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A Guide to Processing Dairy Farm Business Summaries in County and Regional Extension Offices for Micro DFBS V 2.0

IBM PC, XT and IBM-Compatible Microcomputers

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INTRODUCTION

This publication is a guide to using the Microcomputer Dairy Farm Business Summary (Micro DFBS) computer program for analyzing individual dairy farm businesses. County Extension agents and regional specialists are the intended audience, however, college faculty in other states may also find this publication of value. Farm business summary and analysis projects have long been a basic part of the agricultural Extension program in New York State. Records submitted by New York State dairy farmers provide the basis for many Extension educational programs and the data for applied research studies and classroom teaching.

Extension offices with appropriate microcomputers have the capability to strengthen their dairy farm business analysis activities by calculating and printing the individual farm summaries for immediate use by the agent and farmer, at any time. After entry in the county, individual farm data is sent to the Department of Agricultural Economics at Cornell University for additional review prior to calculation of county, regional, and State summaries.

HARDWARE REQUIREMENTS

Version 2.0 of the Micro DFBS program will run on IBM PC and XT and IBM-compatible computers such as Compaq with a minimum of 256K of random-access memory (RAM). The DOS 2.0 or 2.1 operating system is needed. Either two floppy disk drives or one floppy and one hard disk are needed.

Printers vary from one Extension office to another, and an effort is being made to make the program work with as many printers as possible. Most printers capable of printing in pica type (10 characters per inch, 66 lines per page) should work.

Each farm summary printout is 11 pages long and you typically need three copies -- one for the farmer, one for your county or regional Extension office file, and one to send to Cornell for the regional and State summaries. Triple-copy paper will allow you to print all three copies at once, and is highly desirable.

GETTING STARTED

This tutorial section will serve as a learning guide and "hands-on" exercise in using Micro DFBS. The user becomes familiar with the operation of Micro DFBS by:

a) copying previous year's data files to current year's file location
b) starting the program
c) typing information from a sample input form
d) calculating and printing a summary
e) preparing a diskette for shipment to Cornell

This tutorial assumes that a suitable microcomputer and printer are available and the user knows how to operate them. Microcomputer hardware requirements were explained in a previous section. If you are not familiar with the operation of your microcomputer and operating system, refer to its DOS manual.

I. Copy previous year's data files to current year's file location.

You should have been given a data diskette that contains 1983 and 1984 data files for the farms in your county that participated in the business summary program in those years. These files are required for the part of Micro DFBS that posts previous year's data (see Section IV) for use by the current year data file (<farm no.>.85). Each farm has three data files on the disk: a 1983 data file (<farm no.>.83), a 1983 output file (<farm no.>.83Ø), and a 1984 data file (<farm no.>.84). Only the 1983 output file and the 1984 data file are necessary to obtain the data needed for the current year data file. These two files for each farm must be copied to the location of the current year's data files. For example, if your hardware is an IBM XT, and you are going to store all of your 1985 data files on the hard disk, you should insert the previous year's data disk in the floppy disk drive and at the C> prompt, type:

```
copy a:*.84 ↵
copy a:*.83Ø ↵
```

For an IBM PC or other two-floppy disk drive system, you may not be able to copy all of the previous year's data files to a floppy and still leave room for the current year data files. Therefore, it is advisable to do some advance planning as to how many and which farm files you will store on one floppy disk (10-15 farm files should fit). Then copy the previous year's data files for those farms to the floppy disk. For example, with the previous year's data disk in the A drive and a blank formatted disk in drive B, at the A> prompt, type:

```
copy 6231*.84 b: ↵
copy 6231*.83Ø b: ↵
```

These two commands would copy all the 1984 and 1983 output files for county number 62, whose farm numbers begin with 6231. If the farm numbers are sequential for this county, farm numbers 62310, 62311, 62312, ... through 62319 would have their previous year's data copied to the blank floppy. Then the current year's data for these farm numbers would be entered on that same floppy disk.

II. Start the program.

Important - be sure to always enter the correct date when you start the computer to run Micro DFBS. Micro DFBS prints this date on the summary printout. It also assumes that the summary is for the previous year. For example, if you enter 1-13-86, the printout will show:

1985 Dairy Farm Business Summary

If you don't enter the date and instead leave it as the default of 1-01-1980, the printout will show:

1979 Dairy Farm Business Summary

which is probably not what you wanted.

Follow A or B depending on the hardware system you are using.[1]

A. Two floppy disk drives (IBM PC, Compaq):

Insert your DOS diskette in drive A (the left-hand drive) and turn on the computer and printer. Wait until DOS is loaded. Type the date and time, if asked. You should see a prompt A>. This means that drive A is the default drive. Take out the DOS diskette. Insert the Micro DFBS diskette in drive A and the sample data diskette provided in drive B (right-hand drive).

Skip to C on page 5.

B. One floppy and one hard drive (IBM XT):

If you have previously loaded DOS onto the hard disk[2], turn on the computer and printer with the floppy drive empty. Wait until DOS is loaded from the hard disk. Type the date and time, if asked.

If you will be storing data on the hard disk and/or operating the program from the hard disk, it is advisable to set up a separate directory on the hard disk for this purpose.[3] We'll call the directory DFBS. First, let's check if the directory DFBS already exists. To check, type:

CD \DFBS ↵

---

[1] If you have not already done so, be sure to make a backup copy of your program diskette.

[2] If you have not previously loaded DOS onto the hard disk, follow the procedure in A, and when you see the prompt A>, type:

C:↵

(The symbol ↵ stands for a carriage return.)

Upper- or lower-case letters will do. This makes drive C the default drive.

[3] If you are unfamiliar with the concept of a directory, refer to your DOS manual. In the IBM DOS 2.1 manual, see pages 5-1 to 5-12. Typing the command prompt pg or inserting this command in your autoexec.bat file will change your C> prompt to show which directory you are in, such as C:\DFBS>.

If it does exist, you will see the prompt C> reappear. If it does not exist, you will see 'invalid directory', so set it up. To set up a directory named DFBS, from the prompt C>, type:

MD \DFBS ↵

Each time Micro DFBS is rerun on a one-floppy/one-hard disk system, the Micro DFBS directory must be accessed using the command:

CD \DFBS ↵

The sample data diskette contains files which must be transferred to your new Micro DFBS directory if you select to store data on the hard disk. Insert the sample data disk into drive A and transfer the file by typing:

COPY A:38001.* ↵

The C> prompt should reappear.

The Micro DFBS program may be run from the hard disk drive or from the floppy disk drive.

1. Operating the Micro DFBS program from the hard disk drive:

   The Micro DFBS program diskette contains all the files necessary to run the Micro DFBS program. These files must be copied to your 'DFBS' directory to be able to run the program from the hard disk. If you are not already in the 'DFBS' directory, type 'CD \DFBS'. Insert the Micro DFBS program diskette into drive A and copy all the files to the hard disk by typing:

   COPY A:*.* ↵

   The names of the files being copied will appear on the screen as they are copied to the hard disk. The C> prompt should reappear after all the files are copied.

2. Operating the Micro DFBS program from the floppy disk drive:

   Insert the Micro DFBS program diskette in drive A. Type:

   A:↵

   This makes the A drive the default drive. With the Micro DFBS program operating from the A drive, you will need to store the data files on the C drive as there is insufficient space on the program diskette. The "Install" program described in Section III will enable you to specify the C drive for data storage.

   Note: The MD DFBS and COPY commands need to be used only once -- the directory and files will remain after the session is ended and can be used in future sessions.

C. You are now ready to run Micro DFBS. Type:

DFBS ↵

You should see the main menu.

MAIN MENU

```
                                        DATE: 1/13/1986
COOPERATIVE EXTENSION

Prepared by
DEPARTMENT OF                                          NEW YORK
AGRICULTURAL ECONOMICS
CORNELL UNIVERSITY

Dairy Farm Business Summary
```

```
[ ] Post Previous Year's Data        [ ] Delete Record
[ ] Create/Update/Display Record     [ ] Calculate and Print Farm Summary
[ ] Verify Record                    [ ] Run Install Program

                    [ ] Help
                    [ ] Quit
```

The main menu shows the options available in DFBS. A set of brackets [ ] appears to the left of each named option. An underline character [_] is used as the cursor and marks the first option 'Post Previous Year's Data'. Practice moving the cursor keys. What happens when you use the right and left arrow keys?

III. Final startup instructions - the INSTALL program

An installation program must be run before using the Micro DFBS Program in order to specify which disk drive data is to be stored on. Use the cursor keys (↑ or ↓) to select "Run Install Program".

You should get the message:

DAIRY FARM BUSINESS SUMMARY INSTALLATION PROGRAM
PRESENT DRIVE IS : ENTER NEW DRIVE OR PRESS RETURN TO OK EXISTING DRIVE.

Enter a drive letter, either A:, B:, C: or press return if the correct drive is already specified. Once you set the drive, it will remain at that setting until you change it by selecting "install" again.

You should then see the following menu:

```
CURRENT DIRECTORY IS \

CHOOSE OPTION:
  1: MAKE A DIRECTORY
  2: REMOVE A DIRECTORY
  3: SET NEW PATH TO DIRECTORY
  0: QUIT

OPTION:
```

This menu allows the user to create and select the path for the storage of data in the program. The current path will display at the top of the menu. If the path displayed is correct then choose Ø to quit the program and save the current path. If the path displayed needs to be changed or a new subdirectory needs to be created, then select those items from the menu. For example, to create a subdirectory called DFBSDATA you select 1 from the menu. The program will then prompt you for the name of the new directory. To specify the name you would type the complete path name to the new directory, e.g., C:\DFBS\DFBSDATA and press the return key. The program will now create the desired subdirectory. After the new directory is created the menu will again appear, the new path should be displayed at the top of the screen. If the path is not correct you can use option number 3 to set the proper path. When you are satisfied with your selection, you can exit the installation program by typing Ø to quit, you will then return to the main DFBS menu.

FOR DOS 1.XX USERS:

The path command is not implemented in this version of DOS and you will get an error message if you try to specify a path or create a subdirectory. To properly install the program for this version enter the desired disk drive and then select option 3 from the menu and, when prompted for a path, press return. There should be either a \ or nothing displayed at the top of the screen where the path is normally displayed. Once this is done you may exit the installation program.

FAILURE TO PROPERLY SET THE PATH WILL RESULT IN THE DATA BEING DIRECTED TO THE WRONG SUBDIRECTORY OR IN THE PROGRAM ABORTING WITH AN "I/O ERROR Ø1" ERROR MESSAGE DISPLAYED.

IV. Post previous year's data.

Select the "Post Previous Year's Data" option. The function of this option is to copy data from previous year's data files (for this sample farm: 38001.83 and 38001.84) into output files (38001.830 and 38001.840) for use by the current year data file (38001.85)[4]. The data copied includes progress of the farm business data printed on

[4]The previous year's data files must already exist on your data disk drive (see Section I on page 2).

page 1 of the output, and 1985 planned debt payments printed on page 7 of the output. End year inventory values, end year cow inventory, business description items, land inventory, and end year assets are copied into the current year data file and are displayed on the input screens as beginning year values. To select the post option type:

↵ (return/enter)

The following will appear on the screen:

Post past year's data to current year? [y]/[n]

Enter "y" for yes. You will then be prompted for a farm number. Type the farm number of the sample farm:

38001 ↵ (return/enter)

The following messages will appear on the screen:

READING	**C:38001.84**
UNABLE TO LOCATE OR OPEN	**C:38001.830:CONTINUING**
CREATING	**C:38001.830**
CREATING	**C:38001.840**
CREATING	**C:38001.85**

PRESS RETURN TO CONTINUE.

If there are no data to post, i.e., the farm did not participate in the summary program in 1984 or the data was "irregular" and not included in a county/regional summary, there will be the message "DATA FILES ARE MISSING. PRESS RETURN TO CONTINUE."[5]

Type ↵

When posting is complete, you will again be at the main menu.[6]

You should run "post" <u>only one time</u> per farm. Selecting post again will erase any 1985 data you have entered for that farm.

V. <u>Enter the input data</u>.

The Create/Update/Display Record option on the main menu is used to enter input data for a new farm or to change or display a previously entered farm record. Use the cursor keys (↑ or ↓) to select this option. Type:

↵

to select the 'Create/Update/Display Record' option.

You will see a prompt to enter a farm number. The farm number assigned will be made up of your 2-digit county number, followed by a 3-digit number identifying the individual farm.

---

[5]Do not attempt to post 1983 data into a 1984 file, your current 1985 data file will be overwritten and your data lost.

[6]If there is an I/O error F3 during the post routine, follow the instructions in Appendix B.

MAIN MENU WITH FARM NUMBER PROMPT

```
                                        DATE: 1/13/1986
COOPERATIVE EXTENSION

Prepared by
DEPARTMENT OF                                          NEW YORK
AGRICULTURAL ECONOMICS
CORNELL UNIVERSITY

Dairy Farm Business Summary
```

```
[ ] Post Previous Year's Data        [ ] Delete Record
[ ] Create/Update/Display Record     [ ] Calculate and Print Farm Summary
[ ] Verify Record                    [ ] Run Install Program

                    [ ] Help
                    [ ] Quit
```

ENTER FARM NO

Important - select farm numbers carefully following the recommended procedure. You must assign the same number to the same farm each year and assign a new number to a new farm. This is essential for the first page of the summary, "Progress of The Farm Business", and page 7, "Repayment Analysis", to work properly.

If you make an error entering data and you notice it before typing the ↵ (return/enter) key, you can correct the error by using the backspace key, delete key or the ← key to erase the error, and type the correct entry. If you type ↵ before noticing the error, you can move back to the incorrect entry by using the ↑ key, and then retype the number.

