore, as you want to SET-UP you type the number 1 and then press <RETURN>.

The next menu that appears on the screen is:

FARMFILER SET-UP

DO YOU WANT TO.....

1. PRINT FILE PLANNING FORMS

2. RUN THE SET-UP PROGRAM

Q. QUIT

ENTER.....

Again, you will type 1 and press <RETURN> as, prior to setting up your model, you will want to take advantage of the planning form provided.

Printer Configuration

To enable your printer to work with FARMFILER properly (including printing your planning form), you will need to provide some specific information to the program regarding your printer. This information may be changed at any time through item #1 of the CHANGE CONFIGURATION option.

The first input required is the location of the printer interface card in your Apple II. It may be located in slot 1, slot 7 or slot 0 (use 0 if no printer will be used). Slot 1 is recommended. Enter the slot number.

The next three entries needed are the ASCII code numbers for specific functions. The screen will display:

PRINTER FORM FEED.....

The ASCII standard TOP-OF-FORM character is called FF, or <CTRL-L>. Its number is 12, so enter the number 12 unless your printer manual specifically identifies another number.

If you do not have form feed on your printer, then you should press <RETURN> and the following question will replace PRINTER FORM FEED:

HOW MANY LINES PER PAGE.....

The standard 8-1/2" by 11" paper has 66 lines per page.

FORM HEADING PRINT STYLE....

This code varies from printer to printer. It's the code signal that turns on expanded or bold-face letters for headings, if your printer is capable of producing them. If you are using the Epson MX-100, the standard printer of the FARMPLAN system, enter 14 here. Otherwise, consult your manual. If your printer does not print headings, simply enter <RETURN>.



FORM TEXT PRINT STYLE.....

This is the code signal to turn off the expanded or bold-face letters. Enter the appropriate code for your printer (20 if you are using an Epson MX-100), or <RETURN>.

PRINTER COLUMN WIDTH.....

Enter the maximum number of columns per line on your paper printouts. The system requires that any printer used have at least 80 columns. However, if you are using the Epson MX-100, you can enter 132 as the column width if you use 14 inch paper, or 8 inch paper with the condensed print mode. If you use 14 inch paper and the condensed print mode, you may enter 230 as the column width. Increased column widths allow more complex printouts in some of the reporting routines.

CENTRONICS CARD? Y/N.....

Answer Y if you are using a Centronics interface card, or N if you are not. For the Epson MX-100, "N" is the proper response.

In summary, these are the entries to make if you are using an Epson MX-100 printer and interface card:

PRINTER SLOT NO.....	1
PRINTER FORM FEED.....	12
FORM HEADING PRINT STYLE.....	14
FORM TEXT PRINT STYLE.....	20
PRINTER COLUMN WIDTH.....	80 (or 132 or 230)
CENTRONICS CARD? Y/N.....	N

This data will be recorded on the data diskette and will not have to be re-entered unless you change printers.

After providing the computer with the required information, it will instruct you:

SET-UP PLANNING FORMS

TURN PRINTER ON

SET TOP OF FORM

PRESS <RETURN> WHEN READY...

Upon pressing <RETURN> your FILE PLANNING FORM will be printed. Please read the notes at the bottom of the form as there is some very important general information.

Now that the planning form is ready, it is time to sit back and think about exactly what information is required and how that information will be used.



FARMFILER MODEL (Example)

You are running a beef operation and need to find a way of recording weight gain for each animal, and then use the information for comparing individual animal performance with the herd average. Using FARMFILER, the solution is easy.

The first thing you do is decide what information you want to store, and how to use it to get the statistics you need.

Using the File Planning Form you have just printed, you can start to list the items you're going to use:

Item No.	Item Name (Max. 12)	No. Characters or Formula
1.	Animal I.D.	8
2.	Tag number	8
3.	Dam I.D.	8
4.	Sire I.D.	8
5.	Date Born	8 (automatic)
6.	Birth Weight	6
7.	Date Weaned	8 (automatic)
8.	Weaning Weight	6
9.	Date Weighed	8 (automatic)
10.	Weight	6
11.	Comments	20
12.	Comments	20
13.	Comments	20
14.	&Age in Days	Formula : 5-9
15.	&Tot Wt Gain	Formula : 10-6

This completes your first "page" of data, and once into the Set-Up program you will see the screen Scroll to access the remaining items:

16.	&Av Gain/Day	Formula : 15/14
17.	&Wt/Day Age	Formula : 10/14
18.	&ADG Ratio	Formula : 18*#1
19.	&WDA Ratio	Formula : 19*#1

This model is designed to illustrate some of FARMFILER's most powerful features, so at this point a little explanation may be useful.

When you have Set-Up this file structure and are entering data the calculations in items 14 through 19 will be activated as follows:

Item 14 (Age in Days) calculates the number of days between item 5 (Date Born) and item 9 (Date Weighed).

Item 15 (Total Weight Gain) subtracts item 6 (Birth Weight) from item 10 (Current Weight) to give Weight Gain Since Birth.

Item 16 (Average Weight Gain per Day) divides item 15 (Total Gain) by item 14 (Age in Days).



Item 17 (Weight per Day of Age) divides item 10 (Current Weight) by item 14 (Age in Days).

Items 18 and 19 contain "dummy" calculations in which they multiply their own value by #1. These items will be used later to store Ratios calculated during the Reporter program. (Remember the '#' symbol denotes a real number, as opposed to the value of an Item in your file.) This has the effect of leaving the data stored in these items unchanged when the calculations are activated.)

In order to keep our example reasonably straightforward, the formulae included have been kept fairly simple. Refer to Summary of Procedures in Section 5 for further information on the use of calculated items and ratios.

You now review your completed File Planning Form to see if you will want any additional items of information in the record. As you have given a "great deal of thought" to this set-up you are satisfied and ready to enter your file format as permanent (knowing that you can change item names and formulae with the Configuration Change program).

You have noted that the original menu:

FARMFILER

DO YOU WANT.....

1. FARMFILER SET-UP
2. FARMFILER MAINTENANCE
3. FARMFILER REPORTER
- Q. TO QUIT

ENTER.....

returned to the screen after printing your File Planning Form. So once again you type 1 for SET-UP and press <RETURN> and you are again given the choice of:

FARMFILER SET-UP

DO YOU WANT.....

1. PRINT FILE PLANNING FORMS
2. RUN THE SET-UP PROGRAM
- Q. QUIT.

ENTER.....

This time you type 2 and press <RETURN>.

The screen will remind you that you must have your new initialized diskette in Drive 2 and will also refer you to a section of the manual for future Set-Ups requiring more than one data disk drive. As your diskette is still located in Drive 2 you can press <RETURN> to continue.



FARMFILER SET-UP

IN THIS SECTION YOU WILL BE ASKED TO ENTER THE DATA WHICH YOU SHOULD HAVE ALREADY PREPARED. YOU WILL BE ABLE TO BACK-TRACK AND MAKE CORRECTIONS WITHOUT LOSING DATA USING THE RETRACE FACILITY DURING THE PROGRAM OR THE CONFIGURATION CHANGE PROGRAM AFTER COMPLETION.

*KEYS TO PRESS ARE SHOWN IN INVERSE
*PRESS <RETURN> AFTER EACH ENTRY

<RETURN> TO CONTINUE OR QUIT....

In the above menu are three very important bits of information to remember. The first is that through the RETRACE, REJECT, and QUIT commands you will have the option to go back in order to correct or change any of the set-up configuration or data entered. The second is that the commands are shown in inverse, black on white, and the letter, number or special key shown in inverse must be typed or pressed to achieve your desired result. The third is that you must press <RETURN> after typing in any of those letters or numbers, except ESC for escape.

You now see the following on the screen:

FARMFILER SET-UP : DATA ENTRY

1. YOUR DATABASE NAME :
2. HOW MANY FILES RQD :

The cursor is flashing at the end of line 1, waiting for you to type the database name. Also note that at the bottom of the screen you are advised that your input is limited to fifteen characters. The limitations on your answers will always be shown in this way.

You are going to call your system by your farm name, so you type that and press <RETURN>. The cursor will move to the end of line 2, waiting for you to type in the number of files required, maximum 10. As you are only going to be keeping records for one group of animals you only require 1 file, and should therefore type 1 and then press <RETURN>. Then three more questions will appear on the screen.

3. NAME OF FILE 1 :
4. HOW MANY ITEMS :
5. NO RECORDS RQD :

The cursor is at the end of line 3 and you will type Weight Records for your file name. Press <RETURN> and the cursor moves to the end of line 4. Now you refer to your file planning form and see that you selected 20 items, type 20 and press <RETURN>. The information that you would normally supply in question five is answered by the computer automatically, entering 1000 as, with only one file, the system defaults to the maximum number possible. Now you are given the choice:

CHANGE ITEM NO RETRACE OR <RETURN>....



As your entries are accurate you press <RETURN> and

FILE 1		FILE NAME
ITEM NO.	ITEM NAME	NO CHARACTERS OR FORMULA
-----	-----	-----
1.		
2.		
3.		
4.		
5.		
6.		
7.		
8.		
9.		
10.		
11.		
12.		
13.		
14.		
15.		

appears on the screen, with the cursor against item 1. You now type the item name, press <RETURN>, type the number of characters or formula, press <RETURN>, and proceed to enter name and number of characters for each of the 20 items in your record.

DON'T PANIC IF YOU MAKE A MISTAKE!

After entering the details from your file planning form you can:

CHANGE ITEM NO SCROLL RETRACE OR <RETURN>...

meaning that you type the item number if you wish to change that line, scroll to roll the screen so that you can see your first 15 items again, retrace so that you can start over, or press <RETURN> to continue.

Having developed manual dexterity through the earlier phases of set-up you did not type anything incorrectly: but wait. On item 1 you remember you typed "Aminal" instead of "Animal". You must first type S to scroll to rotate to the page on which the incorrect item appears. Then type 1 and press <RETURN> which will move the cursor back to line 1 under the column ITEM NAME. Type the corrected spelling, press <RETURN>, and again type 20 for the number of characters. Did you press <RETURN>?

As your file format is now correct you again press <RETURN>, this time to proceed to set-up your disk and printer configurations.

DISK CONFIGURATION

PROGRAM DISKETTE IN S6,D1

HOW MANY DATA DISK DRIVES
WILL YOU BE USING (1-8).....



You are using one DATA disk drive in this example (remember that Drive 1 is your PROGRAM disk drive) so you will type 1 and press <RETURN>. The next menu to appear:

DISK CONFIGURATION

PROGRAM DISKETTE IN S6D1 NOW ENTER DISK
CAPACITY IN K

DATA DISKETTE 1...S6D2V000.....

provides you with the opportunity to define the amount of capacity of that data disk drive. If you have 3.2 Disk Operating System type 100. If you have 3.3 DOS (current Apple issue) then type 126. You have selected the correct configuration and now proceed by pressing <RETURN>.

The next menu to appear allows you to change your set-up.

If you had elected to make some changes a menu would appear from which you could have chosen to go back and change the contents of your files, the number of records requested, the disk configuration, or the allocation of reference numbers. As the allocation of reference numbers is dependent upon the disposition of items 1 thru 3, it must be changed last.

You have pressed <RETURN> and now see the printer configuration menu on the screen. Refer to Printer Configuration in this section for assistance. After entering the new printer configuration you press <RETURN>.

Your format is now being stored on the data diskette in drive 2. This is an integral part of your system and you are now able to enter data.

The screen will indicate that New Files are being set-up, and will return to the Main Menu upon completion.

FARMFILER

DO YOU WANT.....

1. FARMFILER SET-UP
2. FARMFILER MAINTENANCE
3. FARMFILER REPORTER
- Q. TO QUIT



Section 3 - MAINTENANCE

From the Main Menu you will type 2 <RETURN> to select file maintenance. The next menu to appear is:

FARMFILER MAINTENANCE

DO YOU WANT TO....

1. ENTER/CHANGE/DELETE RECORDS
2. USE THE AUTO ENTRY PROGRAM
3. PRINT DATA ENTRY FORMS
4. CHANGE FARMFILER CONFIGURATION
- Q. QUIT

ENTER.....

You type 3 and press <RETURN>, as you want a reminder of the record format for your file. Make sure that the power on your printer is ON and it is set On Line.

From the next menu you will choose whether or not to have the Data Entry Form printed in Single or Double spacing, by either typing S or D, and then pressing <RETURN>. Then the computer will ask you how many forms you want.

At this point one form will be satisfactory, so type 1 and press <RETURN>. After the form is printed you will automatically return to the Main Menu, and, as you still want maintenance you type 2 and press <RETURN>.

From the Maintenance Menu you choose to enter data and therefore will type 1, then press <RETURN>. After the screen advises you that it is loading the Enter/Change/Delete Program and asks you to wait a few seconds, the following menu appears:

FARMFILER MAINTENANCE

PLEASE NOTE...

IT IS ESSENTIAL THAT YOU USE THE
QUIT FUNCTION IN THIS PROGRAM
WHEN YOU ARE FINISHED.

DO NOT JUST SWITCH COMPUTER OFF

DELETE RECORDS OR <RETURN> TO ENTER DATA..

Note that the D in delete and the word <RETURN> are in inverse video. If you wished to select Delete you would type D and then press <RETURN>. As you want to enter data you just press <RETURN>. The proper entry will always be shown in inverse video so watch the screen for the prompts.



The next question at the bottom of the screen is:

AUTO NUMBERING ON (Y/N)...