The top of the first page of our sample farm check-in form is shown below. We will call our sample farm number 38001 and we have written the number in the block labelled "For Cornell Use Only".

NEW YORK STATE COOPERATIVE EXTENSION DAIRY FARM BUSINESS
SUMMARY AND DATA CHECK-IN FORM

Name Sample Farmer County Rockland
Address RD1 Box 19
Dairytown, NY 19876
Phone no. 607-256-2299

For Cornell Use Only *Screen 1.*
Proc. number 38001 *Year 1985*
(✓)complete, ( )entered, ( )ready

Type the farm number:

38001 ↵

The program will find the file 38001.85 that was created under the post option. This file already contains data from the previous two years. The program continues on to Screen 1.

If the data you are entering is for a new cooperator and you did not use the post option, you would see the following message after you entered the newly assigned farm number:

Data files missing, create new ones (Y/N)

Enter y ↵

The program will continue on to Screen 1. Screen 1 contains the farm name, address, and number from the top section of page 1 of the check-in form. Screen numbers 2 through 14 correspond to the 13 boxed-in areas of the check-in form.

Screen 1 should look like Screen 1 below. The farm number, state, and county will already be inserted for you and the cursor will be at the farm name.

There is no farm name[7], so enter ↵ (return/enter) to move to 'Operator's Name' and then enter the farm name and the rest of the farm information, (use the sample farm information from page 8).

Screen #1

FARM INFORMATION

```
                                                    Verified [N]
Farm No. ........ 38001
Farm Name .......
Operator's Name .
Address .........
City ............
State ........... NY
Zip ............     -
County .......... ROCKLAND
Phone ........... (    )    -

      Regular [ ]            Irregular [ ]            DDP [ ]
```

[7]Determine whether or not the information in the "Name" space on the check-in form is a farm name, operator's name, or both.

At the bottom of the screen, find the classifications "Regular", "Irregular", and "DDP". The regular and irregular classifications indicate the accuracy and completeness of the information for determination of whether or not this farm will be included in the county, regional, and state summaries. Regular is included; irregular is not. The "DDP" classification is for Dairy Diversion Program Participants. Select the appropriate classifications by entering an "x" in the space between the brackets. A regular or irregular classification may be selected along with the Dairy Diversion Program Participant classification.

The "Verified [N]" notation in the upper right corner of Screen 1 indicates that the data has not yet been verified. The "N" will change to a "Y" after the verification has been completed.

The entering of farm information in Screen 1 has now been completed. It is possible to change data in the screen at this point. For example, use the ↑ key to move the cursor to "Farm Name" and type:

Sam Hill ↵ (return/enter)

There are three ways to get out of Screen 1 and move to the next screen:

1) ↵ (return/enter). Keep pressing return until the cursor goes off the screen and you get the message below.

2) ↓ key. Keep pressing the down arrow key until you get the message below.

3) [Esc.] key. The escape key only needs to be pressed once to get the message below. Note: Use this key with caution. On screens with totals or computed values use ↵ or ↓ to move through the entire screen so values are calculated.

[PgDn] or [RETURN] - next, [PgUp] - previous screen, [Esc] to exit, or # of Screen.

The above message or command line allows you four courses of action:

1) [PgDn] or [RETURN] will take you to the next screen.

2) [PgUp] will take you to the previous screen.

3) [Esc] will exit the screen and take you back to the main menu.

4) # of Screen, i.e., enter the number of any screen to move to that screen. It is not necessary to ↵ (Return/Enter) after entering the Screen #.

Screen #1

FARM INFORMATION

```
                                                        Verified [N]
Farm No. ........ 38001
Farm Name ....... Sam Hill
Operator's Name . Sample Farmer
Address ......... RD1 Box 19
City ............ Dairytown
State ........... NY
Zip ............. 19876-
County .......... ROCKLAND
Phone ........... (607)256-2299

      Regular [ ]          Irregular [x]          DDP [ ]
```

[PgDn]or[RETURN]-next, [PgUp]-previous screen, [Esc] to exit, Or # of Screen.

Move to Screen 2 by typing:

↵ as many times as necessary.

You should see Screen 2.

Farm No.38001 Screen #2

MACHINERY AND EQUIPMENT INVENTORY AND DEPRECIATION

```
Machinery & Equipment Inventory Beginning $  90000     End $      0

Machinery & Equipment Purchased          + $      0
Machinery & Equipment Sold               - $      0

1985 Tax Depreciation                    - $      0

Total Beginning Inventory After Changes                  $  90000

Machinery Appreciation (end less beginning after changes)  $ -90000
```

Part of page 1 of Sample Farmer's check-in sheet, the machinery inventory and depreciation information, is shown below. The arrows show where each item is typed into Screen 2 of Micro DFBS. The computer doesn't know what to do with commas (or spaces within or to the left of numbers), so <u>don't type the commas</u>. If there were previous year's data to post, the beginning of year inventory value will be displayed. If this value does not need to be revised, press ↵ (return/enter) to move to the next item. If it needs to be changed, simply type the revised value over the existing one. Enter the data called for. Use ↵ to move from one item

to the next one below. The bottom two items, marked with *, are calculated by Micro DFBS. When you get Screen 2 completed, advance to Screen 3 by typing:

[PgDn]

Screen 2.

MACHINERY & EQUIPMENT INVENTORY & DEPRECIATION (do not include leased items)

Beginning of Year Inventory	$ 90,000	*End of Year Inventory*	$ 91,000
Machinery & Equipment Purchased	+ 10,800		
Machinery & Equipment Sold	- 1,250		
*1985 Tax Depreciation**	- 14,280		
Total Beginning Inventory After Changes			$ 85,270
Machinery Appreciation (end less beginning after changes)			$ 5,730

**Exclude buildings and cattle from ACRS depreciation.

Farm No. 38001 Screen #2

MACHINERY AND EQUIPMENT INVENTORY AND DEPRECIATION

Machinery & Equipment Inventory Beginning	$ 90000	End	$ 91000	
Machinery & Equipment Purchased	+ $ 10800			
Machinery & Equipment Sold	- $ 1250			
1985 Tax Depreciation	- $ 14280			
Total Beginning Inventory After Changes			$ 85270	*
Machinery Appreciation (end less beginning after changes)			$ 5730	*

Screens 3 through 14 are handled in a similar way and, as with Screen 2, are designed to resemble the check-in form as closely as possible.

Now finish typing the farm information for Sam Hill into Screens 3 through 14 using the data on the following pages. After Screen 14, you should be back to the main menu.

Screen 3, Feed and Supply Inventory, has three columns, two of which are for data entry. The beginning and end year columns are entered and the beginning and end year totals and inventory change column are computed. The check-in form has additional columns in Screen 3 for quantities and $ per unit; however, these are work spaces.[8] If there was previous year's data to post, the beginning of year inventory value will be displayed, but will be revised if the items entered above do not total to this value. The order of data entry is across the rows.

The inventory change for grown feeds is calculated by subtracting the beginning year inventory value from the end year inventory value. This inventory change is then transferred to Screen 12, the accrual receipts screen.

The inventory changes for purchased feeds and supplies are calculated by subtracting the end year inventory value from beginning year value for each item. These inventory change values are then transferred to Screen 13, the accrual expenses screen.

Use the cursor (↓) key or ↵ (return/enter) to skip zero entries.

FEED & SUPPLY INVENTORY			Total			Total	Screen 3. Inventory Change
Total Grown Feeds			$31,500			$43,985	$12,485
PURCHASED FEEDS:							
Dairy grain & conc.	20.T.	x170/T	-$ 3400	18.T.	x175/T	-$ 3150	250
Dairy roughage	.....	.....	.....	.....	.....	.....	.....
Other lvstk. feed	.....	.....	.....	.....	.....	.....	.....
SUPPLIES:							
Machine: Parts	.....	.....	$ 200	.....	.....	$ 225	$ -25
Fuel, oil, grease	100gal.	1.15/gal.	115	75gal.	1.15/gal.	87	28
Livestock: Semen	.....	.....	.....	.....	.....	.....	.....
Vet. supplies	.....	.....	50	.....	.....	70	-20
Other supplies	.....	.....	100	.....	.....	125	-25
Crops: Fertilizer	.....	.....	.....	.....	.....	.....	.....
Seeds	.....	.....	.....	.....	.....	.....	.....
Pesticides	.....	.....	.....	.....	.....	.....	.....
Other:.....	.....	.....	.....	.....	.....	.....	.....
Total Feed & Supplies			$35,365			$47,642	

Farm No. 38001 Screen #3

FEED & SUPPLY INVENTORY

Feed & Supply Inventory	Beg-Year	End Year	Inventory Change
Total Grown Feeds	$ 31500	$ 43985	$ 12485
Purchased Feeds:			
Dairy Grain & Conc.	$ 3400	$ 3150	$ 250
Dairy Roughage	$ 0	$ 0	$ 0
Other Lvstk. Feed	$ 0	$ 0	$ 0
Supplies:			
Machine: Parts	$ 200	$ 225	$ -25
Fuel, Oil, Grease	$ 115	$ 87	$ 28
Livestock: Semen	$ 0	$ 0	$ 0
Vet. Supplies	$ 50	$ 70	$ -20
Other Supplies	$ 100	$ 125	$ -25
Crops: Fertilizer	$ 0	$ 0	$ 0
Seeds	$ 0	$ 0	$ 0
Pesticides	$ 0	$ 0	$ 0
Other:	$ 0	$ 0	$ 0
Total Feed & Supplies	$ 35365	$ 47642	

[8] There are three kinds of spaces on the check-in form: ..... for work space, _____ for data entry items, ------- for calculated values.

Data entry in Screen 4, Livestock Inventory, starts with "leased dairy cows" then continues across the remaining rows. The "$ per Head" columns are calculated after the "number of head" and "total value" entries are made for each row. All totals are calculated.

If there were previous year's data to post, the beginning of year total dairy cow number and corresponding value and total livestock value will be displayed. These values will be recalculated if the data entered does not total to these values.

LIVESTOCK — *Screen 4.*

Number of leased/rented dairy cows at end of year 0

	Beg. of Year Inventory			End of Year Inventory Using: Beg. Year Prices			End Year Prices	
	No.	$ per Head	Total Value	No.	$ per Head	Total Value	$ per Head	Total Value
Dairy Cows:								
.....	70	$900	$63000	80	$900	$72000	$800	$64,000
.....								
Total Dairy Cows	70		$63,000	80		$72,000		$64,000
Heifers:								
..Bred Heifers....	10	$1000	$10000	20	$1000	$20,000	$900	$18,000
...Open Yearlings..	20	750	15,000	20	750	15,000	650	13,000
..Calves.....	20	500	10,000	10	500	5,000	450	4500
Total Heifers	50		$35,000	50		$40,000		$35500
Bulls & Other Lvstk.:								
...Dairy Steers....	0	$.....	$ 0	4	$400	$1600	$400	$1600
.....								
Total Bulls & Other Livestock	0		$...0	4		$1600		$1600
Total Livestock			$98000			$113600		$101100

Explain change in livestock value per head from beginning of year to end of year at beginning of year prices : None

Farm No. 38001 — LIVESTOCK INVENTORY — Screen #4

Leased Dairy Cows End Yr.: 0	Beginning of Year			End of Year Inventory Using: Beg. Prices			End Prices	
	No.	$ per Head	Total Value	No.	$ per Head	Total Value	$ per Head	Total Value
Dairy Cows:	70	$ 900	$ 63000	80	$ 900	$ 72000	$ 800	$ 64000
	0	0	0	0	0	0	0	0
Total Dairy Cows	70		63000	80		72000		64000
Heifers:	10	1000	10000	20	1000	20000	900	18000
	20	750	15000	20	750	15000	650	13000
	20	500	10000	10	500	5000	450	4500
Total Heifers	50		35000	50		40000		35500
Bulls/Other Lvstk	0	0	0	4	400	1600	400	1600
	0	0	0	0	0	0	0	0
Total Bulls & Other Livestock	0		0	4		1600		1600
TOTAL LIVESTOCK	120		98000	134		113600		101100

The data for Screen 5, Real Estate Inventory, is entered in the following order: beginning year market value, end year market value, new land, new buildings, lost capital, depreciation, and real estate sold (amount received and beginning year value). All remaining items are calculated.

If there were previous year's data to post, the beginning of year inventory value will be displayed. It may be revised, if necessary, by typing the new value over the existing one.

REAL ESTATE INVENTORY BALANCE *Screen 5.*

Land & Building Market Value: *Beginning $190,000* *End $195,000*

*New Real Estate:**

Land $ 0 + bldg. $10,300 = $10,300.

*Less lost capital** - 0*

= Value added +10,300.

*Depreciation: from 1985 income tax**** - 6615

Real estate sold: Amount received $3000

Beginning of year value - 500

Total Beginning Value After Changes $193,185.

Real Estate Appreciation (end less beginning after changes) $ 1815.

*Use Worksheet 4 on page 2 to calculate.

**Include depreciation on buildings in ACRS 5-year class as well as 10 and 15-year classes and non-ACRS depreciation from 1985.

Farm No. 38001 Screen #5

REAL ESTATE INVENTORY

Land and Building Market Value Beginning $ 190000 End $ 195000

New Real Estate:

Land $ 0 + Bldg. $ 10300 = $ 10300

Less Lost Capital - $ 0

= Value Added + $ 10300

Depreciation: From 1985 Income Tax - $ 6615

Real estate sold: Amount Received $ 3000

Beginning of Year Value - $ 500

Total Beginning Value After Changes $ 193185

Real Estate Appreciation (end less beginning after changes) $ 1815

The order of data entry in Screen 6 is as follows: numbers of livestock, milk sold, butterfat test, production record, DHI#, milking system, business type, dairy housing, and financial recordkeeping system.

Business description items in Screen 6 are entered by typing the number that appears in parentheses on the data check-in form and pressing ↵ (return/enter). The appropriate business description item will be displayed on the screen. Initially, all the items are set to 1, so there will be data on the screen when you call it up.

When entering the Average Milk Plant Test, the decimal must be typed.

The value entered for other livestock is the number of total work units for the total number of other livestock. Table 1 on the next page shows estimated work units for various livestock and crops.

If there were previous year's data to post, the production record, milking system, business type, and dairy housing will have last year's data displayed. These items may be revised by typing the correct number.

LIVESTOCK & BUSINESS DESCRIPTION — *Screen 6.*

Livestock	Avg. No. For Year	Production Record	Milking System	Business Type
Dairy cows (owned, rented & leased)	77	✓(1)D.H.I.	__(1)Bucket & carry	__(1)Single prop.
Heifers (dairy)	50	__(2)O.S.	__(2)Dumping station	✓(2)Partnership
Bulls		DHI# 123456 __(3)Other	✓(3)Pipeline	__(3)Corporation
Other: Dairy Steers (type) ...4... (#head)	[8] w.u.*	__(4)None	__(4)Herringbone par.	__(4)Other
			__(5)Other parlor	

	Dairy Housing	Financial Recordkeeping System	
Lbs. milk sold 1116,500	✓(1)Stanchion	__(1)CAMIS	__(4)On-Farm Computer
	__(2)Freestall	✓(2)Acct. Book	
Avg. milk plant test 3.4 %B.F.	__(3)Other	__(3)Agrifax (mail-in only)	__(5)Other

Farm No. 38001 — Screen #6

LIVESTOCK and BUSINESS DESCRIPTION

Livestock	Average No. For Year	Production Record	Milking System	Business Type
Dairy Cows	77	1 D.H.I	3 PIPELINE	2 PARTNERSHIP
Heifers(dairy)	50			
Bulls	0	D.H.I # 12345		
Other:	8 w.u.			

Milk Production		Dairy Housing	Financial Recordkeeping System
milk sold (lb)	1116500	1 STANCHION	2 ACCT. BOOK
Average Milk Plant Test 3.40% B.F.			

Table 1. Work Units For Livestock and Crops

	Work units per head or per acre
Livestock	
Beef cows	2
Horses	2
Hens (production only)	0.04
Egg processing (per dozen)	0.002
Pullets raised	0.004
Broilers raised	0.003
Brood sows	3
Hogs raised	0.15
Ewes	0.5
Crops	
Barley	0.6
Dry beans	1.5
Potatoes	6
Cabbage	9
Snap beans for processing	1
Sweet corn	1
Onions	12
Apples - growing	4
Apples - harvest - per bushel	0.02
Work off farm, days	1
Primary Enterprises*	
Livestock	
Dairy cows	7
Heifers	2
Bulls	2
Crops	
Hay	0.6
Hay crop silage	0.8
Corn silage	0.8
Other forage harvested	0.6
Corn for grain	0.6
Oats	0.6
Wheat	0.6
Tillable pasture	0

*Work units for the primary enterprises are built into Micro DFBS and are not entered by the user. They are provided here for information only.

In Screen 7, the order of data entry for the labor and land inventory is across the rows. The total months of labor, worker equivalent, and land inventory totals are calculated. If there were previous year's data to post, the entire land inventory section will be displayed. If revisions need to be made in this data, simply type over the existing values. The "all acres" column and the "total" row will be recalculated.

Screen 7.

LABOR INVENTORY	*Full-Time Months*	*Age*	*Years Educ.*	*Value of Management & Labor*
Operator - 1	12	51	14	$ 15,000
- 2	12	28	16	$ 15,000
- 3				$
- 4				$
- 5				$
- 6				$
Family (paid employees)	6			
Family (unpaid)	3			
Hired (regular & seasonal)				
Total	33	/ 12 = 2.75 *Worker Equivalent*		

LAND INVENTORY	*Acres Owned*	*Acres Rented*	*All Acres*
Tillable land	200	60	260
Pasture (nontillable)	30	10	40
Woods & other nontillable	160	5	165
Total	390	75	465

Farm No. 38001 Screen #7

LABOR and LAND INVENTORY

LABOR INVENTORY	Full-Time Months	Age	Years Educ.	Value of Mgmt & labor
Operator - 1	12	51	14	$15000
- 2	12	28	16	$15000
- 3	0	0	0	$ 0
- 4	0	0	0	$ 0
- 5	0	0	0	$ 0
- 6	0	0	0	$ 0
Family (paid emp.)	6			
Family (unpaid emp.)	3			
Hired (reg & seasonal)	0			
Total	33	/ 12 =	2.75 Worker Equivalent	

LAND INVENTORY	Acres Owned	Acres Rented	All Acres
Tillable land	200	60	260
Pasture (nontillable)	30	10	40
Woods & other nontillable	160	5	165
Total	390	75	465

Screen 8 is Tillable Land Use. When entering the data in the dry matter coefficient column, the decimal must be typed. The entry for total production of "Other Crops" is in number of work units (see Table 1 on page 17). The order of data entry is across the rows. Total Tillable Acres and the Total Tons Dry Matter column are the calculated values.

TILLABLE LAND USE	*Acres (1st cut only)*	*Total Production (all cuttings)*	*Dry Matter Coefficient****	*Screen 8. Total Tons Dry Matter*
Hay Crop (1st cut acres only)	120	xxxxxxxxxxxxxxxxxxxx xxxxxxxxxxxxxxxxxxxx	xxxxxxxxxx xxxxxxxxxx	xxxxxxxxx xxxxxxxxx
Hay	xxxxxxxxxxxxx xxxxxxxxxxxxx	150 tons	.85	128
Hay crop silage	xxxxxxxxxxxxx xxxxxxxxxxxxx	480 tons	.4	192
Corn silage	70	980 tons	.35	343
Other forage harvested	10	40 tons	.4	16
*Corn for grain***	35	3300 dry sh. bu.	Tot. tn DM	679
Oats	10	560 dry bu.		
Wheat		dry bu.		
Other:.....		1 w.u.*		
Tillable pasture	15			
Idle tillable acres				
Total tillable acres	260			

***Work units. To be entered at Cornell. **Convert to dry shelled equivalent (see tables, opposite page). ***Enter as decimal, e.g., 40% is entered as .4.**

Farm No. 38001 Screen #8

TILLABLE LAND USE

	Acres (1st cut)	Total Production (all cuttings)		Dry Matter Coefficient	Total Tons Dry Matter
Hay Crop	120				
Hay		150	tons	0.85	128
Hay Crop Silage		480	tons	0.40	192
Corn Silage	70	980	tons	0.35	343
Other Forage	10	40	tons	0.40	16
Corn for Grain	35	3300	bu.	Total Tons D.M.:	679
Oats	10	560	bu.		
Wheat	0	0	bu.		
Other	0	0	w.u.		
Tillable Pasture	15				
Idle Till. Acres	0				
Total Till. Acres	260				

Screen 9 is the Asset portion of the Farm Family Financial Situation. The first items, beginning and end year total farm inventories, are calculated from data entered in earlier screens and displayed here. The order of data entry is across the rows. The calculated values are Total Farm Assets, Total Nonfarm Assets, and Total Assets. If there were previous year's data to post, the entire beginning year column will be displayed.

Screen 9.

ASSETS

	January 1, 1985	December 31, 1985
Total Farm Inventory	$413,365	$434,742
Other Farm Assets:		
Farm cash, checking, & savings	13,000	1,200
Accounts receivable	12,500	13,025
Co-op stocks & certificates	3,000	3,200
Total Farm Assets	$441,865	$452,167
Nonfarm Assets:		
Personal cash, checking & savings	$ 1500	$ 1600
Cash value life insurance	3000	3200
Nonfarm real estate	0	0
Personal share auto	2000	1500
Stocks & bonds	0	0
Household furnishings	5000	5000
Other	0	0
Total Nonfarm Assets	$11,500	$11,300
TOTAL ASSETS (not including leases)	$453,365	$463,467

Farm No. 38001 Screen #9

FARM FAMILY FINANCIAL SITUATION--ASSETS

	January 1, 1985	December 31, 1985
Total Farm Inventory	$ 413365	$ 434742
Other Assets:		
Farm Cash, Check/Saving	$ 13000	$ 1200
Accounts Receivable	$ 12500	$ 13025
Co-op Stock and Cert.	$ 3000	$ 3200
Total Farm Assets:	$ 441865	$ 452167
Nonfarm Assets:		
Personal Cash, Check/Saving	$ 1500	$ 1600
Cash Value Life Insurance	$ 3000	$ 3200
Nonfarm Real Estate	$ 0	$ 0
Personal Share Auto	$ 2000	$ 1500
Stocks & Bonds	$ 0	$ 0
Household Furnishings	$ 5000	$ 5000
Other	$ 0	$ 0
Total Nonfarm Assets	$ 11500	$ 11300
TOTAL ASSETS	$ 453365	$ 463467

Screen 10, Liabilities and Planned Debt Payment Schedule, is divided into two screens (Screen 10 and Screen 10a). Screen 10 contains the Long Term and Intermediate Liabilities and Debt Payments. Screen 10a contains the Short Term, Operating Debt, Accounts Payable, and Nonfarm Liabilities and Debt Payments. To move from Screen 10 to Screen 10a, press the [PgDn] key or the [Esc] key. To get back to Screen 10 from Screen 10a, press the [PgUp] key.

The data check-in form contains two more columns than Screen 10, the Amount of Payments and Payments Per Year columns. These columns are for workspace, the data are not entered into the computer. The first column, the creditor description, is limited to 12 characters of input. You may abbreviate and use upper or lower case letters, however you wish; the description will be printed on the output just as it is entered here. If a decimal is contained in the interest rate, it must be typed. The order of data entry is across the rows. The calculated values are the rows for Total Farm Liabilities/Payments and Total Liabilities/Payments.

Screen 10.

LIABILITIES			DEBT PAYMENTS*						
Creditor (The first 12 characters will be used as input.)	Amount Jan. 1, 1985	Amount Dec. 31, 1985	Actual 1985 Pymts. Principal	Actual 1985 Pymts. Interest	Planned 1986 Payment Schedule Beg. '86 Int. Rate	Amt. of Pymts	Pymts/ Year	Total Annual Payments
Long Term Debt (10 years & over)								
1st Bank Mtg.	$36,000	$35,000	$1000	$3000	9.5%	$326	x 12 =	$3920
FLB	$58,000	$60,000	$2000	$4000	11%	$589	x 12 =	$7068
	$	$	$	$	%	$.....	x .... =	$
	$	$	$	$	%	$.....	x .... =	$
Intermediate Term Debt (over 1 yr., under 10 yrs.)								
First Bank	$18,000	$17,000	$2500	$2100	12%	$378	x 12 =	$4539
PCA	$33,000	$30,000	$3000	$4500	14%	$675	x 12 =	$8100
	$	$	$	$	%	$.....	x .... =	$
	$	$	$	$	%	$.....	x .... =	$
	$	$	$	$	%	$.....	x .... =	$
*Short Term Debt (1 yr. or less)***								
	$	$	$	$	%	$.....	x .... =	$
	$	$	$	$	%	$.....	x .... =	$
*Operating Debt****	$16,000	$15,000		$3000	net reduction planned in operating debt:			$4000
*Accounts Payable*****	$5,500	$16,500		$400	net reduction planned in accounts payable:			$1000
Total Farm Liab./Pymts	$166,500	$173,500	$8,500	$17,000	*Total Farm Loan Pymts*			$28,627
Nonfarm Liab./Pymts	$0	$0	$0	$0	*Total Nonfarm Pymts*			$0
TOTAL LIAB./PYMTS (not including leases)	$166,500	$173,500	$8,500	$17,000	*Total Payments*			$28,627

*Include payments on all liabilities listed to the left. If no payments are made, please enter zero.

**Money borrowed to purchase capital items.

***Money borrowed to purchase items/services entered as expenses in Screen 13, page 11.

****Accounts not paid (no money borrowed) for noncapital items/services.

Farm No. 38001 Screen #10

LIABILITIES & PLANNED DEBT PAYMENT SCHEDULE

Liabilities:	Amount		Debt Payment: Actual Pymnts		Planned Payment Sched.	
	January 1, 1985	December 31, 1985	Principal	Int.	Beg. 1986 Int. Rate	Total
*Long Term:.....			.....		.....	
1st Bank Mtg	$ 36000	$ 35000	$ 1000	$ 3000	9.50%	$ 3920
FLB	$ 58000	$ 60000	$ 2000	$ 4000	11.00%	$ 7068
	$ 0	$ 0	$ 0	$ 0	0.00%	$ 0
	$ 0	$ 0	$ 0	$ 0	0.00%	$ 0
*Intermediate:.....			.....		.....	
First Bank	$ 18000	$ 17000	$ 2500	$ 2100	12.00%	$ 4539
PCA	$ 33000	$ 30000	$ 3000	$ 4500	14.00%	$ 8100
	$ 0	$ 0	$ 0	$ 0	0.00%	$ 0
	$ 0	$ 0	$ 0	$ 0	0.00%	$ 0
	$ 0	$ 0	$ 0	$ 0	0.00%	$ 0

PRESS [PgDn] OR [ESC] TO GO TO SCREEN 10A

((((((SCREEN 10 CONTINUED)))))) (PRESS [PgUp] TO GO TO SCREEN 10)

Liabilities:	Amount		Debt Payment: Actual Pymnts		Planned Payment Sched.	
	January 1, 1985	December 31, 1985	Principal	Int.	Beg. 1986 Int. Rate	Total
*Short Term:.....			.....		.....	
	$ 0	$ 0	$ 0	$ 0	0.00%	$ 0
	$ 0	$ 0	$ 0	$ 0	0.00%	$ 0
*Operating Debt:.....			.....		.Net Reduction Planned	
	$ 16000	$ 15000		$ 3000	Oper. Debt	$ 4000
*Accounts Payable:.....			.....		Net Reduction Planned	
	$ 5500	$ 16500		$ 400	Accts Payable	$ 1000
*Total Farm Liab./Pymts:.....			.....		.Total Farm Loan.....	
	$ 166500	$ 173500	$ 8500	$ 17000	Payments	$ 28627
*Nonfarm Liab./Pymts:.....			.....		.Total Nonfarm	
	$ 0	$ 0	$ 0	$ 0	Payments	$ 0
TOTAL LIAB./PYMTS:.....			.....		.....	
	$ 166500	$ 173500	$ 8500	$ 17000	TOTAL PYMTS	$ 28627

Financial leases are entered in Screen 11. The columns titled "amount of each payment", "no. of payments in 1985", "no. of payments/full year", and "no. of payments remaining" from the data check-in form are entered on Screen 11. The total 1985 expense column is calculated. The order of data entry is across rows.