If you reply Y the reference numbers for your records will be assigned automatically in numeric sequence (although you can override the allocated number if you wish). If you reply N you will be able to select any reference number you wish, within the range 1 to 9999, provided it is not already in use. For the moment, type N.

You now have the screen set up to accept new records. First, you will enter the reference number, and as this is your first record, type 1. The computer will ask you to verify by flashing "NEW RECORD" and then ask you to reject by typing R or pressing <RETURN> to continue. You press <RETURN> and the cursor positions itself at item one for data entry. You enter the correct information and press <RETURN> to proceed to the next item number, and so on through the record.

When you have entered item 13, note that the computer takes over and activates the calculations in items 14 through 19. When the record is completed you will have the opportunity to correct any data entered or just press <RETURN> to continue. Play with the program a little by entering data incorrectly and then going back and changing.

IMPORTANT

After entering data you MUST use the Quit function. Do not turn off your machine until you are back in the main menu. Although your data is stored on the diskette it has not yet been sorted in a format in which it can be re-used. If you have a "breakdown" during data entry please refer to the section entitled "Recovering from Disaster".

Data Entry

We have provided twelve sample records in Appendix A for entry into your model. These are designed to illustrate some of FARMFILER's most important features, rather than to represent a practical model. By entering all twelve you will be better able to understand the value of the reporting procedures which we will examine in the Reporter section. You should now refer to Appendix A and enter the sample data.

Now type Q for Quit: the screen will clear and then display a message telling you the files are being sorted. The system is actually re-organizing the data it has stored temporarily, into a form in which it can be re-used. This is why you must use the Quit option to leave the program after adding or deleting records - if you do not, you will not be able to retrieve your records, until you follow the recovery procedures described in Section 5.



AUTO-ENTRY

Time saving on any job is important, and the updating of records becomes much easier with Auto-Entry. You have the option of inputting data one record at a time, searching the files for records with a certain parameter and inputting the same data to those alone, or entering the same data in all records.

Let's go back to our sample file and use some of the Auto-entry options.

From the FARMFILER MAINTENANCE MENU you will select 2 and the following menu will appear on the screen:

```

FARMFILER  -  AUTO-ENTRY

DO YOU WANT TO....

1. INSPECT YOUR AUTO-ENTRIES
2. CREATE AN AUTO-ENTRY
3. IMPLEMENT AN AUTO-ENTRY
4. DELETE AN AUTO-ENTRY

Q. QUIT

ENTER.....

```

At this point you have not stored any Auto-entry formats in the system so you will elect to create an Auto-entry by typing 2 <RETURN>.

```

CREATING AN AUTO-ENTRY

+ADD -DEDUCT *MULTIPLY =REPLACE

1. ANIMAL I.D.. : :
2. TAG NUMBER.. : :
3. DAM I.D..... : :
4. SIRE I.D.... : :
5. DATE BORN... : :
6. BIRTH WEIGHT : :
7. DATE WEANED. : :
8. WEANING WGHT : :
9. DATE WEIGHED : :
10. WEIGHT..... : :
11. COMMENTS.... : :
12. COMMENTS.... : :
13. COMMENTS.... : :
14. &AGE IN DAYS : :
15. &TOT WT GAIN : :

ITEM NO SCROLL QUIT OR <RETURN>.....

```



The first fifteen items of your record are shown on the screen and you can type S to scroll to look at the rest of the record. In this example of Auto-entry you want to change DATE WEIGHED (item 9) and WEIGHT (item 10). You select item 9 by typing 9, then pressing <RETURN>. The cursor is now located between the colons at the end of that line. As you want to replace the previous date with a new one you select the replacement function by typing the = followed by <RETURN>. Now carry out the same procedure for item 10. Next you are given the opportunity to store this Auto-Entry format (you can store up to 10) and as you will want to carry out this procedure regularly, select Yes, press <RETURN>, then choose a name for the format, such as "Weight Update".

The next choice is whether or not to enter the same new information automatically into all records, or whether to select records individually by reference number. As your new data will be different for each animal in this case you select the Individual option.

DO YOU WANT A PRINTED RECORD Y/N

permits the printing of an audit trail. Due to the simplicity of the entry you answer N for this question.

Now you come to one of the most exciting features of Auto-entry. That is the ability to input new data into files that meet a certain parameter that you choose. By selecting C for conditional you may define those records in which new data is to be entered. In our next data entry sample we provide the means to really examine this powerful feature of FARMFILER. But in this example you want no conditions on the entry so you press <RETURN>.

As FARMFILER is concerned with time saving, the following options to appear on the screen will be found in the Reporter programs as well. These options provide the ability to reference all records, or, if you know your files, a section of those records. Once into the Auto-entry or one of the Reporter programs you are given the chance to PAUSE in the routine by the appearance of:

ESC TO PAUSE

on the screen. Press the ESC key (remember, this is one time you do not press <RETURN>), and then thru the menu

QUIT OR <RETURN> TO CONTINUE....

you may go back to the previous menu or continue entering data or reporting.



Now try a Global Auto-Entry with special conditions. You will again select option 2 from the menu to create a new Auto-Entry format. In this example you are going to use one of your 'Comments' (item 11) to record inoculations of all animals born since July 1981. Try it yourself by following the screen prompts.

You should first have selected item 11 and entered the = to replace whatever was there already. After selecting Global Auto-Entry, you would then have typed in the data you wanted to enter into the records, such as "inoculated 1/5/82". Next you should have selected Conditional, entered 5 (date born) for the item number, > for the condition, and 7/1/81 for the data. Of course you followed each entry by pressing the <RETURN> key!!

Another example of a Global update would be converting all your weights from pounds to kilograms (perhaps you're sending a stud list to Europe). All you would do is select / (for divide) against items 6, 8, and 10, then using the Global option divide all the weights by 2.2 the calculated weights in items 15 through 19 would be automatically re-calculated for you.

Print Data Entry Forms

Pressing 3 <RETURN> from the Maintenance menu provides a printed copy of your file layout, including formulae. This can be helpful as a guide for data input preparation. Our example would look like this:

FARMFILER : DATA ENTRY FORM

FARMFILER MODEL: FILE NO.1 : File Name REF NO : _____ :

1: ANIMAL I.D. : _____ :
 2: TAG NUMBER...: _____ :
 3: DAM I.D.....: _____ :
 4: SIRE I.D.....: _____ :
 5: DATE BORN....: ___ / ___ / ___ :
 6: BIRTH WEIGHT.: _____ :
 7: DATE WEANED..: ___ / ___ / ___ :
 8: WEANING WGT..: _____ :
 9: DATE WEANED..: ___ / ___ / ___ :
 10: WEIGHT.....: _____ :
 11: COMMENTS.....: _____ :
 12: COMMENTS.....: _____ :
 13: COMMENTS : _____ :
 14: &AGE IN DAYS.= 5-9
 15: &TOT WT GAIN.= 10-6
 16: &AV GAIN/DAY.= 15/14
 17: &WT/DAY AGE..= 10/14
 18: &ADG RATIO...= 18*#1
 19: &WDA RATIO...= 19*#1



CONFIGURATION CHANGES

Pressing 4 <RETURN> from the Maintenance menu allows you to make certain changes in your record structure.

FARMFILER CONFIGURATION CHANGES

YOU MAY CHANGE....

1. PRINTER CONFIGURATION
 2. DISK SLOT/DRIVE POSITIONS
 3. ITEM NAMES OR FORMULAE
 4. BEEPING TURNED ON
 5. BEEPING TURNED OFF
- Q. QUIT

ENTER.....

If you select 1 you will repeat the printer configuration questions covered in the section Model Set-up.

If you select 2 the following comes to the screen:

DISK DRIVE CONFIGURATION

THE PRESENT CONFIGURATION IS:

- 1: THE PROGRAM DISKETTE IN S6D1
- 2: DATA DISKETTE 1 IN S6D2V000

CHANGE OR <RETURN> TO CONTINUE

When you type C and press <RETURN> the cursor moves to line 1 and positions itself to the right of the letter S. After entering the new Slot number and pressing <RETURN> the cursor moves to the right of the letter D. You then enter the new Drive number, press <RETURN>, and the cursor moves to line 2 and proceeds through the program until all changes are made.



If you select 3 you will see the following on the screen:

FILE 1

1. ANIMAL I.D.. :
2. TAG NUMBER.. :
3. DAM I.D..... :
4. SIRE I.D..... :
5. DATE BORN... :
6. BIRTH WEIGHT :
7. DATE WEANED. :
8. WEANING WGHT :
9. DATE WEIGHED :
10. WEIGHT..... :
11. COMMENTS.... :
12. COMMENTS.... :
13. COMMENTS.... :
14. &AGE IN DAYS :
15. &TOT WT GAIN :

CHANGE ITEM NO SCROLL OR <RETURN>

To either change the item description or change a formula you just enter the item number, press <RETURN>, and then enter the new data. Please note that you cannot change a date to a non-date, you cannot change a formula to a non-formula, and you cannot change the number of characters allotted for data input.

Upon completing the changes you will be returned to the Main Menu.

Selections 4 and 5 allow you to either turn on the prompting provided by the beeping (please note that the beeping is on when you first use the program), or to turn off the beeping, especially after you become familiar with using the program.



Section 4 - THE REPORTER

From the main menu type 3 <RETURN> to obtain the Reporter menu:

FARMFILER REPORTER

DO YOU WANT...

1. THE SEARCH PROGRAM
2. THE SORT & LIST PROGRAM
3. THE LABEL PROGRAM
- Q. QUIT

ENTER....

SEARCH

The Search program allows you to examine the information in your file in several ways:

You can select individual records to examine on the screen and print out if required.

You can search through the file to find records matching your specification.

You can design specifications for as many items in the record as you like, using the conditions Greater Than, Less Than, Not Equal To, Between, or Equal To whatever you choose. An example of a search specification, using the model we have already set up, would be:

3. DAM I.D.	EQUAL TO	2145AA
8. WEANING WGHT	LESS THAN	75
14. AGE IN DAYS.	BETWEEN	205 and 365

A further facility in this section allows you to search for "partial" information. For example, you may have forgotten the suffix "AA" in the dam's I.D., but remembered the number 2145. In this case you would type 2145? to find all I.D.'s starting with 2145.

If you set no search specifications and just press <RETURN> to proceed to the next section, all records in the file will be extracted, in order of reference number.

There are three options available for seeing the results of your search. You may view the records on the screen, print out each record, or print a single line containing selected items from each record, with column headings and column totals and averages if required. These averages are computed in two ways. In the first, the total is divided by the number of records found during



the search. In the second, any records containing FARMFILER's '/' (no data) symbol in the selected item will not be included in the number by which the total is divided.

Having established your specification and selected the items you wish to print, you may store your new format for re-use. The system allows room for ten stored formats, which can of course be deleted again if you wish.

SEARCH Examples

You have advertised animal number 2 for sale, and a prospective buyer calls you for details. You load FARMFILER, select Search from the reporter section, then from the Search menu choose 1 for individual record. Now type in the reference number 2 and the record will be displayed on the screen. If you wish, you could print the record to mail to your client.

Now we will work through a more complex example to produce a statistical report on your herd's performance, using the Ratio function.

You want to see how 1 year old individual animals from the same sire are performing in relationship to each other. Select 2, (Search the file) from the Search program menu, and the screen will display your file format:

```
ENTERING ITEMS TO SEARCH AND COMPARE
>GREATER <LESS #NOT= ^ BETWEEN =EQUALS
```

1. ANIMAL I.D.. : :
2. TAG NUMBER.. : :
3. DAM I.D..... : :
4. SIRE I.D..... : :
5. DATE BORN... : :
6. BIRTH WEIGHT : :
7. DATE WEANED. : :
8. WEANING WGHT : :
9. DATE WEIGHED : :
10. WEIGHT..... : :
11. COMMENTS.... : :
12. COMMENTS.... : :
13. COMMENTS.... : :
14. &AGE IN DAYS : :
15. &TOT WT GAIN : :

```
SEARCH ITEM NO. SCROLL OR <RETURN>...
```

Now we define the search conditions. We want to check on animals bred from Sire B100, so enter 4 (followed by <RETURN>) for Sire I.D. and the cursor will appear between the colons at the end of item 4. Now enter = (and <RETURN>) and the cursor moves to the right. You are now prompted for the data, so type B100. After pressing <RETURN> again you are back to the original display. Now select Item 14, Age in Days, and enter the (^) for between. (Since it is unlikely that many animals would be exactly one year old on the same day, we will set a range 2 weeks either side of one year). You will now be prompted for the lower limit (>) so enter 350, then for the upper limit (<) enter 380, after which you are back again to the original display. Since our two search items are within the first 15 you do not need to scroll, so press <RETURN> to continue.



Now the screen will display the following menu :

```

SELECTING DISPLAY FORMAT

DO YOU WANT...

1. SCREEN ONLY

2. WHOLE RECORD PRINTED

3. LINE PRINT SELECTIONS OF RECORD

Q. QUIT

ENTER.....

```

In this example we are going to use the Line Print routine and compute some ratios, so press 3 <RETURN>. You will see:

```

FILE 1.  WEIGHT RECORDS

PRINT TOTAL & PRINT QUIT OR <RETURN>

0. REF NO.....(6) :

```

You want to Print the reference number so type P and press <RETURN>. The screen will now display item 1 underneath REF NO :

```

1. ANIMAL I.D..(10):

```

and at the bottom of the screen you will see:

```

TOTAL USED..6..SPACE LEFT..74

```

This is telling you that you have used 6 of the 80 spaces across the page on your 80 column printer; the space required for each individual item is the number shown in parentheses after the item name.

You also want the animal's I.D., so type P and press <RETURN>. Just press <RETURN> for TAG NUMBER, P plus <RETURN> for DAM I.D., then <RETURN> for items 4 through 15. For items 16 and 17 enter T to generate group totals and averages for Gain Per Day and Weight Per Day of Age.

Now we come to the powerful facility known as RATIOS. Enter R against item 18 and you will be prompted with:

```

18. &ADG RATIO..(12):RATIO OF #

```

The ADG Ratio is the ratio of the individual animal's Average Gain Per day, (item 16) compared with the group average. It will be expressed as a percentage, and the group average will always be 100. The prompt is asking you which item the ratio is to be calculated from, so enter 16. Similarly, enter R for item 19, and then 17 for

```

19. &WDA RATIO..(12):RATIO OF #

```



Note that if we had completed our selection before reaching the last item in the record, instead of pressing <RETURN> against each of the subsequent items, you could just enter Q to go on to the next section.

Your next choice is:

REFORMAT COLUMNS (Y/N)..

Answer N for the moment. This will result in the columns being printed from left to right in item number order. If you were to select Y you would then be able to specify which item you wanted printed in each column.

Then you are given the option of:

REJECT QUIT OR <RETURN> TO CONTINUE

You like your report, so you press <RETURN> to continue and, as in Auto-entry, are then given the option of storing the Search format. The next question deals with spacing on the printout, followed by the option of searching all or some of the records. While searching, if you wish to pause you press ESC, and are then able to continue the search or quit.

If you had not set any search parameters, your list would include all records in the file. Use this option when you wish to print the whole file, or wish to visually check each record on the screen.

SORT AND LIST

This program allows you to sort the files in alphabetic or numeric order of any ONE item and print selected items from ALL THE RECORDS in either ascending or descending order. As in Search you can choose totals and averages.

SORT AND LIST Examples

You wish to produce a list of animals printed out in order of Average Gain per Day. From the reporter menu you select item 2 to load the Sort & List program, which will display the following menu:

FARMFILER SORT & LIST

YOU MAY SORT THE FILE IN ORDER

OF ONE ITEM ONLY.

ENTER ITEM NO. OR QUIT...

Average Gain per Day is Item 16, so enter 16 and press <RETURN>. The program will display item 16 for confirmation of your selection. You now choose ascending or descending order, and as in the Search program, Single or Double spacing and Number Formatting, then choose Conditional selection as in Auto Entry (Section 3).



The only output format available in Sort & List is the Line Print routine, which is identical to that in the Search program, except that ratios are not available. This time, decide for yourself what you want to print out, but include the item on which you are sorting (no. 16).

When you eventually get a substantial amount of data onto your own files, you will find that there are several delays in this program when nothing appears to be happening. In fact, the system is manipulating data so that the sort and printout is achieved in the fastest possible time. Just make sure your printer is loaded, switched on and on line, to avoid delays once the system is ready to print your report.

Note that the sort routine operates on only the first 6 characters of the information in the selected item.

THE LABEL PROGRAM

This allows you to search the files for records matching your specification and print selected items from those records in either single or double column label format. Up to ten lines of data can be printed, and two items may be combined on one printed line. This program also includes the facility to print the labels in alphabetic or numeric order of any one selected item.

LABEL Examples

From the REPORTER Menu you select 3 to use the Label program, and after waiting for the file to load the following appears on the screen:

```

ENTERING ITEMS TO SEARCH AND COMPARE

>GREATER <LESS #NOT= ^BETWEEN =EQUALS
      *ITEM TO SORT ON

1. ANIMAL I.D.. : :
2. TAG NUMBER.. : :
3. DAM I.D..... : :
4. SIRE I.D.... : :
5. DATE BORN... : :
6. BIRTH WEIGHT : :
7. DATE WEANED. : :
8. WEANING WGHT : :
9. DATE WEIGHED : :
10. WEIGHT..... : :
11. COMMENTS.... : :
12. COMMENTS.... : :
13. COMMENTS.... : :
14. &AGE IN DAYS : :
15. &TOT WT GAIN : :

```

ITEM NO SCROLL QUIT OR <RETURN>..

You want to produce labels to attach to photographs of animals you are advertising for sale, which includes only those weighing more than 1200 lbs. The labels are to be printed out in order of Tag Number.



The first step is to select 2 for Tag Number and enter an * followed by <RETURN>. Then set the weight condition by typing 10 for Current Weight, entering > (greater than) and then the limit of 1200. After pressing <RETURN> as your next response to:

ITEM NO SCROLL QUIT OR <RETURN>..

you will see a menu very similar to the Line Print Selection routine in Search and Sort & List. The difference in this case is that instead of Print, Total and Ratio options you can select only Label, Quit or <RETURN>.

FILE 1 : WEIGHT RECORDS

LABEL QUIT OR <RETURN>...

0. REF. NO..... :

Type L for Ref No, Animal I.D. and Tag Number, <RETURN> for Dam I.D. and Sire I.D., L for Date Born, Birth Weight, Date Weaned, Weaning Weight, Date Weighed and Weight, then press Q and <RETURN> to avoid having to work through the rest of the list. After confirming that the entries are as you intended, press <RETURN> to continue to the next section:

LABEL FORMAT AND POSITION

YOU HAVE SELECTED THE FOLLOWING ITEMS:

- 0. REF NO.....
- 1. ANIMAL I.D..
- 2. TAG NUMBER..
- 5. DATE BORN...
- 6. BIRTH WEIGHT
- 7. DATE WEANED.
- 8. WEANING WGHT
- 9. DATE WEIGHED
- 10. WEIGHT.....

NOW SELECT THE ITEMS TO BE PRINTED ON
EACH LINE : YOU MAY COMBINE TWO ITEMS
BY ENTERING (EG) "3+1"

LINE 1: :<RETURN> TO FINISH

On the first line of the label you want to print the Ref No, so type 0 then <RETURN>. The line number will then increment to 2. Type 1+2 to combine Animal I.D. and Tag Number on line 2; for line 3 type 5+6; line 4, 7+8 and for line 5, 9+10. Since you have selected no more items for your labels, press <RETURN> to finish.



Now you set up label positions through a series of questions. The first is:

DOUBLE OR SINGLE COLUMN LABELS

for which you will select S for single.

INDENT HOW MANY SPACES -->

For the moment enter 10, then <RETURN>

HOW MANY LINES BETWEEN LABELS

^
^
^

is asking for the number of blank lines required between the bottom of one label and the top of the next. Enter 4 and press <RETURN>. Then:

HOW MANY COPIES OF EACH LABEL?

answer 1 copy for this example.

You are then instructed to set the printer to TOP OF FORM and press <RETURN>. The computer will then print out two samples of how the format will look, using X's rather than data. You are given the option to try again if the spacing is incorrect by saying no to the next question:

IS THIS CORRECT Y/N...

Of course you were correct, so type Y and press <RETURN>.

You can make the printer pause during printing by pressing the ESC key. If you do, the screen will ask for:

DO YOU WANT TO 1. REFORMAT LABELS
2. CONTINUE
Q. QUIT

If you Continue printing, the program will inform you the last label number that it had printed, and ask on which number you wish to restart.

This program can be used for listing, especially if you want the information presented in double columns, as well as labels for mailing. You can print up to ten items, on ten lines. Try setting up your own formats, and use double columns as well.



Section 5 - SUMMARY OF FARMFILER FACILITIES AND PROCEDURESCapabilitiesSET-UP

1. Print Planning Forms: to provide a form on which to plan database structure.
2. The Set-up Program: to set up database structure on disk after defined within the limits:
 - Maximum 10 files, each with
 - Maximum 1000 records, each with
 - Maximum 60 items (fields), each with
 - Maximum 12 character names, and
 - Maximum 20 characters for data entry or
 - Maximum 20 character formula

MAINTENANCE

1. Enter/Change/Delete Records: to open new records, change existing records, or to delete existing records
2. Auto-Entry: secondary data entry program to modify selected items of existing records by replacement, addition, subtraction or multiplication as follows:
 - Individual- one record at a time
 - Global- same data into all records
 - Conditional- same data into some records matching single pre-selected condition
 - Audit trail- printed if selected
 - Auto formats- stored for future use if desired
3. Print Data Entry Forms: to print data entry forms for data input preparation away from computer
4. Change Farmfiler Configuration: to change existing file structure with following limitations:
 - Change item names
 - Change formula
 - Change printer configuration
 - Change disk slot positions
 - Not change item lengths
 - Not change number of items
 - Not change alphanumeric items to non-alphanumeric
 - Not change dates to non dates
 - Not change formula to non-formula



REPORTER

1. The Search Program: to search file for records matching specifications, with outputs available in range of formats, including totals and averages at end of selected columns.
2. The Sort and List Program: to list selected items from each record in the file, sorted in ascending or descending order of one specified item. Column totals and averages are available.
3. The Label program: to search and sort file with outputs in label format, either single or double column, up to 10 items per label.

Commands

Remember that all permissible responses are always displayed on the screen in inverse video. The number or letter displayed in inverse video is the only response, except when a number (NO) is asked for. Also, no command will be accepted unless the option is displayed on the screen.

ENTER.... Input one of the options displayed on the screen in inverse video.

RETRACE.. Type R to go back to previous routine without losing data from current routine.

REJECT... Type R to go back to previous routine and cancel data entered in current routine.

<RETURN>... Press <RETURN> to proceed to next program section.

CHANGE ITEM NO..Type index number shown on screen of item to change.

ITEM NO.. Type index number shown on screen of item to access.

SCROLL... Type S to roll-up items on screen to see next set of up to fifteen.

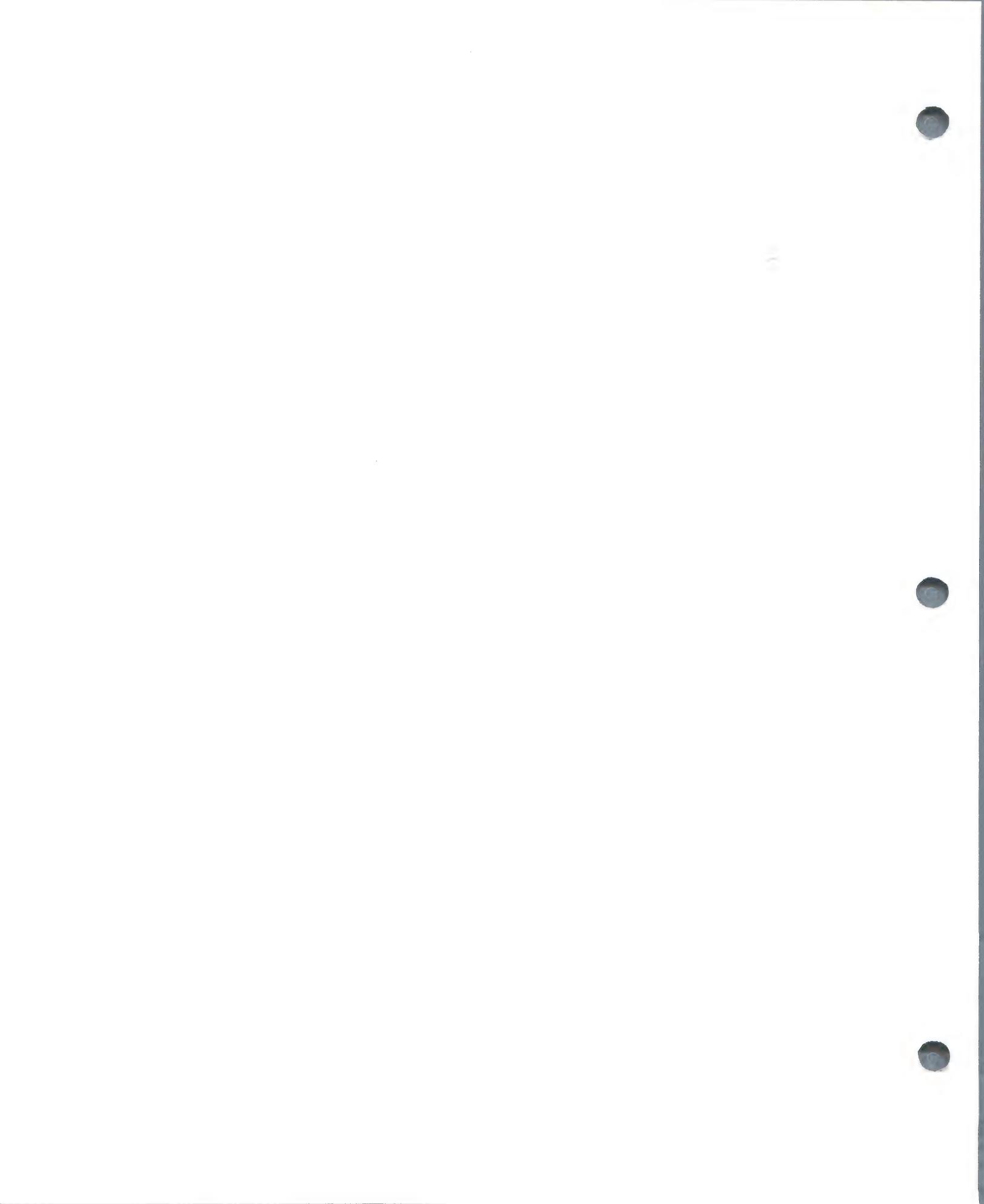
PRINT.... Type P to print data, either displayed on screen or being found through a search.