Leased item	Amount of each payment	No. of payments in 1985	Total 1985 expense	Screen 11. No. of payments/ full year	No. of payments remaining
Cattle:	$		$		
		Total	$ *		
Equipment: Tractor	$ 170	12	$ 2040	12	24
		Total	$ 2040 **		
Structures:	$		$		
		Total	$ ***		

*Enter under "Cattle leases" on Screen 13, page 11.
**Enter under "Machine hire, rent, & lease" on Screen 13, page 11.
***Enter under "Real Estate rent/lease" on Screen 13, page 11.

Farm No. 38001 Screen #11

FINANCIAL LEASES

Leased Item	Amount of Each Pymt	No. of Payments in 1985	Total 1985 Expense	No. of Payments/ Full Year	No. of Payments Remaining
Cattle	$ 0	0	$ 0	0	0
	$ 0	0	$ 0	0	0
	$ 0	0	$ 0	0	0
		Total	$ 0		
Equipment	$ 170	12	$ 2040	12	24
	$ 0	0	$ 0	0	0
	$ 0	0	$ 0	0	0
		Total	$ 2040		
Structures	$ 0	0	$ 0	0	0
	$ 0	0	$ 0	0	0
	$ 0	0	$ 0	0	0
		Total	$ 0		

Screen 12 is the Summary of Yearly Receipts and Changes in Inventory and Accounts Receivable. The pounds of milk sold will be displayed on the screen when it is first brought up. This value was entered earlier in Screen 6. The change in inventory values are also displayed. The dairy cattle change in inventory value is calculated from the dairy cow and heifer values entered in Screen 4. The other livestock change in inventory value is calculated from the bulls and other livestock values entered on Screen 4. The crops change in inventory value is calculated from the grown feeds inventory on Screen 3.

There is work space to itemize other receipt items, only the total is entered. The order of data entry is across the rows. The calculated values include the change in inventory column, accrual receipts column, and the total accrual receipts row.

For any negative values in the Change in Accounts Receivable column, you must type the negative sign.

Screen 12.

Receipts	*Cash Receipts* +	*Change in Inventory** +	*Change in Accounts Receivable*** -	*Accrual Receipts*
Milk 1,116,500 *lbs.*	$151,850	xxxxxxxxx	$ 1,825	$153,675
Dairy Cattle	9,540	$14,000	-1,000	22,540
Dairy Calves	1,630	xxxxxxxxx	-300	1,330
Other Livestock	0	1,600		1,600
Crops	400	12,485		12,885
Government Receipts	230	xxxxxxxxx		230
Custom Machine Work	250	xxxxxxxxx		250
Gas Tax Refunds	160	xxxxxxxxx		160
Other: Pat. Refunds $ 200.				
..... $.....				
..... $.....				
Total Other	200	xxxxxxxxx		200
TOTAL ACCRUAL RECEIPTS	$164,260	$28,085	$ 525	$192,870
Nonfarm Cash Receipts				
Nonfarm Income	$ 4,000	xxxxxxxxx	xxxxxxxxx	$ 4,000

**End of year minus beginning of year. **Use Worksheet 6 on page 8 to calculate.

Farm No. 38001 Screen #12

SUMMARY OF YEARLY RECEIPTS & CHANGES IN INVENTORY & ACCOUNTS RECEIVABLE

Receipts	Cash Receipts +	Changes in Inventory +	Changes in Accts Rec. -	Accrual Receipts
Milk 1116500 lbs	$ 151850		$ 1825	$ 153675
Dairy Cattle	$ 9540	$ 14000	$ -1000	$ 22540
Dairy Calves	$ 1630		$ -300	$ 1330
Other Livestock	$ 0	$ 1600	$ 0	$ 1600
Crops	$ 400	$ 12485	$ 0	$ 12885
Government Recpts	$ 230		$ 0	$ 230
Cust Mach Work	$ 250		$ 0	$ 250
Gas Tax Refunds	$ 160		$ 0	$ 160
Other	$ 200		$ 0	$ 200
TOTAL	$ 164260	$ 28085	$ 525	$ 192870
NONFARM CASH RECPTS				
Nonfarm Income	$ 4000			$ 4000

Screen 13, Summary of Year's Expenses and Changes in Inventory and Accounts Payable, is divided in two screens (Screen 13 and Screen 13a). Screen 13 contains the hired labor, feed, machinery, and livestock expense categories. Screen 13a contains the crops, real estate, other, and nonfarm expense categories. To move from Screen 13 to Screen 13a, press the [PgDn] or [Esc] keys. To get back to Screen 13 from Screen 13a, press the [PgUp] key.

The values in the change in inventory column are displayed when Screen 13 is first brought up. These values are calculated from the purchased feed and supply inventories entered in Screen 3. The order of data entry is across the rows. The calculated values are the change in inventory column, accrual expenses column, and the total accrual expenses row.

See page 12 for instructions. *Screen 13.*

Expenses	*Cash Amount paid* +	*Change in Inventory* +	*Change in Accounts Payable** -	*Accrual Expenses*
Hired Labor	$ 5,200	$xxxxxxxx	$	$ 5200
Feed				
Dairy grain & concentrate	37,480	250	6000	43,730
Dairy roughage	0	.....		0
Other livestock feed	0	.....		0
Machinery				
Machine hire, rent & lease	2,040	xxxxxxxx		2,040
Machinery repairs & parts	7,430	-25	1500	8,905
Auto expense (farm share)	500	xxxxxxxx		500
Fuel, oil & grease	6,880	28		6,908
Livestock				
Replacement livestock	1,800	xxxxxxxx		1,800
Breeding	2,300	.....		2,300
Veterinary & medicine	3,120	-20	-500	2,600
Milk marketing	9,560	xxxxxxxx		9,560
Cattle lease/rent	0	xxxxxxxx		0
Other livestock expense	5,190	-25	400	5,565
Crops				
Fertilizer & lime	7,710	.....	2200	9910
Seeds & plants	3,250	.....	800	4050
Spray, other crop expense	2,640	.....	600	3240
Real Estate				
Land, building, fence repair	6,350	xxxxxxxx		6,350
Taxes	3,600	xxxxxxxx		3600
Insurance	2,730	xxxxxxxx		2730
Rent & lease	1,200	xxxxxxxx		1200
Other				
Telephone (farm share)	700	xxxxxxxx		700
Electricity (farm share)	4,200	xxxxxxxx		4200
Interest paid	17,000	xxxxxxxx		17,000
Miscellaneous	2,330	.....		2330
TOTAL ACCRUAL EXPENSES	$133,210	$ 208	$ 11,000	$144,418
Expansion livestock	$ 9,000	xxxxxxxx	0	$ 9,000
Nonfarm Cash Expenses				
*Personal withdrawals & family expenditures***	$17,000	xxxxxxxx	xxxxxxxx	$17,000

*Use Worksheet 7 on page 10 to calculate.

**Include personal income tax, personal share of real estate tax, personal social security tax, as well as other family living expenses.

Farm No.38001 (PRESS [PgDn] or [ESC] TO GO TO SCREEN 13A) Screen #13

SUMMARY OF YEARS EXPENSES & CHANGES IN INVENTORY & ACCOUNTS PAYABLE

Expenses	Cash Amount Paid	+	Change In Inventory	+	Change In Accts Payable	=	Accrual Expenses
Hired Labor	$ 5200				$ 0		$ 5200
FEED							
Dairy Grain/Conc	$ 37480		$ 250		$ 6000		$ 43730
Dairy Roughage	$ 0		$ 0		$ 0		$ 0
Other Lvstk Feed	$ 0		$ 0		$ 0		$ 0
MACHINERY							
Mach Hire/Rent/Ls	$ 2040				$ 0		$ 2040
Mach repair/parts	$ 7430		$ -25		$ 1500		$ 8905
Auto Expense	$ 500				$ 0		$ 500
Fuel Oil & Grease	$ 6880		$ 28		$ 0		$ 6908
LIVESTOCK							
Replacement Lvstk	$ 1800				$ 0		$ 1800
Breeding	$ 2300		$ 0		$ 0		$ 2300
Vet & Medicine	$ 3120		$ -20		$ -500		$ 2600
Milk Marketing	$ 9560				$ 0		$ 9560
Cattle Lease	$ 0				$ 0		$ 0
Other Lvstk Exp	$ 5190		$ -25		$ 400		$ 5565

(((((SCREEN 13 CONTINUED)))))) (PRESS [PGUP] TO GO TO SCREEN 13)

Expenses	Cash Amount Paid	+	Change In Inventory	+	Change In Accts Pay.	=	Total Expenses for Year
CROPS							
Fertilizer/Lime	$ 7710		$ 0		$ 2200		$ 9910
Seeds & Plants	$ 3250		$ 0		$ 800		$ 4050
Spray/Other Exp	$ 2640		$ 0		$ 600		$ 3240
REAL ESTATE							
Land/Bldg Repair	$ 6350				$ 0		$ 6350
Taxes	$ 3600				$ 0		$ 3600
Insurance	$ 2730				$ 0		$ 2730
Rent/Lease	$ 1200				$ 0		$ 1200
OTHER							
Telephone	$ 700				$ 0		$ 700
Electricity	$ 4200				$ 0		$ 4200
Interest Paid	$ 17000				$ 0		$ 17000
Miscellaneous	$ 2330		$ 0		$ 0		$ 2330
TOTAL	$ 133210		$ 208		$ 11000		$ 144418
Expansion Lvstk.	$ 9000				$ 0		$ 9000
NONFARM EXPENSE							
Personal Withdrawl	$ 17000						$ 17000

The final screen, Screen 14, contains the breakdown of crop expenses by crop. The total crop expense row at the bottom of the screen is displayed. These values were calculated from the crop expense data entered in Screen 13. The rows for hay crop and corn require data entered in them. The all other crops row is calculated as the residual so the column totals equal the crop expenses in Screen 13.

Screen 14.

Crop	*Fertilizer & Lime*	*Seeds & Plants*	*Spray, Other Crop Expenses*
	Enter dollar amounts, totals below should equal amounts in right column of Screen 13.		
Hay crop (silage & dry)	$ 3074	$ 1098	$ 690
Corn (silage & grain)	6125	2609	2480
All other crops	711	343	70
Total	$ 9910	$ 4050	$ 3240

Farm No. 38001 Screen #14

BREAKDOWN OF 1985 CROP EXPENSES BY CROP

Crop	Fertilizer & Lime	Seeds & Plants	Spray, Other Crop Expenses
	Enter dollar amounts, totals below should equal amounts in right column of screen 13A.		
Hay Crop (silage & dry)	$ 3074	$ 1098	$ 690
Corn (silage & grain)	$ 6125	$ 2609	$ 2480
All Other Crops	$ 711	$ 343	$ 70
TOTAL	$ 9910	$ 4050	$ 3240

VI. Verify the data.

We all make typing mistakes occasionally. The "Verify Record" option is an important step that will reduce the embarrassment of having a farmer tell you that you typed one of his figures incorrectly and printed out a "nonsense" summary for him. It is tempting to skip this step. The best advice is don't skip this step.

Use the ↓ cursor key to move down to "Verify Record" in the main menu and type ↵. You will be asked for the farm number. Type:

38001 ↵ (return/enter)

The program will go on to Screen 1. As you see, the information that was entered under the "Create/Update/Display Record" option is displayed. Re-enter the data for Screen 1.

If you were to incorrectly enter the Operator's name as "Simple Farmer", the following message would appear on the screen:

ENTRY DOES NOT MATCH PREVIOUS ENTRY

The program will give you this kind of message for up to three tries. On the fourth try, if it still does not match a previous entry, the following message will be displayed:

LAST ENTRY DIDN'T MATCH - ACCEPTED WITHOUT QUESTION

At this point you are on your own to see that the entry is correct.

In Screens 2 through 14, where the entries are numeric not character data, the value you are verifying will appear as a zero.

Re-enter the data for all the screens. The cursor movement and movement between screens is done the same as in the "Create/Update/Display Record" option.

When you have completed the verification process on Screen 14, the program will return to the main menu.