TOTAL.... Type T to command a column total (and average) at the end of a data listing.

QUIT..... Terminate current routine and go back to previous menu.

ESC..... Press to pause or halt during search or listing.

REF NO... Type the reference number of record you wish to access or create.



GLOBAL... In Auto-entry only, to start a routine to access all records in a file.

CONDITIONAL..In Auto-entry only, to expand Global to access records meeting a specification.

Y/N..... Type Y or N for questions with Yes or No responses.

YES..... Type YES in confirmation of a deletion.

Symbols and Reserved Words

In The Set-up Program:

DATE as the first four characters of an item name is recognized as a Date and date entries will be validated.

& as the first character of an item name means that the data contained in that item will be calculated by a formula you have defined.

&DATE as the first 5 characters of an item name is recognized as a date calculation in which a new date is derived from adding or subtracting a number of days to or from another date.

^ in a formula is used as a summation function, ie, 1 12 will give the sum of the data stored in all items 1 through 12 inclusive. No further functions are permitted in this type of formula.

+ in a formula means an addition.

- in a formula means a subtraction.

- in a date calculation is used to express Date 1 to Date 2 in place of the word 'to'. The answer is given in days positive or negative. No further functions are permitted in a date-date calculation.

* in a formula means multiplied by.

/ in a formula means divided by.

in a formula precedes a real number as opposed to an item number, ie, 1+#12 will add 12 to the value of data in item 1.

Note:

Formulae are executed left to right, ie, in formula 1*#3+2/#100 item 1 is multiplied by 3, then item 2 is added, and the total is divided by 100.

Formulae are also processed in item number sequence, ie, a formula in item 5 will be executed before a formula in item 10.



In The Auto-Entry and The Reporter Programs:

- ^ in a search routine prompts the system to search for data between lower and upper limits which you then specify.
- > in a search routine sets a search for data greater than a value or date which you specify.
- < in a search routine sets a search for data less than a value or date which you specify.
- = in a search routine sets a search for data equal to your specification.
- # in a search routine sets a search for data not equal to your specification.
- * in the label routines is used to define the item in order of which you wish the labels presented.
- ? in Search and Label to define a 'partial data search', ie, if you search the file for data equal to SAN? the system will identify San Francisco, San Jose, Sandy Beach etc..
- + in Label is used to combine two selected items on one label line.

Note:

In both Search and Label the conditionals (^><=#*) are optional. If you set no conditions or search parameters then your output selection will be extracted from all records in the file.



MULTIPLE DISK USE

FARMFILER can run with up to eight 5-1/4" disk drives or with an 8" unit with one to four drives, giving a maximum capacity between 1 and 1.1 Megabytes, but the decision on your drive configuration must be made at the SET-UP stage.

You do not need to have your full disk configuration before running SET-UP, as long as your first data disk drive is connected and you have read the following instructions.

Example 1: For Multiple 5 1/4" Drive Users

When using multiple disk drives you will be required to enter the Slot Numbers, Drive Numbers, and Volume Numbers of each successive data diskette, and these must be in ascending order.

```
Example: Program Diskette  S5,D1
          1st Data Diskette S5,D2,V1
          2nd Data Diskette S6,D1,V2
          3rd Data Diskette S6,D2,V3
```

Step 1: When initializing your Data Diskettes you must use the volume number of the diskette:

```
TYPE : NEW
PRESS: <RETURN>
TYPE : 10 PRINT "FARMFILER DATA DISKETTE"
PRESS: <RETURN>
TYPE : 20 END
PRESS: <RETURN>
TYPE : INIT DATA DISKETTE, D2,Vv
      (where "v" is the volume number of that diskette)

PRESS : <RETURN>
```

Please note that the Volume number has nothing to do with diskette capacity but is simply a library number, used to verify that you have the diskettes in the correct drives.

Step 2: If you have an Autostart system the diskette that booted when you switch the computer on will be the one in Drive 1 of the HIGHEST SLOT NUMBER. In the example above it would be the second data diskette; Slot 6, Drive 1, Volume 2. Therefore you must replace statement 10 of the INIT program on the appropriate diskette with the following:

```
TYPE :10 PRINT CHR$(4);"PR#n"
```

(Where n is the number of the slot in which the program diskette is located; n=5 in our example). This command will cause the system to boot the program diskette.

Step 3: When the initialization process is completed you can start the SET-UP program, working through to the Disk Configuration section, and, for the moment, just select 1 (one) on the question of how many data diskettes. Go on to the next section which defines the number of records available.



Step 4: Make a note of the number of records available using one data diskette and write it on your first data diskette label. (You will not need to install the next drive until you have that number of records on file UNLESS you also have multiple files, in which case you can proceed with SET-UP.

Step 5: Now select C for change, select Disk Configuration (item 1) from the resulting menu, enter the appropriate information, and complete the SET-UP procedure.

Example 2: For 8" Floppy Disk Users

FARMFILER contains the DOS patch to permit the use of the 4 drive, 26 sector 8" DOS. As with multiple 5-1/4" drives the data diskettes must be volumed. However the controller card for the 8" system goes in Slot 7.

Example: Program Diskette S6,D1 (5-1/4" drive) : 8" Controller card S7 :
 1st Data Diskette S7,D1,V1 : 2nd Data Diskette S7,D2,V2 : 3rd Data Diskette
 S7,D3,V3 : 4th Data Diskette S7,D4,V4

Follow the instructions in your 8" system manual carefully and after completing the following go to Step 2. You need not attempt to use the 8" Connect program but address the following utility programs on the 8" system master diskette supplied with your system. BRUN PREINIT, then go to Step 1 for initialization, and then MAKEBIG. Now to Step 2.

RECOVERING FROM DISASTER

We hope you will not have to! But powercuts and powerdrops do happen, and computers and accessories have been known to breakdown. Here is what to do.

If you have not read the section INSURANCE - the Back Up Diskette do it now.

BREAKDOWN IN ENTER/CHANGE/DELETE RECORDS AND AUTO-ENTRY WHILE DATA BEING WRITTEN TO THE DISKETTE

In the two data entry routines you will only be in serious trouble if you get a breakdown while data is actually being written to your data diskette: ie, when the data disk drive IN USE light is on after entering or updating a record. Recovery is handled by replacing your current data diskette in Drive 2 with your back-up copy, and re-entering the most recent data. For this reason it is worth maintaining printed records of all data-entries since you last copied onto the first back-up copy. Do not forget to make another back-up copy.

Other breakdowns during AUTO-ENTRY are harmless - just restart and continue where you left off.



BREAKDOWN IN ENTER/CHANGE/DELETE RECORDS BEFORE SORTING

When in ENTER/CHANGE/DELETE RECORDS, a breakdown other than described above is harmless since all your new information is written to disk as you enter it. The data is not yet sorted, however, and is not re-usable until you have taken the following action:

You will recall that after quitting this program, as you had finished entering new records or deleting old ones, that the screen displays a message asking you to wait while the files are sorted.

You must now trigger this action by selecting the program again and entering A SINGLE RECORD, USING A REFERENCE NUMBER THAT YOU KNOW DOES NOT EXIST. Otherwise you may end up with two records with the same reference number, which can get very confusing.

For this reason it is wise to reserve one easily remembered reference number for this purpose, like the last reference number allotted to that file. Having entered this dummy record simply quit the program and all will be well.

As an alternative, deleting a record is equally effective.

If you have a multi-file structure this action is only necessary for the file on which you were working at the moment of breakdown.

BREAKDOWN IN OTHER ROUTINES

A breakdown is quite harmless and all you have to do is switch the machine off, turn it back on, and then re-boot the Program Master Diskette.

FREQUENT ERROR MESSAGES

If you have problems with frequently occurring error messages, then your data diskette is probably worn out or corrupted. Throw it away, update your first back-up copy, and create a new back-up copy.

SYSTEM HANG-UP

If the system should "hang" (you are in the middle of a program and find nothing is happening; no disks running, no cursor on the screen, no printer activity, etc.) for more than thirty seconds, you will probably find the printer is OFF-LINE or has failed, or the printer card has failed while the program has been trying to print data. In this case you will have to switch the computer off and correct the problem.

(May we suggest that before going to your dealer for service, that, after turning off the computer, you remove the printer card from the slot, press down firmly on each of the integrated circuits mounted on the card, and wipe the connection surface with a non-oily cleaner. Replace card and try again.)



If this happens during data-entry, be sure to take the action described in Breakdown in Enter/Change/Delete Records.

If you can manage temporarily without the printer, then select the printer section of the CHANGE CONFIGURATION routine and type 0 for no printer. All the non-printer dependent routines will then function.

HARDWARE FAILURES - DISK DRIVES

If your disk drives whirr and buzz inefficiently, or you get disk error messages where they should not exist, you probably have a disk drive problem. This can often be temporarily corrected by switching drives one and two on the controller card, but be sure to have your dealer check them out.

HARDWARE FAILURES - THE COMPUTER

The most common computer breakdown is a RAM fault, often signified by "garbage" on the screen, especially random characters in inverse video. The only solution is repair by an authorized dealer.

OTHER BREAKDOWNS

If in any of the programs you get an error message when the system is trying to read a record, you probably have a Data Diskette corruption in that record position. You can usually recover by deleting that record with the ENTER/CHANGE/DELETE program and then re-entering it. Otherwise, go through the back-up procedure, re-entering recent data on your copy 1 diskette.

ERROR CODES

When Farmfiler prints an error message, it also shows an error code. This is one of the standard error codes explained in the DOS and Applesoft manuals, and will be required if you need assistance from Farmplan.



APPENDIX A

REF NO..... : 1	REF NO..... : 4
1. ANIMAL I.D.. : A1111	1. ANIMAL I.D.. : A2004
2. TAG NUMBER.. : 1	2. TAG NUMBER.. : 4
3. DAM I.D..... : 2204AA	3. DAM I.D..... : 9461FF
4. SIRE I.D..... : B100	4. SIRE I.D..... : B100
5. DATE BORN... : 1/5/81	5. DATE BORN... : 4/22/81
6. BIRTH WEIGHT : 82	6. BIRTH WEIGHT : 71
7. DATE WEANED. : 6/19/81	7. DATE WEANED. : 11/9/81
8. WEANING WGHT : 675	8. WEANING WGHT : 705
9. DATE WEIGHED : 1/8/82	9. DATE WEIGHED : 1/8/82
10. WEIGHT..... : 1150	10. WEIGHT..... : 850
11. COMMENTS.... : / (<RETURN>)	11. COMMENTS.... : /
12. COMMENTS.... : /	12. COMMENTS.... : /
13. COMMENTS.... : /	13. COMMENTS.... : /
REF NO..... : 2	REF NO..... : 5
1. ANIMAL I.D.. : A0560	1. ANIMAL I.D.. : A0223
2. TAG NUMBER.. : 2	2. TAG NUMBER.. : 5
3. DAM I.D..... : 2145AA	3. DAM I.D..... : 4452FD
4. SIRE I.D..... : B100	4. SIRE I.D..... : B100
5. DATE BORN... : 6/8/80	5. DATE BORN... : 1/9/80
6. BIRTH WEIGHT : 90	6. BIRTH WEIGHT : 88
7. DATE WEANED. : 2/1/81	7. DATE WEANED. : 6/24/80
8. WEANING WGHT : 724	8. WEANING WGHT : 711
9. DATE WEIGHED : 1/8/82	9. DATE WEIGHED : 1/8/82
10. WEIGHT..... : 1550	10. WEIGHT..... : 1964
11. COMMENTS.... : /	11. COMMENTS.... : /
12. COMMENTS.... : /	12. COMMENTS.... : /
13. COMMENTS.... : /	13. COMMENTS.... : /
REF NO..... : 3	REF NO..... : 6
1. ANIMAL I.D.. : A1520	1. ANIMAL I.D.. : A440
2. TAG NUMBER.. : 3	2. TAG NUMBER.. : 6
3. DAM I.D..... : 804XC	3. DAM I.D..... : 4304FG
4. SIRE I.D..... : B100	4. SIRE I.D..... : GA420S
5. DATE BORN... : 7/2/80	5. DATE BORN... : 3/27/81
6. BIRTH WEIGHT : 84	6. BIRTH WEIGHT : 83
7. DATE WEANED. : 1/17/81	7. DATE WEANED. : 10/14/81
8. WEANING WGHT : 750	8. WEANING WGHT : 685
9. DATE WEIGHED : 1/8/82	9. DATE WEIGHED : 1/8/82
10. WEIGHT..... : 1607	10. WEIGHT..... : 952
11. COMMENTS.... : /	11. COMMENTS.... : /
12. COMMENTS.... : /	12. COMMENTS.... : /
13. COMMENTS.... : /	13. COMMENTS.... : /



REF NO..... : 7

1. ANIMAL I.D.. : A2709
 2. TAG NUMBER.. : 7
 3. DAM I.D..... : 324AWR
 4. SIRE I.D..... : B100
 5. DATE BORN... : 1/14/81
 6. BIRTH WEIGHT : 85
 7. DATE WEANED. : 8/2/81
 8. WEANING WGHT : 709
 9. DATE WEIGHED : 1/8/82
 10. WEIGHT..... : 1221
 11. COMMENTS.... : /
 12. COMMENTS.... : /
 13. COMMENTS.... : /