VII. Calculate and print farm summary.[9]

You are now ready to calculate and print a dairy farm business summary. Use the ↓ cursor key to move down to "Calculate and Print Farm Summary". You will be prompted for the farm number. Type:

38001 ↵ (return/enter)

The following will be displayed on the screen[10]:

BEGINNING CALCULATIONS

DFBS CALCULATION PROGRAM

ENTER DESIRED OUTPUT DEVICE; (S)creen, (P)rinter, (F)ile or (Q)uit

Select the appropriate output device:[11]

1. Type "S" to have the output be displayed on the screen. The output will scroll, so use [Control] - [num-lock][12] keys or the [Pause] key to stop the output from scrolling. Hit any key to continue scrolling.

2. Type "P" to have the output printed on your printer. You will be prompted for the number of copies to print. Before entering the number be sure to have your printer on and the paper set at the perforation. The program will advance the paper a couple of lines before starting to print.

3. Type "F" to have the calculated output stored on your disk. The file name will be made up of the farm number with a file extension of .prn (<farm no.>.prn). This file will be stored on the disk that you specified when you ran the "install" program.

4. Type "Q" to go back to the main menu.

After you select one of the above, you will again see the message to enter the desired output device. This allows you to review the output on the screen and then print if the output is satisfactory.

---

[9]See Appendix A for the procedure used to calculate costs of producing milk that are printed on page 9 of the following output.

[10]If you did not post previous year's data, the following messages will also be displayed:

1984 FILE DOES NOT EXIST - SETTING VALUES TO 0
1983 FILE DOES NOT EXIST - SETTING VALUES TO 0

[11]If there is an I/O error F3 during calculation, follow the instructions in Appendix B.

[12]Hold down the [ctrl] key and press the [num-lock] key.

NEW YORK COOPERATIVE EXTENSION
Prepared by
DEPARTMENT OF AGRICULTURAL ECONOMICS
CORNELL UNIVERSITY

Name _____

Address _____

_____

```
                    *****
                   *    *
                  *     *
                 *      *
            *********   *
           *            *
          *     NY      *
         *              *
          ***********   *
                     *  *
                   *******
                      ****
```

1985 DAIRY FARM BUSINESS SUMMARY

FARM NO. 38001 JANUARY 30, 1986

PROGRESS OF THE FARM BUSINESS

SELECTED FACTORS	1983	1984	1985
Size of Business			
Avg # of cows	65	67	77
Avg # of heifers	50	50	50
Milk sold, lbs.	910000	964800	1116500
Worker equiv.	2.75	2.75	2.75
Total tillable acres	260	260	260
Rates of Production			
Milk sold per cow,lbs.	14000	14400	14500
Hay DM per acre,tons	2.8	2.4	2.7
Corn silage per acre,tons	14	14	14
Labor Efficiency			
Cows per worker	24	24	28
Milk sold per worker,lbs.	330909	350836	406000
Cost Control			
Grain & conc. purch. as % milk sales	28%	29%	28%
Dairy feed & crop exp. per cwt. milk	$ 4.38	$ 4.17	$ 5.46
Labor and mach. costs per cow	$ 786	$ 868	$ 821
Capital Efficiency (average for year)			
Farm capital per cow	$ 5754	$ 5719	$ 5507
Real estate per cow	$ 2346	$ 2351	$ 2500
Machinery and equipment per cow	$ 1362	$ 1336	$ 1175
Capital turnover, years	2.4	2.8	2.3
Profitability			
Net farm income w/o apprec.	$ 1200	$ -6426	$ 18557
Net farm income w/ appreciation	$ 19315	$ -5881	$ 13602
Labor & management income	$ -11529	$ -19844	$ 2974
Rate return on equity capital w/apprec	-5.4%	-15.7%	-6.5%
Financial Summary			
Farm net worth	$ 224575	$ 238365	$ 278667
Debt to asset ratio	0.44	0.42	0.38
Farm debt per cow	$ 2603	$ 2583	$ 2212
Cash flow coverage ratio	1.06	1.14	1.22

PARTNERSHIP, ACCT. BOOK, DDP.*

2

FARM NO. 38001 JANUARY 30, 1986

INCOME STATEMENT

EXPENSES	Cash Amount paid +	Change in Inventory* +	Change in Accounts Payable** =	Accrual Expenses
Hired Labor	$ 5200		$ 0	$ 5200
Feed				
Dairy grain & conc.	37480	$ 250	6000	43730
Dairy roughage	0	0	0	0
Other livestock	0	0	0	0
Machinery				
Mach hire, rent/lease	2040		0	2040
Machinery repairs/parts	7430	-25	1500	8905
Auto expense (f.s.)	500		0	500
Fuel, oil & grease	6880	28	0	6908
Livestock				
Replacement livestock	1800		0	1800
Breeding	2300	0	0	2300
Veterinary & medicine	3120	-20	-500	2600
Milk marketing	9560		0	9560
Cattle lease/rent	0		0	0
Other livestock expense	5190	-25	400	5565
Crops				
Fertilizer & lime	7710	0	2200	9910
Seeds & plants	3250	0	800	4050
Spray, other crop exp.	2640	0	600	3240
Real Estate				
Land/bldg/fence repair	6350		0	6350
Taxes	3600		0	3600
Insurance	2730		0	2730
Rent & lease	1200		0	1200
Other				
Telephone (farm share)	700		0	700
Electricity (farm share)	4200		0	4200
Interest paid	17000		0	17000
Miscellaneous	2330	0	0	2330
TOTAL OPERATING	$ 133210	$ 208	$ 11000	$ 144418
Expansion livestock	$ 9000		$ 0	$ 9000
Machinery depreciation				$ 14280
Building depreciation				$ 6615
TOTAL ACCRUAL EXPENSES				$ 174313

*Net amount of purchased feed and supplies used out of inventory during the year. A decline in inventory results in a positive value that will increase expenses, an increase in inventory is a negative value that will decrease expenses.

**Unpaid items or services that were used or added to inventory during the year.

FARM NO. 38001 JANUARY 30, 1986

INCOME STATEMENT (continued)

RECEIPTS	Cash Receipts +	Change in Inventory* +	Change in Accounts Receivable =	Accrual Receipts
Milk sales	$ 151850		$ 1825	$ 153675
Dairy cattle	9540	$ 14000	-1000	22540
Dairy calves	1630		-300	1330
Other livestock	0	1600	0	1600
Crops	400	12485	0	12885
Gov't receipts	230		0	230
Custom machine work	250		0	250
Gas tax refund	160		0	160
Other	200		0	200
TOTAL ACCRUAL RECEIPTS	$ 164260	$ 28085	$ 525	$ 192870

*Change in livestock inventory excluding appreciation plus total change in grown feeds inventory.

PROFITABILITY ANALYSIS

	Without Apprec. +	Appreci-ation =	With Apprec.
RETURN TO OPERATOR(S) & FAMILY LABOR UNPAID, MGMT., & EQUITY CAPITAL:			
Total Accrual Receipts	$ 192870		$ 192870
		Livestock	-12500
		Machinery	5730
		Real Estate	1815
- Total Accrual Expenses	$ 174313		$ 174313
= NET FARM INCOME	$ 18557		$ 13602
RETURN TO OPERATOR(S) LABOR, MANAGEMENT & EQUITY CAPITAL:			
Net Farm Income	$ 18557		$ 13602
- Family Labor Unpaid @ $550/mo.	1650		1650
= RETURN TO OPERATOR'S LABOR, MANAGEMENT & EQUITY CAPITAL	$ 16907		$ 11952
RETURN TO OPERATOR'S LABOR & MGMT.:			
Return to Operator's Labor, Management & Equity Capital	$ 16907		
- Real Interest on $ 278667 Equity Capital @ 5%	13933		
= LABOR & MANAGEMENT INCOME	$ 2974		
LABOR & MANAGEMENT INCOME PER 2.00 OPERATOR/MANAGER	$ 1487		
RETURN TO EQUITY CAPITAL:			
Return to Operator's Labor, Management & Equity Capital	$ 16907		$ 11952
- Value of Operator's Labor & Management	30000		30000
= RETURN ON EQUITY CAPITAL	$ -13093		$ -18048
Rate of Return on Equity Capital	-4.7%		-6.5%

FARM NO. 38001 JANUARY 30, 1986

1985 BALANCE SHEET

FARM BUSINESS

ASSETS	Jan. 1	Dec. 31	LIABILITIES & NET WORTH	Jan. 1	Dec. 31
Current			Current		
Farm cash, chkg & savings	$ 13000	$ 1200	Accounts payable	$ 5500	$ 16500
Accts. rec.	12500	13025	Operating debt	16000	15000
Feed/supplies	35365	47642	Short term:		
				0	0
				0	0
Total	$ 60865	$ 61867	Total	$ 21500	$ 31500
Intermediate			Intermediate		
Dairy cows:					
owned	63000	64000	First Bank	18000	17000
leased	0	0	PCA	33000	30000
Heifers	35000	35500		0	0
Bulls/other lvstk.	0	1600		0	0
Mach/eq owned	90000	91000		0	0
Mach/eq leased	4817	3448	Financial lease (cattle/mach.)	4817	3448
Coop stock & cert.	3000	3200			
Total	$ 195817	$ 198748	Total	$ 55817	$ 50448
Long-Term			Long-Term		
Land/buildings:			1st Bank Mtg	36000	35000
owned	190000	195000	FLB	58000	60000
leased	0	0		0	0
Total	$ 190000	$ 195000		0	0
			Fin. lease (struc)	0	0
Total Farm Assets	$ 446682	$ 455615	Total	$ 94000	$ 95000
			Total Farm Liab.	$ 171317	$ 176948
			FARM NET WORTH	$ 275365	$ 278667

NONFARM

	Jan. 1	Dec. 31		Jan. 1	Dec. 31
Nonfarm Assets			Nonfarm Liab.	$ 0	$ 0
Pers cash, chkg. & savings	$ 1500	$ 1600			
Cash value of life ins	3000	3200			
Nonfarm RE	0	0			
Auto (pers sh)	2000	1500			
Stocks & Bonds	0	0			
Hshld. furn.	5000	5000			
All other	0	0			
Total Nonfarm	$ 11500	$ 11300	NONFARM NET WORTH	$ 11500	$ 11300

FARM & NONFARM

			Total Farm & Nonfarm Liab.	$ 171317	$ 176948
Total Farm & Nonfarm Assets	$ 458182	$ 466915	FARM & NONFARM NET WORTH	$ 286865	$ 289967

FARM NO. 38001 JANUARY 30, 1986

BALANCE SHEET ANALYSIS

Financial Ratios	Farm Business	Farm & Nonfarm
Percent equity	61%	62%
Debt to asset ratio		
Total	0.39	0.38
Long-term	0.49	
Intermediate/current	0.31	

Debt Analysis

Accounts payable as % of total debt	9%
Long-term liabilities as a % of total debt	54%
Current & intermediate liabilities as % of total debt	46%

Debt Levels

	Per Cow	Per Tillable Acre Owned
Total farm debt	$ 2212	$ 885
Long-term debt	1188	475
Intermediate/current	1024	410

Farm Capital

	Real Estate	Machinery & Equipment	Livestock	Feed & Supplies
Beginning of Year	$ 190000	$ 90000	$ 98000	$ 35365
Purchases	10300*	10800		
- Lost Capital	0			
- Sales	500	1250		
- Depreciation	6615	14280		
= Net Investment	3185	-4730	15600**	
Appreciation	1815	5730	-12500	
End of Year	$ 195000	$ 91000	$ 101100	$ 47642

* $ 0 Land + $ 10300 Building.

** See page 9, Dairy Inventory Analysis, for dairy cow and heifer inventory detail.

FARM NO. 38001 JANUARY 30, 1986

ANNUAL CASH FLOW STATEMENT

Cash Inflows		
Beginning farm cash, checking & savings	$ 13000	
Cash farm receipts	164260	
Sale of assets: Machinery	1250	
Real estate	3000	
Money borrowed (intermediate & long-term)	5500	
Money borrowed (short-term)	0	
Increase in operating debt	0	
Nonfarm income	4000	
Money borrowed - nonfarm	0	
TOTAL		$ 191010
Cash Outflows		
Cash farm expenses	$ 133210	
Capital purchases: Expansion livestock	9000	
Machinery	10800	
Real estate	10300	
Principal payments (intermediate & long-term)	8500	
Principal payments (short-term)	0	
Decrease in operating debt	1000	
Nonfarm debt payments	0	
Personal withdrawals & family expenditures	17000	
Ending farm cash, checking & savings	1200	
TOTAL		$ 191010
Imbalance (error)		$ 0

FARM NO. 38001 JANUARY 30, 1986

REPAYMENT ANALYSIS

Debt Payments	Planned for 1985*	Made in 1985	Planned for 1986
Long term	$ 10988	$ 10000	$ 10988
Intermediate term	12639	12100	12639
Short-term	0	0	0
Operating (net reduction)	4000	1000	4000
Accounts payable (net reduction)	1000	0	1000
Total	$ 28627	$ 23100	$ 28627
(% made of planned = 81%)			
Per cow	$ 372	$ 300	
Per cwt. 1985 milk	$ 3	$ 2	
Percent of total 1985 receipts	15%	12%	
Percent of 1985 milk receipts	19%	15%	

* If on Business Summary in 1984.

Cash Flow Coverage Ratio

Cash Farm Receipts	$ 164260	
- Cash Farm Expenses	133210	
+ Interest Paid	17000	
- Net Pers. Withdls from Farm**	13000	
(A) = Amount Available for Debt Service		$ 35050
(B) = Debt Payments Planned for 1985		$ 28627
(A / B) Cash Flow Coverage Ratio for 1985		1.22

** Personal withdrawals & family expenditures less nonfarm income.

FARM NO. 38001 JANUARY 30, 1986

CROPPING PROGRAM ANALYSIS

Land	Owned	Rented	Total
Tillable	200	60	260
Nontillable	30	10	40
Other nontillable	160	5	165
Total	390	75	465

Crop Yields	Acres	Total Production	Production Per Acre
Dry hay		128 Tons DM	
Hay crop silage		192 Tons DM	
Total Hay Crop Production	120	320 Tons DM	2.67 Tons DM
Corn silage	70	980 Tons	14.00 Tons
		343 Tons DM	4.90 Tons DM
Other forage	10	16 Tons DM	1.60 Tons DM
Total Forage	200	679 Tons DM	3.40 Tons DM
Corn grain	35	3300 Bushels	94.29 Bushels
Oats	10	560 Bushels	56.00 Bushels
Wheat	0	0 Bushels	0.00 Bushels
Other crops	0		
Tillable pasture	15		
Idle tillable land	0		
Total tillable acres	260		

Crop Related Accrual Expenses

		Hay Crop		Corn		
Crops	Total/ Till. Acre	Per Acre	Per Ton DM	Per Acre	Per Ton Corn Sil. Equiv.*	Other Crops Per Acre
Fert. & lime	$ 38.12	$ 25.62	$ 9.61	$ 58.33	$ 3.97	$ 35.55
Seeds & plants	15.58	9.15	3.43	24.85	1.69	17.15
Spray/other crop expense	12.46	5.75	2.16	23.62	1.61	3.50
Total Crop	$ 66.15	$ 40.52	$ 15.19	$ 106.80	$ 7.28	$ 56.20

Machinery	Total Expenses	Per Tillable Acre
Fuel, oil & grease	$ 6908	$ 26.57
Machinery repair & parts	8905	34.25
Machine hire, rent & lease	2040	7.85
Auto expense (farm share)	500	1.92
Interest (5%)	4525	17.40
Depreciation	14280	54.92
Total Machinery	$ 37158	$ 142.92

*Corn grain converted to silage equivalent using 5.88 bushels = 1 ton silage as fed.

Crop/Cow Factors

Total Tillable Acres per Cow	3.38
Total Forage Acres per Cow	2.60
Harvested Forage Dry Matter per Cow	8.82

FARM NO. 38001 JANUARY 30, 1986

DAIRY ANALYSIS

Dairy Inventory	Dairy Cows Number	Dairy Cows Value	Heifers Number	Heifers Value
Beginning of Year	70	$ 63000	50	$ 35000
+ Change in Inventory (without appreciation)		9000		5000
+ Appreciation		-8000		-4500
= End of Year	80	$ 64000	40	$ 35500
Total End (incl. leased)	80			
Average Number	77		50	

Milk Production

Total milk sold	1116500 lbs.
Milk sold per cow	14500 lbs.
Average milk plant test	3.40 % butterfat

Accrual Receipts From Dairy	Total	Per Cow	Per Cwt.
Milk	$ 153675	$ 1996	$ 13.76
Dairy cattle (including culls)	22540	293	2.02
Dairy calves	1330	17	0.12
Total	$ 177545	$ 2306	$ 15.90

Accrual Cost of Producing Milk - Whole Farm Method

Operating cost of producing milk	$ 105223	$ 1367	$ 9.42
Total cost of producing milk excluding operator's labor, management & capital	136768	1776	12.25
Total cost of producing milk	180701	2347	16.18

Dairy Related Accrual Expenses

Purchased dairy grain & concentrates	$ 43730	$ 568	$ 3.92
Purchased dairy roughage	0	0	0.00
Total Purchased Dairy Feed	43730	568	3.92
Purchased grain & concentrates as % of milk receipts	28%		
Purchased feed & crop exp.	$ 60930	$ 791	$ 5.46
Purchased feed & crop exp. as % of milk receipts	40%		
Breeding	$ 2300	$ 30	$ 0.21
Veterinary & medicine	2600	34	0.23
Milk marketing	9560	124	0.86
Cattle lease	0	0	0.00
Other livestock expense	$ 5565	$ 72	$ 0.50

D.H.I, PIPELINE, STANCHION.

FARM NO. 38001 JANUARY 30, 1986

CAPITAL & LABOR EFFICIENCY ANALYSIS

Capital Efficiency (Average for Year)

	Per Worker	Per Cow	Per Tillable Acre	Per Tillable Acre Owned
Farm capital	$ 154201	$ 5507	$ 1631	$ 2120
Real estate		2500		963
Machinery & equip.	32909	1175	348	

Capital Turnover, years 2.26

Labor Force	Months	Age	Years of Education	Value of Labor & Mgmt.
Operator number 1	12	51	14	$ 15000
Operator number 2	12	28	16	$ 15000
Family paid	6			
Family unpaid	3			
Hired	0			
Total	33 / 12 =	2.75 Worker Equivalent		
		2.00 Operator/Manager Equivalent		

Labor Efficiency

	Total	Per Worker
Cows, average no.	77	28
Milk sold, lbs.	1116500	406000
Tillable acres	260	95
Work units	808	294

Labor Cost	Total	Per Cow	Per Till Acre
Value of Operator(s) Labor ($800/month)	$ 19200	$ 249	$ 73.85
Family unpaid ($550/month)	1650	21	6.35
Hired	5200	68	20.00
Total Labor	$ 26050	$ 338	$ 100.19
Machinery Cost	$ 37158	$ 483	$ 142.92
Total Labor & Machinery Costs	$ 63208	$ 821	$ 243.11

FARM NO. 38001 JANUARY 30, 1986

ANNUAL CASH FLOW WORKSHEET

Item	Receipt or Expense Total	Per Cow	Expected Change	1986 Projection
Average Number of Cows	77			_____
ACCRUAL OPERATING RECEIPTS				
Milk	$ 153675	$1995.78	_____	$_____
Dairy cattle	22540	292.73	_____	_____
Dairy calves	1330	17.27	_____	_____
Other livestock	1600	20.78	_____	_____
Crops	12885	167.34	_____	_____
Miscellaneous receipts	840	10.91	_____	_____
Total	$ 192870	$2504.81	_____	$_____
ACCRUAL OPERATING EXPENSES				
Hired labor	$ 5200	$ 67.53	_____	$_____
Dairy grain & concentrate	43730	567.92	_____	_____
Dairy roughage	0	0.00	_____	_____
Other livestock feed	0	0.00	_____	_____
Machine hire/rent/lease	2040	26.49	_____	_____
Mach.repair/parts & auto	9405	122.14	_____	_____
Fuel, oil & grease	6908	89.71	_____	_____
Replacement livestock	1800	23.38	_____	_____
Breeding	2300	29.87	_____	_____
Veterinary & medicine	2600	33.77	_____	_____
Milk marketing	9560	124.16	_____	_____
Cattle lease	0	0.00	_____	_____
Other livestock expense	5565	72.27	_____	_____
Fertilizer & lime	9910	128.70	_____	_____
Seeds & plants	4050	52.60	_____	_____
Spray/other crop expense	3240	42.08	_____	_____
Land, bldg., fence repair	6350	82.47	_____	_____
Taxes	3600	46.75	_____	_____
Insurance	2730	35.45	_____	_____
Real estate rent/lease	1200	15.58	_____	_____
Utilities	4900	63.64	_____	_____
Miscellaneous	2330	30.26	_____	_____
Total Less Interest Paid	$ 127418	$1654.78	_____	$_____
NET ACCRUAL OPERATING INCOME				
(w/o interest paid)	$ 65452	$ 850.03		$_____
- Change in lvstk/crop inv	28085	364.74	_____	_____
- Change in accounts rec.	525	6.82	_____	_____
+ Change in feed/supply inv	208	2.70	_____	_____
+ Change in accts. Payable	11000	142.86	_____	_____
NET CASH FLOW	$ 48050	$ 624.03		$_____
- Personal withdrawals & family expenditures	17000	220.78	_____	_____
Available for Debt Payments, Investments & Savings	$ 31050	$ 403.25		$_____
- Farm Debt Payments	23100	300.00	_____	_____
Available for Investment & Savings	$ 7950	$ 103.25		$_____
- Capital Purchases; Cattle, Machinery & Improvements	30100	390.91	_____	_____
Additional Capital Needed				$_____

MACHINERY & EQUIPMENT INVENTORY
FEED AND SUPPLY INVENTORY
2.Feed & supply inventory increase > 25%.
LIVESTOCK INVENTORY
3.End of year heifer inventory at beginning prices > beginning of year inventory but no increase in heifer numbers.
REAL ESTATE INVENTORY
LIVESTOCK & BUSINESS DESCRIPTION
LABOR
LAND INVENTORY AND CROPS
ASSETS AND LIABILITIES
FINANCIAL LEASES
RECEIPTS
EXPENSES
11.Total cost of producing milk is < $10 or > $16/cwt.,= $ 16.18.
CROP EXPENSE BREAKDOWN
MANAGEMENT PERFORMANCE MEASURES
*.Rate return on equity capital w/o appreciation = -4.7.
*.Rate return on equity capital w/appreciation = -6.5.
*.Cash flow coverage ratio < .8 or > 1.2, = 1.22.
OTHER
Farm coded irregular.

VIII. Check the diagnostics page.

The last page of the summary is a diagnostic page, a listing of data items that fall outside of "normal" ranges for that item. These unusual items may indicate data entry errors or simply unusual farm situations. Look over the diagnostics page. Refer to the section at the back of this manual entitled, "Hints for Interpreting and Using Dairy Farm Business Summary Diagnostics". Initial each item and write an explanation as necessary on one copy. Send this copy to Cornell along with the diskette and check-in form to indicate that the record is correct. This will save everyone time and telephone calls spent verifying and correcting farm records.

IX. Update a record.

Select the "Create/Update/Display Record" option on the main menu to update a farm record. After entering the farm number, the program will take you to Screen 1. If no updates are to be made on Screen 1, press the [Esc] key to display the message:

[PgDn] or [RETURN] - next, [PgUp] - previous screen, [Esc] to exit, or # of Screen.

Enter the number of the screen where a change needs to be made. Use the cursor keys to move to the appropriate value and retype the new value over the old one. Important: If totals or calculated values appear on the screen, be sure to press return or use the ↓ arrow key to move through the calculated items so they will be recalculated.

You may now move to another screen to make more changes in data or return to the main menu.

X. Display a record.

To display a record, select "Create/Update/Display Record" on the main menu. Move to any screen by entering the screen number as described in the previous section.

XI. Delete a record.

To delete a farm record, select "Delete Record" on the main menu. You will be prompted for a farm number. Enter the number of the farm you want deleted. The current year's data file (<farm no.>.85) will be erased.

XII. Help

Select the "Help" option on the main menu. A brief description of each option on the main menu will be displayed.

XIII. Quit

To leave the Micro DFBS program, select "Quit" on the main menu. You will then be at the DOS prompt (C>). For a two-floppy disk system, you will be prompted to insert the DOS diskette in drive A. You can restart Micro DFBS by typing 'dfbs'.

XIV. Make two backup copies of the data diskette.

Remove the DFBS program diskette from drive A and insert a blank, formatted diskette. To review the data files on your data diskette, type:

DIR B:↵
(Or DIR C:↵ if the data is on the hard disk and you are still in the 'dfbs' directory.)

You should see a list of data files as shown below.

```
C:\dfbs>dir c:

 Volume in drive C is MACHINE #13
 Directory of  C:\dfbs

.              <DIR>        1-07-86  11:39a
..             <DIR>        1-07-86  11:39a
38001     83       5486  12-20-84  12:26a
38001     840       310  12-20-86  12:38a
38001     830       250  12-20-86  12:38a
38001     84       5486  12-10-85  12:37a
38001     85       5486  12-20-86   1:04a
        7 File(s)    1327104 bytes free
```

The 1985 farm record files entered in 1986 will have file extensions of .85. The sample farm is file 38001.85. Its print file has a file extension .prn. It is less important to backup print files than record files because the print file can be easily recreated from the record file using "calculate and print farm summary". If you wish to save the print files, it is recommended you save them on a separate disk.

To make backup copies of the farm record files from drive B to the blank, formatted diskette in drive A, type:

COPY B:*.85 A:↵
(Or COPY *.85 A: if the data is on the hard disk.)

Do this twice.

One backup diskette is now ready to be shipped to Cornell, along with a copy of the printout and initialed diagnostics page. Keep the other diskette as your backup. This completes the operation of Micro DFBS.

DFBS ERROR MESSAGES

Run Time Error 02 PCXXXX[13] - Caused by an attempt to divide by zero. Check input to assure that all information is correct. If problem persists, call the authors for help.

Run Time Error FØ PCXXXX - Caused by program attempting to locate and not finding the program file Calc.ØØØ. Check the program disk to see if the file is present. If the file is not present, copy the file from a backup disk to the program disk.

I/O Error Ø1 PCXXXX - Caused by an attempt to open a file that the program cannot find; i.e., a data file that is not on the disk. Check to make sure the file exists and that you are using the proper disk drive.

I/Ø Error FØ PCXXXX - Disk full error. Too many files on the data disk. See the next section "What to do When the Diskette Gets Full".

I/O Error F3 PCXXXX - Too many files open. See Appendix B.

All of the above errors will cause the program to terminate and will bring the user back to the operating system. After checking and correcting the cause of the problem, the program may be run as usual.

COMMON PROBLEMS:

Message	Interpretation	Solution
Program won't recognize a farm record file	File extension (year, example .85) must be one less than the year you entered when you turned the computer on or typed "DATE"	Rename the file, changing the file extension. See your DOS manual, RENAME command
Disk error on drive A (or B or C)	Diskette not inserted, door not closed, bad diskette	Insert diskette Close door Try again or copy files from other drive. Replace diskette.
	Drive out of alignment	Service disk drive
CAN'T OPEN FILE!! or other cycling - keyboard won't respond	Cannot locate a file	Check file name. Use DIR command to check disk to see if file exists.