REF NO..... : 10

1. ANIMAL I.D.. : A4510
 2. TAG NUMBER.. : 10
 3. DAM I.D..... : 7741DF
 4. SIRE I.D..... : B100
 5. DATE BORN... : 7/6/81
 6. BIRTH WEIGHT : 76
 7. DATE WEANED. : /
 8. WEANING WGHT : /
 9. DATE WEIGHED : 1/8/82
 10. WEIGHT..... : 674
 11. COMMENTS.... : /
 12. COMMENTS.... : /
 13. COMMENTS.... : /

REF NO..... : 8

1. ANIMAL I.D.. : A3008
 2. TAG NUMBER.. : 8
 3. DAM I.D..... : 2312WR
 4. SIRE I.D..... : B100
 5. DATE BORN... : 1/23/81
 6. BIRTH WEIGHT : 82
 7. DATE WEANED. : 8/8/81
 8. WEANING WGHT : 718
 9. DATE WEIGHED : 1/8/82
 10. WEIGHT..... : 1167
 11. COMMENTS.... : /
 12. COMMENTS.... : /
 13. COMMENTS.... : /

REF NO..... : 11

1. ANIMAL I.D.. : A3118
 2. TAG NUMBER.. : 11
 3. DAM I.D..... : 2674F
 4. SIRE I.D..... : B100
 5. DATE BORN... : 7/3/81
 6. BIRTH WEIGHT : 88
 7. DATE WEANED. : /
 8. WEANING WGHT : /
 9. DATE WEIGHED : 1/8/82
 10. WEIGHT..... : 604
 11. COMMENTS.... : /
 12. COMMENTS.... : /
 13. COMMENTS.... : /

REF NO..... : 9

1. ANIMAL I.D.. : A4429
 2. TAG NUMBER.. : 9
 3. DAM I.D..... : 3250A
 4. SIRE I.D..... : B100
 5. DATE BORN... : 1/3/81
 6. BIRTH WEIGHT : 77
 7. DATE WEANED. : 6/19/81
 8. WEANING WGHT : 703
 9. DATE WEIGHED : 1/8/82
 10. WEIGHT..... : 1213
 11. COMMENTS.... : /
 12. COMMENTS.... : /
 13. COMMENTS.... : /

REF NO..... : 12

1. ANIMAL I.D.. : A1205
 2. TAG NUMBER.. : 12
 3. DAM I.D..... : 45JSP
 4. SIRE I.D..... : B100
 5. DATE BORN... : 7/11/81
 6. BIRTH WEIGHT : 78
 7. DATE WEANED. : /
 8. WEANING WGHT : /
 9. DATE WEIGHED : 1/8/82
 10. WEIGHT..... : 613
 11. COMMENTS.... : /
 12. COMMENTS.... : /
 13. COMMENTS.... : /



APPENDIX B

This is a sample printout showing the use of the SORT AND LIST Option in the Reporter. Data used is that in Appendix A, and entered into our model set up as explained in Section 2.

DATABASE

ANIMAL IN DESCENDING ORDER OF %AV GAIN/DAY

A N I M A L	D A T E	S I R E	B I R T H	D A T E	W E I G H T	% A V G A I N	% W T H D A Y
A4510	7741DF	B100	76	01/08/82	674	3.22	3.62
A2709	324AWR	B100	85	01/08/82	1221	3.16	3.4
A3008	2312WR	B100	82	01/08/82	1167	3.1	3.33
A4429	3250A	B100	77	01/08/82	1213	3.07	3.28
A440	4304FG	GA420S	83	01/08/82	952	3.03	3.32
A2004	9461FF	B100	71	01/08/82	850	2.98	3.26
A1205	45JSP	B100	78	01/08/82	613	2.96	3.39
A1111	2204AA	B100	82	01/08/82	1150	2.9	3.13
A1520	804XC	B100	84	01/08/82	1607	2.74	2.9
A3118	2674F	B100	88	01/08/82	604	2.73	3.2
A0223	4452FD	B100	88	01/08/82	1964	2.57	2.69
A0560	2145AA	B100	90	01/08/82	1550	2.52	2.68

TOTALS & AVERAGES

TOTAL NUMBER OF RECORDS = 12

	TOTAL	AVERAGE ALL RECORDS	AVERAGE EXCLUDING ???
10: WEIGHT.....	13565.00	1130.41	1130.41



APPENDIX C

This is a sample printout showing the use of the SEARCH Option in the Reporter. Parameters for searching are those as outlined in Section 4 - SEARCH Examples. We are looking for all animals sired by B100 between 350 and 380 days ago.

DATABASE REPORT 1. 03/11/83

ANIMAL : SEARCH

SIRE I.D. B100
14 %AGE IN DAYS BETWEEN 350 AND 380

```

R      A      D      &      &      &      &
E      N      A      A      W      A      W
F      I      M      V      T      D      D
      M      I      G      /      G      A
      A      I      B      D      R      R
D      L      .      A      A      A      A
.      .      D      I      Y      A      A
.      I      .      N      .      T      T
.      .      .      /      A      I      I
.      D      .      D      G      O      O
.      .      .      A      E      .      .
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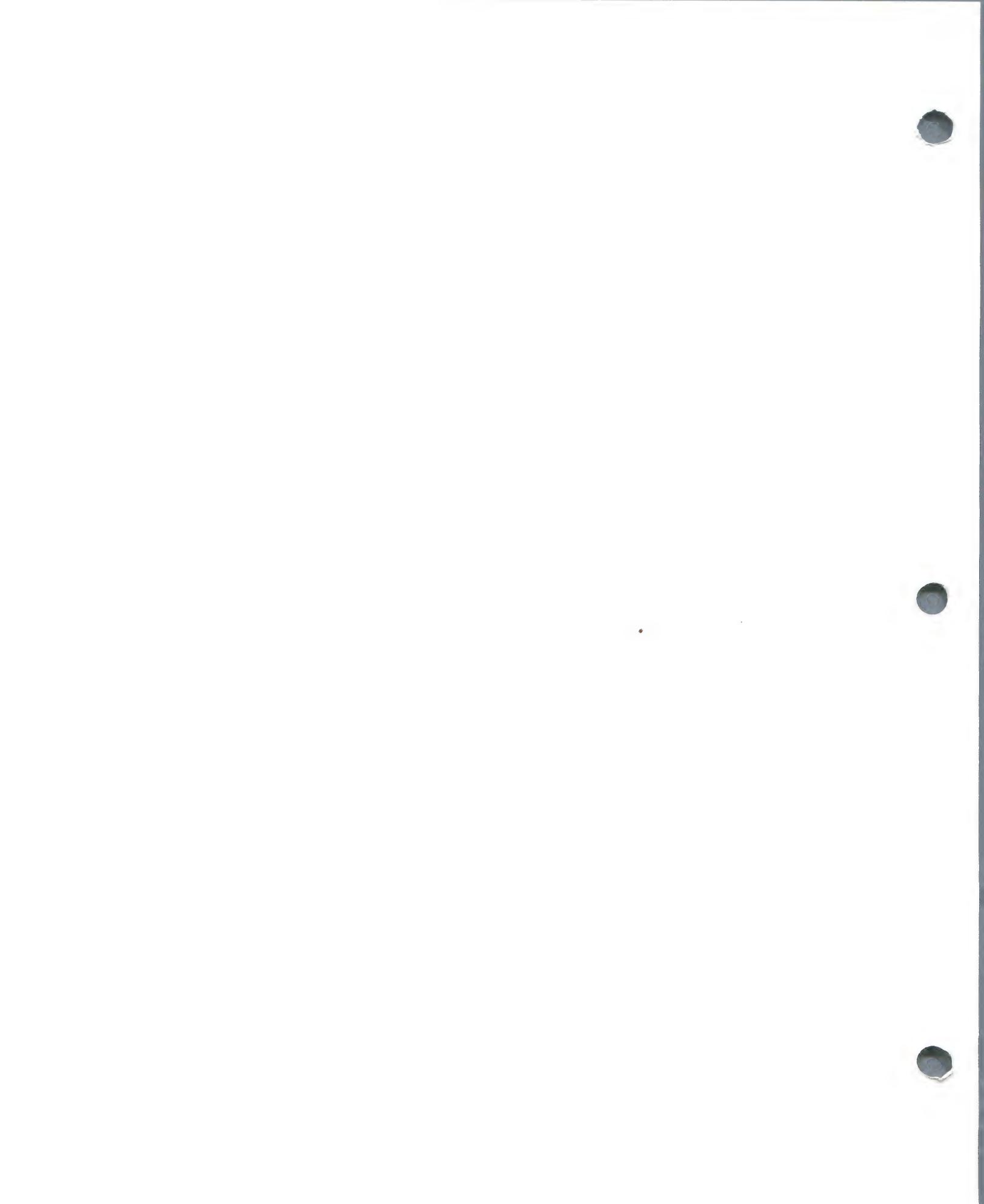
0001  A1111      2204AA      2.9      3.13      94.85      95.28
0007  A2709      324AWR      3.16      3.4      103.35      103.5
0008  A3008      2312WR      3.1      3.33      101.39      101.37
0009  A4429      3250A      3.07      3.28      100.41      99.85

```

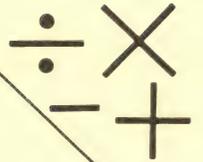
TOTALS & AVERAGES

TOTAL NUMBER OF RECORDS = 4

	TOTAL	AVERAGE ALL RECORDS	AVERAGE EXCLUDING ' / '
16: %AV GAIN/DAY	12.23	3.05	3.05
17: %WT/DAY AGE.	13.14	3.28	3.28
18: %ADG RATIO..	400.00	100.00	100.00
19: %WDA RATIO..	400.00	100.00	100.00



FARMFILER MODELS



The Scope of the Program

FarmFiler, our powerful general purpose filing system (data management system), is complemented by a range of preformatted models. These have been created on-farm, and have been proven to be invaluable aids to the efficient management of a variety of enterprises.

Most models match new users' requirements exactly, while some may need modifying to meet your exact specifications. They provide valuable ideas as to how to use FARMFILER's power and versatility most effectively.

Here is a brief list of some of the best models in the library:

- Cattle Records** is used to record individual animal's weight gain from birth to yearling. It computes ratios of individual Average Daily Gain to herd average.
- Calf Records No. 1** stores information on calf breeding and weight gain from turnout to re-housing. Five periodic weighings are recorded, for each of which Average Daily Gain is calculated.
- Calf Records No. 2** This is similar to No. 1 but stores less detailed information on weight gain. It includes notes on birth and health problems.
- Pedigree Records** stores detailed information about Dairy Cows' breeding and production history.
- Cow Margins** This system was developed in an intensive dairy enterprise, where the herd is fed in-house throughout the year. The file contains detailed calculations to determine gross profits from production, after deducting feed costs.

Sheep Records This is similar to Calf Records No. 2 in that simple administrative information on lambing, weaning and shearing is recorded in order to generate valuable comparative reports.

Field Records is a complex example used to evaluate the comparative success and expected yields of a range of new high-yield grain hybrids.

Plant Service This file provides a simple and effective means of ensuring that vehicle servicing operations are carried out on time.

Plant Depreciation This file is set up to show the depreciating value of farm machinery over a 5 year period. Depreciation rate is entered by the user and applied to each successive year's valuation.

Seed Inventory was developed to control Accounts Receivable and Inventory for seed lot management. It allows for 5 shipments per lot and permits aging of accounts for each shipment.

All FARMFILER users are invited to send us any models they design so that all our customers can benefit from an extensive and expanding library.

Hardware Requirements

Minimum configuration: 48K Apple (II Plus or Apple //e), 80 column printer, and two 5¼" disk drives.

The term APPLE is the registered trademark of APPLE COMPUTER, Inc.



FARMFILER MODELS
=====

From the many Farmfiler applications around the world we have selected 10 examples which illustrate Farmfiler's versatility and principal features. The following descriptions assume that you have read the Farmfiler manual, and are reasonably familiar with its capabilities.

The models are supplied on 2 data diskettes, set up as multi-file systems. (ie 5 files per diskette) You will be able to experiment with these diskettes, using your own data, but we recommend that if you wish to use the models seriously you should set them up as single file systems by re-entering the details through the Set-Up program.