If the program locks up, the user can exit by pressing the Ctrl and C keys at the same time or, if that fails, by turning the computer off.

Please notify the authors (607-256-2299) of any problems.

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[13] "XXXX" will be replaced by a number. Make note of this number. It is useful information to the programmer if there is a persistent problem.

WHAT TO DO WHEN THE DISKETTE GETS FULL

A diskette formatted in DOS 2.1 holds about 360K of data. The "Create/Update/Display Record" option creates a data file for each farm which is about 6K in size. The "Post Previous Year's Data" option requires two previous year's data files and creates two output files totaling 13K. "Calculate and Print Farm Summary" creates a second file (the one with the .prn extension) which is 33K, so it takes a total of 52K for each farm if you post previous year's data, enter new data and calculate each summary in turn. The data diskette should then hold 360/52, or about seven farm records if you save the print files, and about 18 farm records if you do not. If you do wish to save the print files (<farm no.>.prn), it is recommended you save them on a separate disk.

When you fill up the diskette, you will get a message telling you to change diskettes. This may happen when you use "Create/Update/Display Record", but more likely at "Calculate and Print Farm Summary".

When this happens, you will need to use the DOS command COPY to copy the current and previous years' farm record files to another diskette. For example, to copy the record files for farm 38001 to a new diskette, remove the DFBS program diskette from drive A and insert a blank, formatted diskette. Then type:

```
COPY B:38001.* A:↵
```

Then remove the original data diskette from drive B and move the new one from A to B.

HINTS FOR INTERPRETING AND USING DAIRY FARM BUSINESS SUMMARY DIAGNOSTICS

The last page(s) of a farm business summary printout are the "diagnostics". Diagnostics serve the purpose of alerting the person editing the record to possible data problems. Diagnostic statements are generated when data is missing, inconsistent or outside a "normal" expected range. Each diagnostic statement should be carefully scrutinized to help insure that the data is accurate. One should not rely on the diagnostics to "catch" data entry or data acquisition errors. Accurate original collection and entry of data are the best methods.

Page No. of
Check-In Form

MACHINERY AND EQUIPMENT INVENTORY

1. "Machinery owned but no machinery depreciation."

   Check to see if machinery depreciation was collected on the check-in form (Screen 2) and not entered or if an entry error is present. Machinery could be rented from a partner in the business with the market value being reported, but not the depreciation. In situations where machinery is rented from a partner, it is preferable to enter machinery inventory values and depreciation for business analysis purposes. However, check to make certain machinery rental payments have been removed as a cash expense, but that debt payments on machinery remain.

1. "Machinery depreciation = n% of beginning inventory plus new machinery." (When n < 5% or n > 20%)

   Depreciation reported is probably too low or too high (Screen 2). Check to be certain that building and/or cattle depreciation has not been included as a machinery entry. Low depreciation values are expected when the average age of machinery is high (greater than 10 years) and little if any new machinery was purchased. High depreciation values are expected when the average age of machinery is low (less than five years) and relatively large purchases of new machinery occurred in recent years.

1. "Machinery appreciation exceeds depreciation."

   Check to see if depreciation is within the expected range, but is not correct (Screen 2). Low depreciation often results in appreciation that is unrealistically high. In "normal" years of low to moderate inflation, machinery appreciation is expected to be less than machinery depreciation.

1. "Machinery appreciation = -$n." [When n <(-)10% of beginning machinery inventory]

   Reported machinery market values fell more than was accounted for by depreciation (Screen 2). While this is possible, especially in periods of "soft" machinery markets, the decrease was more than 10% of beginning machinery inventory. Check to see if all values, especially depreciation, are correct.

FEED AND SUPPLIES

2. "Feed and supply inventory increase > 25%."

Feed and supply inventory increased beyond what would "normally" be expected (Screen 3). Check to see if physical quantities and/or prices increased from beginning to end of year.

2. "Feed and supply inventory decrease > 25%."

Feed and supply inventory decreased beyond what would normally be expected (Screen 3). Check to see if physical quantities and/or prices decreased from beginning to end of year.

LIVESTOCK INVENTORY

3. "End of year heifer inventory at beginning prices > beginning of year inventory but no increase in heifer numbers."

Two possible explanations exist:

(1) An increase in the quality of heifers has occurred.

(2) The average age of youngstock from beginning of year to end of year has increased and thereby value per head increased.

Check to be certain one or both of the above actually occurred (Screen 4).

3. "End of year heifer inventory at beginning prices < beginning of year inventory, but no decrease in livestock numbers."

Again, two possible explanations exist:

(1) A decrease in the quality of heifers has occurred.

(2) The average age of youngstock from beginning to end of year has decreased and thereby value per head decreased.

Check to be certain one or both of the above actually occurred (Screen 4).

3. "Change in cow values/head >$100, change = $_____."

The upward or downward movement in dairy cow market prices was greater than $100 per head. Check to see if this actually occurred as a result of:

(1) An increase or decrease in quality of animals.

(2) A change in market conditions from beginning to end of year.

Check to be certain one or both of the above occurred (Screen 4). If the beginning of year values taken from last year's end of year inventory were incorrect, make the change in beginning of year values so as to accurately reflect the market at the beginning of the year being analyzed.

3. "Number of leased dairy cows > 0 but cattle lease expense = $0."

An inconsistency may exist. Check to see if cattle were leased (Screen 4) and if lease payments were entered correctly (Screens 11 and 13). Cows may in fact be rented from others or boarded for others. In this situation, do not report cows as leased, but enter the rental expense on Screen 13 and total average numbers, including rentals, on Screen 6.

3. "Livestock appreciation is < $0, = $_____."

Livestock values fell from beginning to end of year (Screen 4). Check to make certain this occurred.

3. "Livestock appreciation > change in inventory, = $_____."

The majority of the increase in total livestock inventory resulted from price increases and not growth or quality improvement of the herd (Screen 4). Check to see if this is accurate.

3. "Expansion livestock expense > $0 but no increase in dairy cow numbers."

An inconsistency exists. If herd size did not increase from beginning to end of year, cattle purchases were not for increase of herd size. Cattle purchases should be entered under "Replacement Livestock" on Screen 13.

An exception to the above is the purchase of youngstock/bred heifers in anticipation of a herd size increase. If this is the situation, disregard the diagnostic.

3. "Dairy cow numbers decreased _____ and dairy cattle sales < $400/head."

The revenue from dairy cattle sales is divided by the number of cows by which herd size decreased and this diagnostic is printed if the result is less than $400 per head.

Did dairy cow numbers decrease (Screen 4) and, if so, were the prices received for cull cows low or did a higher proportion of cows die, or was the sales revenue not accurately reported (Screen 13)? Check the accuracy of input data.

3. "Dairy cow end year inventory at beginning prices > beginning year inventory but no increase in dairy cow numbers."

Quality of cows increased from beginning to end of year (Screen 3). Check to see if this is accurate.

3. "Dairy cow end year inventory at beginning prices < beginning year inventory but no decrease in dairy cow numbers."

Quality of cows decreased from beginning to end of year (Screen 3). Check to see if this is accurate.

REAL ESTATE INVENTORY

3. "Real estate appreciation > 0.05 of beginning + value added or < 0."

Real estate appreciation is greater than expected in "normal" circumstances or is negative (Screen 5). Real estate values may have not been changed for several years and this year's change reflects more than one year's increase. If this occurred, change the beginning of year value to accurately reflect beginning of year value.

3. "Lost capital > 0.50 of real estate purchased = _____."

Lost capital is greater than "normally" expected (Screen 5). Small capital improvements may not add to the market value of the property and, therefore, lost capital could be equal to the total cost.

3. "Land and building inventory > $30,000 but no land is owned."

Implies ownership of buildings, but no land (Screens 5 and 7). Check to see if this is accurate. The operator could rent or lease a farm, but own improvements or real estate consistent with the terms of the contract. If the farm is a partnership or corporation, check to determine if assets are recorded consistent with expenses.

3. "Land is owned but no land and building inventory value."

If land is owned, a market value was not entered (Screen 4). Land owned may have incorrectly been entered. The above stated possibilities should also be explored.

3. "Building depreciation ≥ 4% of beginning real estate."

Building depreciation is greater than "normally" expected (Screen 4). Check to see if machinery and equipment or livestock depreciation was incorrectly included. Large investments in new buildings may justify depreciation in excess of four percent.

3. "Real estate inventory value added < $0."

Lost capital exceeds the value added from new real estate purchases (Screen 5). At worst, this should be $0. Check to be certain data entry is correct.

LIVESTOCK AND BUSINESS DESCRIPTION

5. "Number of bulls and other livestock inconsistent with livestock inventory." (When number = 0 and inventory > 0, or number > 0 and inventory = 0)

Data entered on Screens 4 and 6 are inconsistent with respect to other livestock. Check data collected and entered for accuracy.

5. "Milk per cow = n pounds." (When n <8,000 or n >18,000)

Pounds milk sold per cow is outside the "normal" range. Check to see if average cow numbers and pounds of milk sold (Screen 6) are entered correctly. Check butterfat content to see if a non-Holstein herd is being analyzed.

5. "Milk per worker = n pounds." (When n < 200,000 or n > 700,000)

Milk sold per worker is outside the "normal" range. Check to see if months of labor (Screen 7) and milk sold (Screen 6) are entered correctly.

5. "Average number of dairy cows at least 25% more than total at end, owned and leased."

Implies a significant reduction in herd size from beginning to end of year which occurred close to year end (Screens 4 and 6). Check to see if this is correct.

5. "Average number of dairy cows at least 25% less than total at end, owned and leased."

Implies a significant increase in herd size from beginning to end of year which occurred close to year end (Screens 4 and 6). Check to see if this is correct.

5. "Average number of heifers out of range of beginning and end inventory."

The average number of heifers (Screen 6) is not within the range of number of heifers, beginning and end of year (Screen 4). It is possible if a large number of heifers were purchased and entered the herd before year end. Check to be sure data entries are correct.

5. "Invalid business description."

One or more of the coded business descriptions (Screen 6) are out of acceptable range. Check data entry.

LABOR

5. "Single proprietorship but operators labor = n months." (When n > 12)

Single proprietorship category was checked on Screen 6, but more than one operator was recorded on Screen 7. A single proprietor in the majority of instances would have only one operator, the other should be reported as family unpaid. An exception to this would be when a second person is significantly involved in the day-to-day management of the business, then this person would be entered as Operator #2.

5. "Hired labor expense but no hired labor."

Hired labor expense was recorded on Screen 13 but no months of hired labor were recorded on Screen 7. Check to be certain these

two entries are consistent. Example: labor hired off farm to repair a roof should be reported as land, building, and fence repair, not as hired labor. If the farm is a partnership or corporation, check the labor inventory against business organization for consistency.

5. "Hired labor but no hired labor expense."

Hired labor months were recorded on Screen 7 but no expense on Screen 13. These two entries should be consistent. Example: Hired labor was paid with milk, beef or other farm products. Add the value of the products to receipts (Screen 12) and then count it as an expense (Screen 13). If the farm is a partnership or corporation, check the labor inventory against business organization for consistency.

5. "Partnership or corporation but operator labor is ≤ 12 months."

Partnership or corporation operator labor input is "normally" expected to be greater than 12 months. Check to see if labor input (Screen 7) is correct.

LAND AND CROPS

5. "Land is rented but rental expense = $0."

Land is rented (Screen 7) but real estate rent/lease is $0 (Screen 13). Check to see if this is correct. Example: If land rent is paid with a portion of crop, report that value as a crop sale and as a rent payment.

5. "There are less than two tillable acres per cow."

Land is very limited. Check to see if feed purchases (Screen 13) reflect low levels of farm grown feeds. Check to see if all owned and rented land has been omitted (Screen 7).

5. "Hay crop yield is < 2 or > 4 tons DM per acre. Yield is _____."

Hay crop yield is outside the "normal" range. Check to see if a large number of acres of new seeding were established, poor weather or good weather existed. Also check acres in hay for accuracy (Screen 8).

5. "Corn silage yield is < 2.5 or > 7 tons DM per acre. Yield is _____."

Corn silage yield is outside "normal" range. Check to see if the dry matter coefficient and conversion are correct (Screen 8). Check acres of corn silage (Screen 8) and determine if some acres were not harvested. Check calculation of quantity harvested.

5. "Corn grain yield is < 50 or > 120 bushels per acre. Yield is _____."

Corn grain yield is outside "normal" range. Check to see if moisture conversion and/or bushel conversions were done correctly

(Screen 8). Check acres in corn grain and repeat calculations of quantity harvested.

5. "Oat yield is < 20 or > 80 bushels per acre. Yield is _____."

Oat yield is outside the "normal" range. Check to see if oat acreage was reported under grain and production under forage if harvested as oatlage (Screen 8).

5. "Tons DM harvested per cow < 4 or > 12 = _____."

Tons of dry matter harvested is outside "normal" range. Check dry matter harvested calculations, cow numbers, and feed purchases for consistency.

5. "Tillable land, all acres, does not equal total tillable acres."

Calculations on Screen 7 and Screen 8 are not correct/consistent. Review the data entries for accuracy and recheck your math.

ASSETS AND LIABILITIES

7. "Scheduled debt payments > 0.35 of milk sales = _____%."

Scheduled debt payments are 10 percentage points above the average (Screens 10 and 12). Check milk sales and debt payment schedule for accuracy.

7. "Long-term debt > 0.80 of land and building inventory."