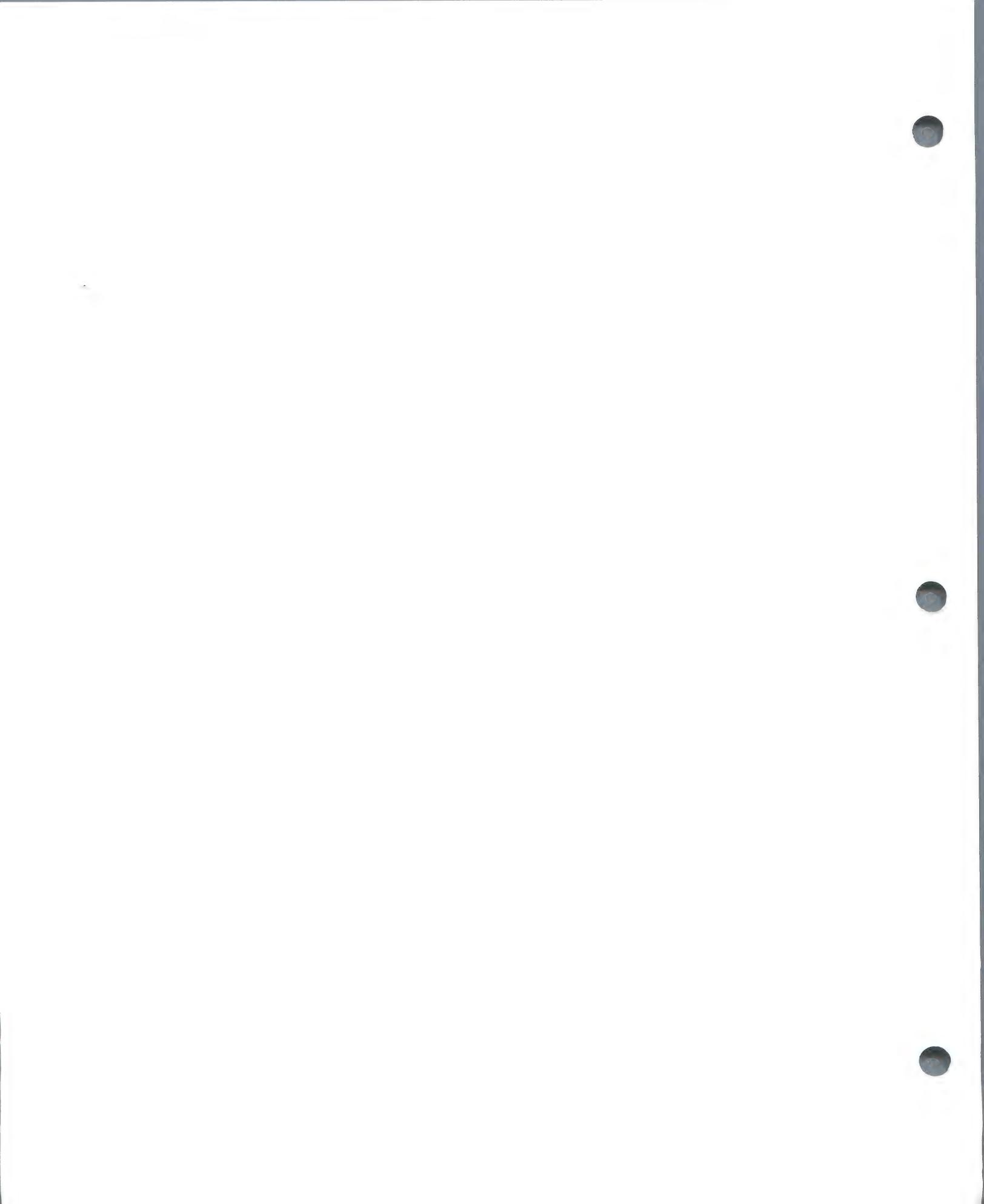
The diskettes are configured to run in slot 6, drive 2, with the program diskette in drive 1. The printer file is set up for the Epson Mx-100 standard 132 column mode (10 characters per inch). If you wish to change this configuration, use the Farmfiler Configuration Change program.

The following file formats are annotated where the item names themselves are not self-explanatory, or where they are abbreviated to much for unambiguous interpretation. The numbers in parentheses represent the number of characters allocated to the item.

DISKETTE 1
=====

File 1 : Cattle Records

1. I.D.NUMBER.. (8)
2. DAM I.D..... (8)
3. SIRE I.D.... (8)
4. DATE BORN... (8)
5. COMMENTS.... (20)
6. (20)
7. BIRTH WEIGHT (4)
8. CURRENT WGHT (4)
9. DATE WEIGHED (8)
10. 205 DAY WGHT (4)
11. 365 DAY WGHT (4)
12. &DAYS OF AGE = 4-9 <DATE 4 TO DATE 9>
13. &GAIN T.D... = 8-7 <item 8 - item 7>
14. &205 DY GAIN = 10-7
15. &365 DY GAIN = 11-7
16. &ADG TO DATE = 13/12 <ADG = average daily gain>
17. &205 DAY ADG = 14/#205
18. &365 DAY ADG = 15/#365
19. &ADG RATIO.. = 19*#1
20. &ADG205RATIO = 20*#1
21. &ADG365RATIO = 21*#1



Items 19 through 21 are "dummy calculations" in which the item value is multiplied by 1, thus remaining unchanged when the calculation mode is activated during data entry.

The purpose of these items is to store Ratios which are calculated during the Search program. The ratios in this case will represent the animal's current ADG, 205 Day ADG and 365 Day ADG as percentages of the herd average for each of the three items, providing a powerful means of comparing the animals' relative performance.

File 2 : Calf Records #1

1. TAG NUMBER.. (4)
2. DATE BORN... (8)
3. DAM I.D..... (8)
4. SIRE I.D.... (8)
5. SEX..... (1)
6. BREED..... (4) <4 character code>
7. PEDIGREE.... (1) <Coded>
8. TURNOUT WT.. (4)
9. DATE TURNOUT (8)
10. WEIGHT 1.... (4)
11. DATE WT 1... (8)
12. &DAYS T/O-1. = 9-11 <days between turnout date
and 1st weighing date>
13. &ADG - PRD.1 = 10-8/12 <average daily gain between
turnout and 1st weighing>
14. WEIGHT 2.... (4)
15. DATE WT 2... (8)
16. &DAYS 1 TO 2 = 11-15
17. &ADG - PRD.2 =14-10/16

The rest of the file follows this pattern for 5 weighing periods spread between turnout and housing dates, and finishes with brief details on housing, breeding and health.

File 3 : Calf Records #2

1. CALF I.D.... (8)
2. DAM I.D..... (8)
3. SIRE I.D.... (8)
4. DATE BORN... (8)
5. BIRTH WEIGHT (4)
6. DATE TODAY.. (8)
7. WEIGHT..... (4)
8. &AGE IN DAYS = 4-6
9. &WEIGHT GAIN = 7-5
10. &AV GAIN/DAY = 9/8
11. BIRTH PROBLM (20)
12. BANGS VACC.. (1)
13. HEALTH RRCDS (20)
14. (20)
15. (20)



This is a much simplified version of a calf recording system, less complex to use but still providing valuable information.

The Age, Weight gain and Average gain per day can be updated using the global Auto-Entry routine to enter 'Today's Date' in all records.

File 4 : Pedigree Records

- | | |
|------------------------|--|
| 1. COW NUMBER.. (8) | |
| 2. HERD PREFIX. (15) | |
| 3. NAME..... (20) | |
| 4. HERD BOOK #. (10) | |
| 5. FEET & LEGS. (2) | |
| 6. HEAD..... (2) | |
| 7. MAMMARY..... (2) | |
| 8. GENERAL APP. (2) | |
| 9. DAIRY CHAR.. (2) | |
| 10. &TYPE SCORE. = 5^9 | <Sum of the characteristics
coded in items 5 through 9> |
| 11. DATE BORN... (8) | |
| 12. DAM I.D..... (8) | |
| 13. DAM'S NAME.. (20) | |
| 14. DAM'S PREFIX (15) | |
| 15. DAM'S H.BK # (10) | |
| 16. SIRE I.D.... (10) | |
| 17. SIRE'S NAME. (20) | |
| 18. SIRE PREFIX. (18) | |
| 19. COMMENTS.... (20) | |
| 20. LACTATION #. (2) | |
| 21. LST LCTN LBS (6) | |
| 22. L.LCTN %FAT. (4) | |
| 23. L.LCTN %PROT (4) | |
| 24. L.LCTN INDEX (4) | |
| 25. AV LCTN LBS. (6) | |
| 26. A.LCTN %FAT. (4) | |
| 27. A.LCTN %PROT (4) | |
| 28. A.LCTN INDEX (4) | |
| 29. LIFE PROD'N. (8) | |

This format is simple in structure, recording administrative information about a dairy cow's breeding and production history. It enables the user to produce invaluable reports, in which dairy qualities can be related to pedigree.



File 5 : Cow Margins

-
1. FEED GROUP # (1)
 2. WEEK NUMBER. (2)
 3. # RECORDINGS (2)
 4. DAYS BETWEEN (2)
 5. LBS MILK.... (2)
 6. FEED - \$/TON (8) <price/ton mixed>

 7. LBS FED/DAY. (2)
 8. MILK - \$/LB. (4) <milk price>
 9. &DAYS T.D... = 3*4 <days since start>
 10. &PERIOD YLD. = 4*5 <yield in this recording period>
 11. &ACCUM YIELD = 11+10 <accumulating from start>
 12. &PERIOD FEED = 4*7
 13. &PRD FEED \$ = 6/#2000*12 <price per ton, divided by 2000 to convert to lbs, then multiplied by total lbs used.>

 14. &ACC FEED \$ = 14+13
 15. &PRD MILK \$ = 8*10
 16. &ACC MILK \$ = 16+15
 17. &PERIOD MOC. = 15-13 <gross profit for period>
 18. &ACCUM MOC.. = 18+17
 19. &ACCUM FEED. = 19+12
 20. &LBS/LB MILK = 19/11 <lbs feed to 1 lb of milk>
 21. &AV MOC/DAY. = 18/9
 22. &AV COST/LB. = 14/11
 23. &COST-%SALES = 14/16*#100
 24. &PRD MOC/DAY = 17/4
 25. &AV YLD/DAY. = 11/9

The Cow Margins file is used in an intensive dairy enterprise, where the herd is housed all year round and fed complete rations. The animals are grouped for feeding according to their age, lactation cycle and output.

The purpose of the system is to monitor the "Margin Over Concentrates" : ie the gross profit from milk production after taking out the feed costs.

In this case, the milk recordings are made at regular intervals; at each recording the user enters the recording number (item 3), the days since the last recording, the amount of milk and the quantity of food for each cow. A range of calculations then provides a comprehensive list of statistics.



DISKETTE #2

=====

File 1 : Sheep Records

- ```

1. DATE BIRTH.. (8)
2. DATE BRED... (8)
3. RAM..... (8)
4. &DATE DUE... = 2+#147 <Date bred plus 147 days>
5. DATE LAMBED. (8)
6. NUMBER LAMBS (1)
7. BIRTH WEIGHT (2)
8. SEX..... (10)
9. &DATE VACC.. (8)
10. VACCINATED.. (1) <enter Y or N>
11. CAST/DOCKED. (1)
12. DATE WEANED. (8)
13. WEANING WT.. (3)
14. NO. WEANED.. (1)
15. 65 DAY WT.. (3)
16. 120 DAY WT.. (3)
17. 365 DAY WT.. (3)
18. COMMENTS.... (20)
19. DATE REBRED. (8)
20. DATE SHORN.. (8)
21. LBS WOOL.... (4)

```

This is similar to Calf Records #2 in that simple 'administrative' information is recorded in order to generate comparative reports. Note the date calculation in item 4, in which the gestation period in days is added to the date bred to predict the lambing date.

## File 2 : Field Records

- ```

-----
1. FIELD #..... (4)
2. NAME..... (20)
3. ROT'N CODE.. (2)              <rotation code>
4. GROSS ACRES. (3)
5. NET ACRES... (3)
6. &WASTE..... = 4-5
7. HARVEST YEAR (6)              <eg 1982/3)
8. PREV.CROP Y3 (10)
9. ....Y2 (10)
10. ....Y1 (10)
11. CURRENT CROP (10)
12. VARIETY..... (15)
13. COMMENTS.... (20)
14. .... (20)

```



15. DATE PLANTED (8)
 16. DRILL TYPE.. (10)
 17. TOT LBS SEED (8)
 18. &LBS/ACRE... = 17/5
 19. ROW WIDTH... (3)
 20. GRAINS/LB... (6)
 21. &TGT G/SQ.YD (18*20/#4840) <target grains per sq.yd>
 22. EMERGD/SQ.YD(6) <deduce this figure from
 <the average of your
 samples from the field>
23. DATE EMERGED (8)
 24. &% OF TARGET = 22/21*#100
 25. TGT GR/EAR.. (3) <target grains per ear>
 26. DATE NODE 1. (8)
 27. DATE EAR EM. (8)
 28. PESTICIDES.. (20)
 29. HERBICIDES.. (20)
 30. FUNGICIDES.. (20)
 31. SOIL.....PH (5)
 32.P205 (5)
 33.K20 (5)
 34. MG (5)
 35.BO (5)
 36.MN (5)
 37. FERT.....N (10)
 38.P205 (10)
 39.K20 (10)
 40. COMMENTS.... (20)
 41. (20)
 42. YIELD NOTES. (20)
 43. DATE FORCAST (8)
 44. DATE HARVEST (8)
 45. &TGT TONS/AC = 22*25/20/#2000*#4840
 46. &TGT TOT TNS = 45*5
 47. ACTUAL TN/AC (4)
 48. &TOT TONS... = 47*5
 49. EARS/SQ.YD.. (6)
 50. GRAINS/EAR.. (3)
 51. GRAINS/LB... (6)
 52. COMMENTS.... (20)

The Field Records model is a somewhat complex structure which is being used to evaluate the comparative success of a range of new high yielding wheat hybrids. Comparisons between target and actual yields provide valuable management information, especially when related to the soil type and applications schedules.

The information recorded on emergence, grains per ear and grains per lb is of particular value to the hybrid developers.



File 3 : Plant Service

-
1. MACHINE..... (20)
 2. NUMBER..... (10)
 3. DATE BOUGHT. (8)
 4. PRICE..... (10)
 5. DEALER..... (20)
 6. DEALER PHONE (12)
 7. DATE TODAY.. (8)
 8. LUBRICATION. (20)
 9. DATE LUBED.. (8)
 10. &DYS SNC LUB = 9-7
 11. OIL CHANGE.. (20)
 12. DATE OIL CH. (8)
 13. &DYS SNC O/C = 12-7
 14. AIR FILTER.. (20)
 15. DATE AIR FLR (8)
 16. &DAYS SNC AF = 15-7
 17. SERVICE..... (20)
 18. DATE SERVICD (8)
 19. &DYS SNC SV. = 18-7
 20. COMMENTS.... (20)

This file provides an simple and effective means of ensuring vehicle service is carried out on time. It includes another example of the use of Global Auto-Entry, in which item 7, Date Today is entered in all records before running a report. The principal could be extended by including additional items for the number of days recommended between servicing operations, and corresponding calculations to show the number of days to go, or overdue.

File 4 : Plant Depreciation

-
1. MAKE..... (20)
 2. MODEL..... (20)
 3. REG NO..... (10)
 4. DATE BOUGHT. (8)
 5. COST..... (10)
 6. SALVAGE VAL. (10)
 7. &DEPREC VAL. = 5-6
 8. DEPREC RATE. (4)
 9. DATE FISC YR (8) <enter start date of next
fiscal year>
 10. &DAYS YEAR 0 = 4-9 <no of days to depreciate
left in current year>
 11. &DEPREC YR 0 = 7*8/#365*10 <proportion of full year's
depreciation>
 12. &NEW BK. VAL = 5-11
 13. &DEPREC YR 1 = 7-11*8
 14. &ACC DEPREC. = 11+13

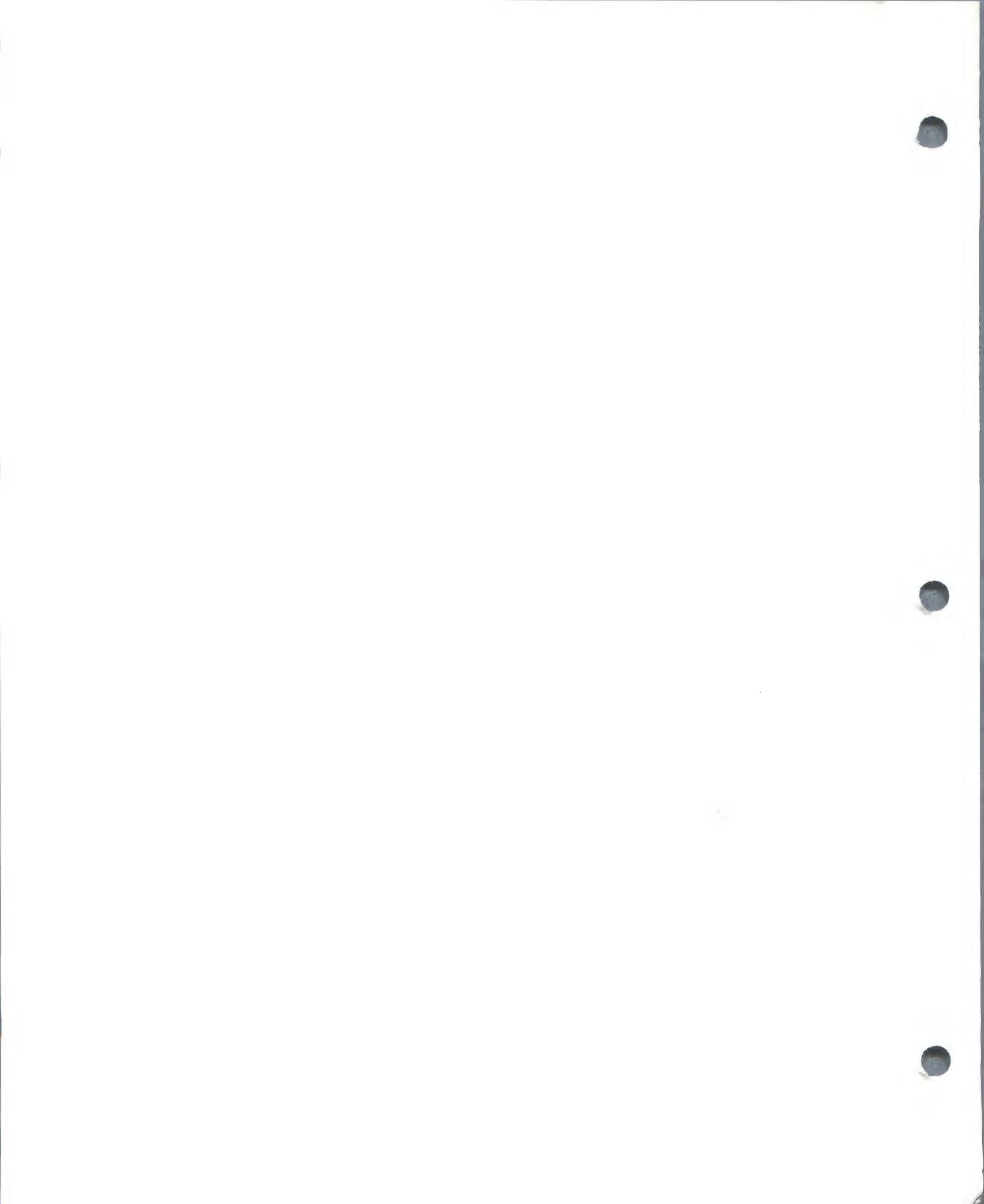


15. &NEW BK. VAL = 5-14
16. &DEPREC YR 2 = 7-14*8
17. &ACC DEPREC. = 14+16
18. &NEW BK. VAL = 5-17
19. &DEPREC YR 3 = 7-17*8
20. &ACC DEPREC. = 17+19
21. &NEW BK. VAL = 5-20
22. &DEPREC YR 4 = 7-20*8
23. &ACC DEPREC. = 20+22
24. &NEW BK. VAL = 5-23
25. &DAYS YR 5.. = #365-10
26. &DEPREC YR 5 = 7-23*8/#365*26
27. &ACC DEPREC. = 26+23
28. &NEW BK. VAL = 5-27
29. DATE SOLD... (8)
30. SALE PRICE.. (10)
31. COMMENTS.... (20)
32. COMMENTS.... (20)

In this example the user selects the annual rate (%) at which he wishes to depreciate the machine. This rate is then applied to the Depreciable Value of the machine (item 7), after the previous year's depreciation has been deducted as appropriate. (ie items 13, 16, 19, 22, 26) This enables Accumulated Depreciation and Book Value to be calculated for the end of each fiscal year. The depreciation in items 11 and 26 is adjusted for the starting and finishing 'part years'.

File 5 : Seed Inventory

1. LOT #..... (10)
2. VARIETY..... (8)
3. FIELD NAME.. (8)
4. FIELD #..... (5)
5. CERT. (Y/N). (1)
6. TEST #..... (6)
7. LBS IN LOT.. (6)
8. &LBS ON HAND = 7-27-33-39-45-51
9. PURE SEED %. (12)
10. CROP %..... (5)
11. INERT %..... (5)
12. WEED %..... (5)
13. NOX WEED.... (10)
14. GERM %..... (5)
15. FLUOR %..... (5)



- 16. NON FLUOR %. (5)
- 17. CROP..... (10)
- 18. CROP..... (10)
- 19. WEED..... (10)
- 20. WEED..... (10)
- 21. DATE TESTED. (8)
- 22. DATE TODAY.. (8)
- 23. &AGE OF TEST = 21-22
- 24. INVOICE 1... (4)
- 25. PURCHASER... (4)
- 26. DATE SHIPPED (8)
- 27. AMT. SHIPPED (6)
- 28. PAYMENT..... (8)
- 29. &AGE SHIP 1. = 26-22
- 30. INVOICE 2... (4)
- 31. PURCHASER... (4)
- 32. DATE SHIPPED (8)
- 33. AMT. SHIPPED (6)
- 34. PAYMENT..... (8)
- 35. &AGE SHIP 2. = 32-22
- 36. INVOICE 3... (4)
- 37. PURCHASER... (4)
- 38. DATE SHIPPED (8)
- 39. AMT. SHIPPED (6)
- 40. PAYMENT..... (8)
- 41. &AGE SHIP 3. = 38-22
- 42. INVOICE 4... (4)
- 43. PURCHASER... (4)
- 44. DATE SHIPPED (8)
- 45. AMT. SHIPPED (6)
- 46. PAYMENT..... (8)
- 47. &AGE SHIP 4. = 44-22
- 48. INVOICE 5... (4)
- 49. PURCHASER... (4)
- 50. DATE SHIPPED (8)
- 51. AMT. SHIPPED (6)
- 52. PAYMENT..... (8)
- 53. &AGE SHIP 5. = 50-22
- 54. &TOTAL VALUE = 28+34+40+46+52
- 55. &LBS SHIPPED = 7-8

This model is essentially an Accounts Receivable/Inventory file for seed lot management. Once a lot (usually 22000 lbs) of particular grade has been recorded by number (item 1) and the initial quantity entered in item 7, then all relevant characteristics of the lot are entered and invoicing or shipment may proceed.

The file is set up for 5 shipments, designated by invoice number. Once Today's Date has been entered in item 22 using the Global Auto-Entry routine, aging of accounts is calculated for each shipment.

The total weight and value of seed shipped is calculated in items 54 and 55.



FARMPLAN

COMPUTER SYSTEMS INC.

FAULT REPORT FORM

In the event that you have a breakdown while running your computer system, the information below is vital for our support staff to assess and correct the problem.

If your Agent suspects a software problem please complete this form and sent it by Express Mail to the address below with a copy of the data diskette in use at the moment of breakdown and a copy of your back-up data diskette from before the breakdown. **DO NOT SEND ORIGINALS.** If you cannot copy the diskettes, ask your dealer or agent to copy them for you.

Diskettes must be protected with cardboard stiffening and wrapped completely in aluminum foil to prevent damage by X-Ray scanners.

NOTE THAT IF YOU HAVE NOT FOLLOWED THE SECURITY PROCEDURES AND HAVE NO BACK-UP COPY WE MAY NOT BE ABLE TO RESTORE YOUR DATA.

Name _____

Address _____

City _____

State/Zip _____ Telephone _____

Name of Program _____ Version Number _____

Date Purchased _____

Agent's Name _____ Telephone _____

Which part of the program were you using?

What was the last successful operation you carried out?

What operation were you trying to carry out?

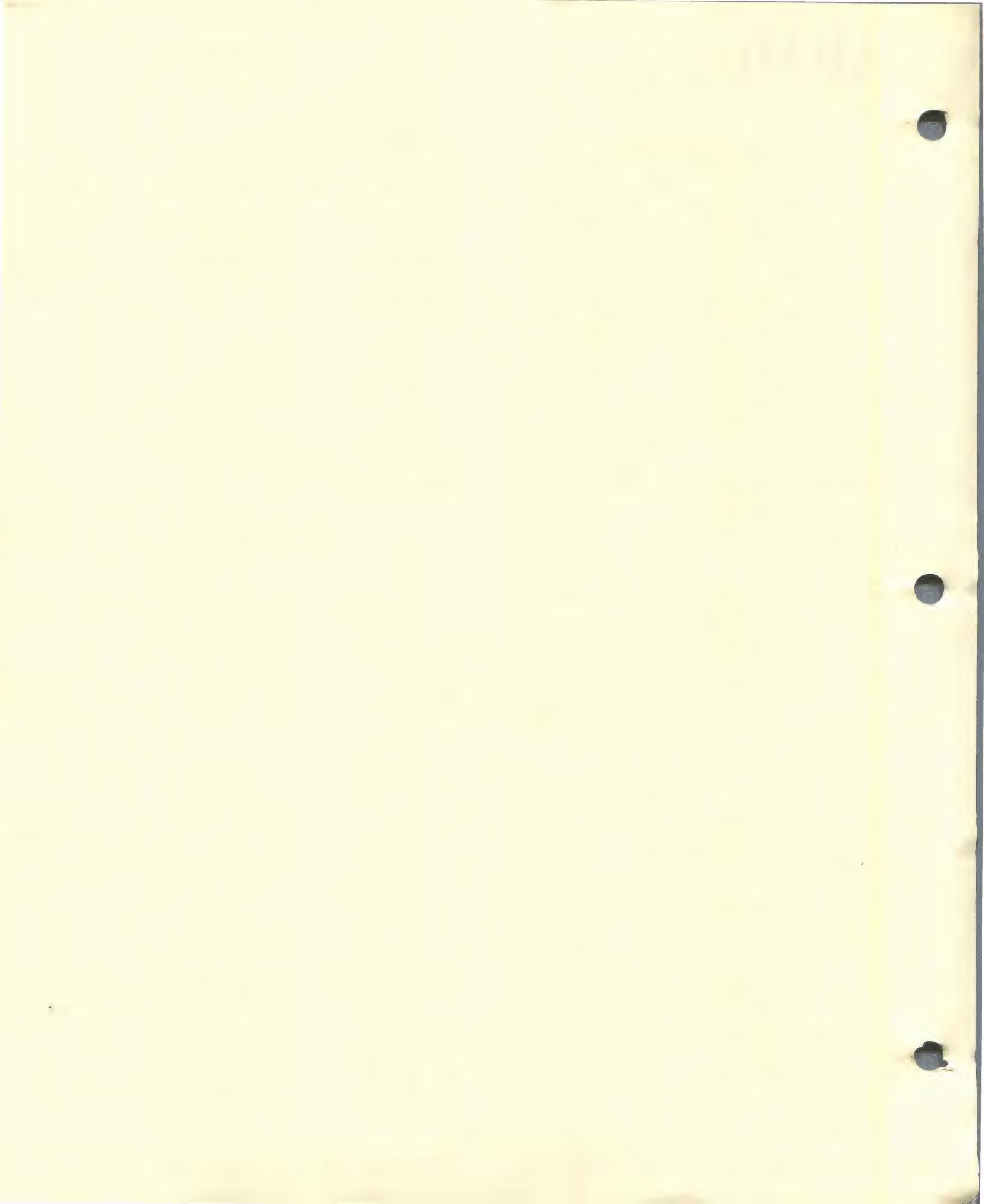
Did any error codes or messages appear on the screen?