Long-term debt is higher than "normally" expected. Check to see if data is entered correctly (Screen 10). Falling asset values may have contributed to creation of this situation as well as increased borrowing.

7. "Farm net worth < 0.30 of farm capital. NW = _____."

Farm net worth is lower than normal (Screen 10). Check all calculations for accuracy. Falling asset values and increased borrowing may have contributed.

7. "Debt per cow > $3,500 = $_____."

Debt per cow is above average. Check for accuracy of data (Screens 6 and 10).

7. "Accounts receivable < 5% of milk sales."

The December milk check may not have been included as an account receivable (Screen 12). Check to see if all accounts have been included.

7. "Intermediate term debt > total farm inventory less real estate."

Intermediate term debt is high and, in fact, greater than intermediate term assets (Screens 9 and 10). Check to see if this is correct.

7. "Long-term planned payments > long term debt."

Long-term planned payments being greater than long-term debt would be expected to occur only in the last year of the payment schedule. Check all entries for accuracy (Screen 10).

7. "Intermediate term planned payments > intermediate term debt."

Intermediate term planned payments greater than intermediate term debt would be expected to occur only in the last year of the payment schedule. Check all entries for accuracy (Screen 10).

7. "Short-term planned payments > 120% of short-term debt."

Short-term planned payments are higher than expected. Check for accuracy of entries (Screen 10).

7. "Planned reduction of operating debt > operating debt."

This is a definite inconsistency. The reduction in operating debt cannot be greater than the end of year balance (Screen 10). Check to see if interest is included.

7. "Planned reduction of accounts payable > accounts payable."

This is a definite inconsistency. The reduction in accounts payable cannot be greater than the end of year balance (Screen 10). Check to make certain interest and penalties have not been included.

7. "Liability > 0 but no scheduled payment, liability = $_____."

Liabilities are greater than $0 but scheduled debt payments are $0, indicates that the payments were inadvertently omitted or, in fact, that no payments are scheduled (Screen 10). Check to make certain the data is accurate.

7. "Decrease in _____ liability from beginning to end year does not equal principal paid."

If no new money was borrowed, the decrease in the liability amount from beginning to end year should equal the amount of principal paid during the year. Check to make certain the data is accurate (Screen 10).

FINANCIAL LEASES

8. "Leases cattle but no lease expense."

Cattle are leased (Screen 11) but lease expense is $0 (Screen 13). Check to be certain cattle lease is not included with machinery or real estate lease and the cattle are in fact leased, not rented.

8. "Leases equipment but no lease expense."

Equipment is leased (Screen 11), but lease expense is $0 (Screen 13). Check to see if cattle or real estate lease includes equipment (Screen 13) and if equipment is in fact leased.

8. "Leases structures but no lease expense."

Structures are leased (Screen 11), but lease expense is $0 (Screen 13). Check to see if cattle or real estate lease includes equipment (Screen 13) and if equipment is in fact leased.

EXPENSES

11. "Wages < $400 or > $1,200. Wages = $_____ per month."

Wages per month for family paid and hired labor are outside the normal range. Determine if months of labor recorded (Screen 7) and labor expense (Screen 13) are accurate.

11. "Owns farm real estate but pays no taxes."

Farm real estate is owned (Screen 5) but taxes are not reported (Screen 13). Check to see if taxes were paid but not reported, paid by a third party or not paid during the year.

11. "Farm liabilities > $0 but no interest expense, liabilities = $_____."

Farm liabilities exist (Screen 10), but no interest expense reported (Screen 13). Check to see if special circumstances exist or if interest was in fact not paid during the year.

11. "Interest expense on page 11 does not equal interest payments on page 7."

The total farm liability interest (Screen 10) does not equal total interest expense (Screen 13). Check to see if data was collected and entered correctly. These two totals must be identical.

11. "Cattle lease expense > $0, but no lease information."

Cattle lease expense is reported (Screen 13), but lease information is missing (Screen 11). Record the information on Screen 13 once the existence of an actual lease has been verified.

11. "Owns farm real estate but pays no insurance."

Farm real estate is owned (Screen 5) but no insurance expense is reported (Screen 13). Check to see if insurance expense was omitted or is included in other categories. Make certain real estate is owned.

11. "Personal withdrawals and family expenditures < nonfarm income."

This indicates that the nonfarm income could be subsidizing the farm business and, therefore, the Net Personal Withdrawals from Farm on page 7 of the Business Summary will be negative. Check to be certain this is accurate.

7 & 11 "Total change in accounts payable entered as expense does not equal change in accounts payable entered as liability."

The total change in accounts payable on Screen 10 does not equal the total accounts payable change on Screen 13. There must be a data acquisition or data entry problem.

11. "Operating cost of producing milk is < $8 or > $12/cwt., = $_____."

The operating cost of producing milk is outside the "normally" expected range. Check all operating expenses and nondairy receipts for accuracy (Screens 12 and 13) as well as total pounds of milk sold (Screen 6).

11. "Total cost of producing milk is < $10 or > $16/cwt., = $_____."

The total cost of producing milk is outside the "normal" range. Check all expenses and nondairy receipts, plus interest on equity capital and value of operator's labor and management and unpaid family labor for accuracy (Screens 12, 13, and 7). Also check the total pounds of milk sold for accuracy (Screen 6).

RECEIPTS

9. "Government payments, other receipts or miscellaneous receipts > $5,000."

Government payments, other receipts or miscellaneous receipts are greater than normally expected. Verify that the entry is correct (Screen 12) and that other categories are not more appropriate.

9. "Milk price < $11 or > $15. Price = $_____ per cwt."

Milk price is outside the "normal" range. Check to see if pounds of milk sold are under-reported (Screen 6), milk sales (gross) is over-reported (Screen 12) or a Jersey herd is being summarized (Screen 6).

9. "Tillable crop acres per cow > 4, but $0 crop sales."

Tillable crop acres per cow are high (Screen 7) but not crop sales are reported (Screen 12). Check to see if crop yields are low (Screen 8) or inventories of feed and supplies increased (Screen 3).

9. "No dairy cattle sales."

This statement indicates that dairy cattle sales on Screen 12 is blank. Check to see if this was overlooked when gathering data or not entered in the computer.

9. "No dairy calf sales."

This statement indicates that dairy calf sales on Screen 12 is blank. Check to see if this was overlooked when gathering data,

not entered in the computer or if in fact all calves were either raised or died and, therefore, no sales existed.

6 & 9 "Total change in accounts receivable entered as a receipt does not equal change in accounts receivable entered as an asset."

This indicates a problem in calculation or data entry as these two totals should be equal.

MANAGEMENT PERFORMANCE MEASURES

12 & 13 "Net farm income w/o appreciation = $n." (When n < $10,000 or > $50,000)

Net farm income without appreciation is outside the "normally" expected range. Review receipts and expenses especially accounts payable and receivable, depreciation, and inventory changes for accuracy.

12 & 13 "Net farm income w/appreciation = $n." (When n < $10,000 or >$50,000)

Net farm income with appreciation is outside the "normally" expected range. Review receipts and expenses especially livestock, machinery, and real estate appreciation for accuracy.

12 & 13 "Labor and management income per operator < $0 or > $30,000 = $_____."

Labor and management income is outside "normally" expected range. Review the cash receipts and cash expenses (Screens 12 and 13) and especially inventory adjustments and/or depreciation for real estate, machinery and equipment, livestock, and feed and supplies.

12 & 13 "Return to operator's labor, management, and equity capital < $10,000 or > $50,000."

Return to operator's labor, management, and equity capital is outside the "normally" expected range. Check all receipts and expenses, plus the unpaid family labor for accuracy.

12 & 13 "Grain and concentrate as % milk unusually low or high. Value is n%." (When n < 10% or > 40%)

Feed purchases as a percent of milk sales is outside the normally expected range. Check feed purchases (Screen 11) for accuracy, check to see if crop yields are high and/or a large number of crop acres per cow exists.

12 & 13 "Rate of return on equity capital w/o appreciation = n%." (When n ≤ 0% or > 10%)

This indicates a rate of return without appreciation outside the "normally" expected range. Check expenses and receipts as well as assets and liabilities for accuracy.

10, 12 & 13 "Cash flow imbalance (error) is > 1% of total cash inflows."

The cash flow imbalance is greater than can be accepted. Check the family withdrawals and family expenditures calculations for accuracy; remember income and social security taxes are considered personal withdrawals and family expenditures. Check principal payments as well as new borrowings for accuracy. Also consider gifts and inheritances as possible sources of discrepancy.

7. "Debt to asset ratio < 0.3, = _____."

Debt to asset ratio is very low. Check asset values and liabilities for accuracy.

10, 12 & 13 "Cash flow coverage ratio < 0.8 or > 1.2."

Cash flow coverage ratio is outside "normal" range. Check receipt and expense items as debt payments made for accuracy.

CROP EXPENSES

13. "Sum of fertilizer and lime expenses for hay crop and corn is > farm total for all crops."

The allocation of expenses among crops is not accurate (Screen 14). Check the allocations.

13. "Sum of seed and plant expenses for hay crop and corn is > farm total for all crops."

The allocation of expenses among crops is not accurate (Screen 14). Check the allocation.

13. "Sum of spray and other expenses for hay crop and corn is > farm total for all crops."

The allocation of expenses among crops is not accurate (Screen 14). Check the allocations.

13. "Total crop expenses per acre of hay crop is > $150 or < $50, = $_____."

The total crop expense per acre of hay is outside the "normally" expected range (Screen 14). Check the allocation of expenses to hay and compare with yields to see if a deviation is justified. Also check acreage for accuracy.

13. "Total crop expense per acre of corn is > $150 or < $50 = $____."

The total crop expense per acre of corn is outside the "normally" expected range (Screen 14). Check the allocation of expenses to corn and compare with yields to see if a deviation is justified. Also check acreage for accuracy.

13. "Total crop expenses per acre of other crops is > $150 or < $25, = $_____."

This is a difficult statement to check. First, determine what

crop or crops comprise "other" and then check the allocations of expenses and acreages.

OTHER

"Farm coded irregular" - A farm is coded irregular when data is incomplete, missing or judged to be inaccurate.

"Farm coded DDP participant" - The farm is a participant in the Dairy Diversion Program.

APPENDIX A

PROCEDURES FOR CALCULATING COST OF PRODUCING MILK -
1985 DAIRY FARM BUSINESS SUMMARY

		Example[a]
Total Accrual Operating Expenses		$144,418
Less: Total Accrual Receipts	$192,870	
Less Accrual Milk sales	-153,675	
Accrual Receipts Less Milk Sales		- 39,195
Operating Cost of Producing Milk[b]		$105,223
Total Accrual Expenses		$174,313
Family Labor Unpaid		+ 1,650
Accrual Receipts Less Milk Sales		- 39,195
Total Cost of Producing Milk Excluding Operator's Labor, Management & Capital[c]		$136,768
Total Accrual Expenses		$174,313
Family Labor Unpaid		+ 1,650
Value of Operator's Labor & Management		+ 30,000
Real Interest on Equity Capital		+ 13,933
Accrual Receipts Less Milk Sales		- 39,195
Total Cost of Producing Milk[d]		$180,701

a/Same example as in Section VII of this publication.

b/Considering only operating costs, this measure shows how you are doing on cost control in "operating" the business. If milk receipts are less than this measure, the farm has serious milk production profitability troubles which must be corrected immediately if the business is to survive.

c/Considering all costs except the opportunity cost of operator's labor, management, and equity capital, this measure after being subtracted from milk receipts will show the return from milk production to the above mentioned factors of production. If milk receipts are less than this measure of cost of producing milk, the business has milk production profitability difficulties. If the operating cost of producing milk is less than milk sales, but this measure is more than milk sales, the farm business is contributing to but not totally covering fixed costs. This situation must be corrected for long-run business survival.

d/Considering all costs of producing milk, including the opportunity cost of operator provided inputs, this measure is the best indicator of long-run business survival. On many farms, the total cost of producing milk will be less than milk sales. This does not imply the business is doomed. If milk sales are greater than the previously discussed two measures of cost of milk production, but less than the total cost of producing milk, the business is not returning the total opportunity cost of operator provided inputs. For long-run business survival, farms should strive for milk sales to meet or exceed this cost of producing milk.

APPENDIX B

CREATION OF A CONFIG.SYS FILE

In order for the program to work properly, a CONFIG.SYS file must exist in the root directory of a hard disk or on the MSDOS or PCDOS boot diskette of a floppy based system. To see if such a file exists, use the DIR command to get a directory of the existing files in the root directory.

For example, on a hard disk you would type:

DIR C:\CONFIG.SYS and press return.

If the file exists, it will be listed on the screen, if the file is not present a message "FILE NOT FOUND" will be displayed.

Existing files will need to be edited. This can be done by using the EDLIN command. To use this command, type:

EDLIN CONFIG.SYS and press return

and the following message will be displayed if the file is found:

```
End of input file
*
```

To get a listing of the file, type 1 and press return. The contents of the file will now be displayed:

```
*
      1:*FILES - 10
      2: BUFFERS - 10
*
```

What is displayed on your screen will be similar to the above example.

You will need to edit the line that contains the FILES statement. In the example above, line 1 contains the statement. To edit the line type:

1 and press return.

The following will then display:

```
*1
      1:*FILES - 10
      1:*
```

Enter new information on the blank line directly below the statement. You will now type:

FILES - 16 and press return.

The prompt will reappear. Type:

E and press return.

You will then return to the operating system prompt.

If the file does not exist on your disk, one has been supplied for you on the program diskette. Simply copy the file onto your boot diskette or into the root directory of the hard disk.

Once you have completed either of the steps outlined above, you will need to reboot the computer.