Any other unexpected or incomprehensible characters on the screen?

Any earlier unreported problems which appeared to resolve themselves?

Any other information or descriptions of the problem?

Farmplan use only: Disk --- CD --- Code ----- Ref ----- D/I -----D/O -----In ----



Mary Jane

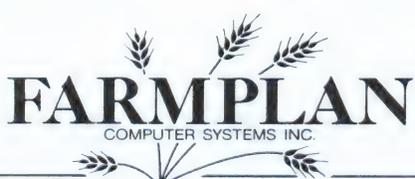
FEBRUARY 15, 1983

\$

FARMLAN PRICE LIST

PART NUMBER	DESCRIPTION	PRICE
3000	Financial Package General Ledger, Accounts Payable, Accounts Receivable, and Inventory Modules	1200.00
3010	Financial G/L & A/P General Ledger and Accounts Payable Modules	795.00
3020	Financial Package with Payroll General Ledger, Accounts Payable, Accounts Receivable, Inventory, and Payroll Modules	1550.00
3030	Financial G/L & A/P with Payroll General Ledger, Accounts Payable, and Payroll Modules	1160.00
3900	Payroll Add-On Used with the Farmlan Financial Package	400.00
3905	Payroll Package Used without the Farmlan Financial Package	425.00
3910	G/L Plus Budgeting Package linked to the Farmlan Financial General Ledger	199.00
3920	Data Plus Creates 'DIF' file to use Financial Data with Visicorp products	99.00
3930	Invoices Plus Links A/R to Inventory module for automatic pricing and inventory control	295.00
3940	Labels Plus Print labels of vendors, and customers, from Farmlan Financial Package plus add other names	99.00
2000	Farmlan Bookkeeper Easy to use double entry, cash or accrual accounting system	395.00
3100	Crop Package	950.00
2100	Junior Crop Package	395.00
3110	Dairy Package	950.00
2110	Junior Dairy Package	395.00
3120	Pig Package	950.00
2120	Junior Pig Package	395.00
2200	Least Cost Rationing	225.00
3210	Farmfiler . (Super. files)	225.00
3220	Farmfiler Models	55.00
3230	Farmcalc (includes Visicalc)	295.00
3240	Farmcalc Models	55.00
3260	Ag Managers Tool Kit	225.00

Need this for these



1055 Sunnyvale-Saratoga Road, Sunnyvale, CA 94087
Telephone (408) 746-0636 / Telex 172352

Free Message Number (800) 325-6000 - Give operator I.D. Number N1431 and message

DEMO PACKAGES

The Demonstration Packages are fully operable with Farmplan sample data. Sample data will not be altered through demonstration of the program. The demonstration program includes documentation and sample printouts.

2000-D	Farmplan Bookkeeper Demo	30.00
3100-D	Crop Package Demo	30.00
2100-D	Junior Crop Package Demo	30.00
3110-D	Dairy Package Demo	30.00
2110-D	Junior Dairy Package Demo	30.00
3120-D	Pig Package Demo	30.00
2120-D	Junior Pig Package Demo	30.00
2200-D	Least Cost Rationing Package Demo	30.00

VISICORP PRODUCTS

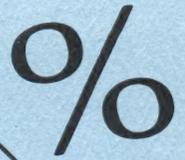
8010	Visicalc for Apple II Plus Electronic spread sheet	250.00
8090	Visicalc for Apple //e Electronic spread sheet	250.00
8020	Visischedule Electronic project planner	300.00
8030	Visitrend/plot Enhanced graph and planning system which links with other Visi products	300.00
8040	Visiterm Ability to communicate with larger computers and other personal computers	100.00
8050	Visifile Electronic filing system	250.00
8060	Visidex Electronic filing system with no structured format	250.00
8080	Desktop Plan Electronic organizer for financial planning budgets and analysis packages	250.00

HARDWARE AND APPLE PRODUCTS

6010	Apple //e	1395.00
6011	Apple //e Starter Set Apple //e, monitor, monitor stand, Disk Drive with controller card	1995.00
6001	Disk Drive with Controller	545.00
6002	Disk Drive #2	395.00
6003	Disk Drive with Controller for Apple //e	545.00
6004	16K RAM Card	195.00
6510	Applewriter II Apple Word Processor	195.00
7000	NEC 12" Green Monitor	285.00
7200	MX-100 with Card and Cable	995.00
9902	Printer Paper (1000 sheets)	35.00
9901	10 Blank Diskettes	50.00
6006	Apple 12" Green Monitor	249.00
6007	Apple Monitor Stand	29.95
6008	Apple Dot Matrix Printer (80 column)	695.00
6009	Apple Parallel Card	180.00
6020	Joystick for Apple //e	59.95
6021	10 Keypad for the Apple //e	159.95
6012	80 Column Text Card for the Apple //e	125.00
6013	Extended 80 Column Card	295.00

Prices subject to change without notice.

Ag Managers Tool Kit



THE SCOPE OF THE PROGRAM

The program contains twelve procedures used in common business practice. Each procedure is simple to use and completely menu driven. You can quickly make changes to any entry and evaluate the resultant effect on the calculations. This "What-If" capability makes this program an invaluable tool for different financial situations. Once you're satisfied with the calculated results, you have the option to send the generated screenful of data to the printer with a single keystroke.

ACCELERATED COST RECOVERY SYSTEM (ACRS)

This utility permits accelerated methods of cost recovery, on property placed in service after 1980, over predetermined recovery periods which are generally shorter than "USEFUL LIVES". The unadjusted basis (cost) of eligible "RECOVERY PROPERTY" is recovered over a 3-year, 5-year, 10-year, or 15-year period depending on the type of property.

STRAIGHT LINE DEPRECIATION

By entering the Starting Book Value, Salvage Value, and Life Expectancy of an asset, the program calculates the Depreciation Amount, Remaining Depreciation Value, Remaining Book Value and the Total Amount Depreciated. It uses the linear Straight Line Method where the amount depreciated for any period is equal to that of any other period through the life of the asset.

VARIABLE RATE - DECLINING BALANCE DEPRECIATION

This procedure uses an exponential method to calculate the same items as those of the Straight Line. By entering the Starting Book Value, Salvage Value, Life Expectancy and Depreciation Rate Factor, it calculates a schedule where Periodic Depreciation Amount is heaviest in the earliest years of the asset's life. Crossover point is highlighted on the screen to indicate the first period where conversion to Straight Line Method is indicated.

DIRECT REDUCTION LOAN SCHEDULES

This utility will determine the Periodic Repayment Amount on a Loan by entering the Amount to Borrow, Annual Interest Rate, Loan Term in Periods (months, years) and an optional balloon Payment Amount. You can create a schedule on the screen displaying Payments for three original Borrowed Amounts against a range of Annual Interest Percentages decremented by a value you decide.

AMORTIZATION SCHEDULES

This calculates the Payment to Principal, Payment to Interest, Remaining Balance and the Total Interest Paid on a Loan. The program breaks down the Periodic Payment Amount determined by the Direct Reduction Loan procedure in order to examine the Amount of Interest Paid on a loan; in tax preparation, for example. The schedule provides amortization with or without a Balloon Payment.

ACCRUED SIMPLE INTEREST

Enter any three of the four items - Beginning Amount, Annual Interest Rate, Future Amount, Number of Days - and the remaining item will be automatically calculated. The period of accrual (number of days) uses the program's days-between-two-dates calculator to permit the user to enter the period for accrual as two dates, and thereby instruct the computer to calculate and display the number of days.

COMPOUND INTEREST

Enter the Amount to Compound, Yearly Interest Rate Ceiling, Display Interest Rate Change Increment, and the Number of Days for Compounding (days-between-two-dates routine in effect). The computer will generate a screenful of resultant amounts based on 365 day, 360 day, monthly and quarterly compounding periods for each annual interest rate starting from your predetermined ceiling and reduced each time by the interest increment.

REBATE ANALYSIS

This uses the "RULE OF 78's TECHNIQUE" to calculate the amount of Prepaid Finance Charge that should be rebated for early payment in full. Enter the Total Number of Payments, Monthly Payment Amount, Total Finance Charge and Number of Payments made to generate a schedule showing the Remaining Balance, Rebate Amount and Total Interest paid for each of the remaining payments. You can then best evaluate if and when it is to your advantage to make a full payment.

LINEAR REGRESSION/TREND LINE

This is a statistical procedure for finding a Straight Line that best fits a set of data points, thereby creating a forecasting model. It describes the relationship between one variable and another variable dependent upon it. Once an equation is established by entering all known data pairs, a dependent value can be predicted for any value input.

MULTIPLE REGRESSION

Similar to the Linear Regression procedure, this creates a Straight Line Forecasting Model that best fits known pairs. Here though, one variable is dependent upon more than one independent variable in determining the linear equation.

EXPONENTIAL CURVE FIT/GROWTH CURVE

This procedure is selected when projected values from input data is better fitted by a curve rather than a straight line. This evaluation can be borne out by examining the coefficient of determination from both Trend Line and Growth Curve. The procedure yielding the highest coefficient should be used. The Growth Rate of the curve is also displayed.

LINEAR PROGRAMMING

This routine accomplishes in minutes what would take hours to do by hand. Using standard linear programming techniques, it quickly solves complex problems minimizing cost or maximizing profit. By entering a set of variables and their respective cost or profit, and constraints to be met, the program solves the problem showing which combination of variables will provide the greatest return. Linear programming can be used to determine the best combination of crops to plant, the least cost fertilizer mix to use, as well as aid in many other complex management decisions.

HARDWARE REQUIREMENTS

48K Apple II Plus, Video Monitor, 80+ column printer with control card, one 5¼" disk drive and disk control card.

To order the Ag Managers Tool Kit, contact:

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FARMPPLAN

1055 Sunnyvale-Saratoga Road, Sunnyvale, CA 94087
Telephone (408) 746-0636 / Telex 172352

Free Message Number (800) 325-6000 — Give operator I.D. Number N1431 and message



The Farmplan Bookkeeper

THE SCOPE OF THE SYSTEM

The Farmplan Bookkeeper is a complete, double entry accounting package for cash or accrual accounting in agricultural businesses. Its unique system of check and deposit entries allows users unfamiliar or uncomfortable with double entry "debits and credits" to make entries in a simple "pseudo-single entry" process while still giving all the advantages of double entry accounting. A "general journal" entry section is also available for more complex transactions requiring the double entry format.

PROGRAM SPECIFICATIONS

The system allows up to 300 user defined accounts in the chart of accounts. The user determines the number of accounting periods per year (1 to 12) and enters his business name for use on the reports. The system can maintain up to 1500 lines of transaction in each period (which is up to 750 complete transactions). Each transaction (check, for example) may be broken down and allocated to as many as 98 different accounts. The system can maintain up to 15 enterprises for separate profit/loss statements. As many as 9 separate checking accounts can be maintained through the check entry routine. The chart of accounts may include a "Personal Expenses" section to keep personal expenses separate from business transactions.

DATA ENTRY

Set-up allows the user to enter the accounts that apply to his business situation. Accounts may be created to allow "enterprise" accounting - that is profit/loss statements by enterprise. Transactions may be entered into the system as checks, deposits, or general journal entries. Check and deposit entries require no complicated "+/-" or "debit/credit" classification, and a single check may be broken down for allocation to multiple accounts. The general journal section allows more complicated transactions to be entered. This unique transaction entry procedure offers ultimate simplicity in data entry, while keeping the advantages of complex double entry accounting. Transactions are entered into a "transactions file" where they can be reviewed and edited before final posting to the general ledger. This reduces the need of making complex and time consuming offsetting correcting entries.

REPORTS

Reports from the bookkeeper offer great flexibility in analyzing that information that is so important to your operation. The Check Register may be printed in either consolidated form, or separately for each checking account. It lists each check and deposit entered and the break down of the amount allocated to various accounts. A summary shows the number of deposits and checks written, the total amounts, and the account totals for each checking account. The Audit Report lists each account and the transactions that have occurred during the accounting period. The current account balance is also shown. The Balance Sheet shows the current balance of the business assets and liabilities as well as the change in financial position, either for this year

FARMPLAN

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to date, or from the same point a year ago. The Profit/Loss statement may be consolidated for the entire operation, or printed separately for each enterprise. This allows the manager to pinpoint productive and unproductive enterprises. Furthermore, a "per unit" profit/loss statement shows the profit per acre, bushel, pound, etc. for a particular enterprise or for the whole farm. The statement may be formatted to show the profit for the current period compared to the year to date, the year to date profit compared to the budget amount, or the year to date profit compared to the prior year to date. Percentages of each income and expense category are also displayed.

In short the Farmplan Bookkeeper allows a manager to control his financial resources as never before. With the bookkeeper's easy-to-use reports that control can be effectively put to work in developing impressive loan applications, analyzing the profitability of an enterprise, developing next year's budget, or a number of other management activities.

HARDWARE REQUIREMENTS

Minimum requirement: 48K Apple II Plus or Apple IIe (with language card), two disk drives, video monitor, and a 80 column printer.