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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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		<u>Page</u>
INTRODUCTIO	N	1
HARDWARE RE	QUIREMENTS	1
GETTING STA	RTED	1
I.	Copy previous year's data to current year's file location	2
11.	Start the program	2
111.	Final startup instructions - the INSTALL program	5
IV.	Post previous year's data	6
v.	Enter the input data	7
VI.	Verify the data	28
VII.	Calculate and print farm summary	29
VIII.	Check the diagnostics page	42
IX.	Update a record	42
х.	Display a record	42
XI.	Delete a record	42
XII.	Help	42
XIII.	Quit	42
XIV.	Make two backup copies of the data diskette	43
DFBS ERROR	MESSAGES	44
WHAT TO DO	WHEN THE DISKETTE GETS FULL	45
HINTS FOR I DIAGNOSTI	NTERPRETING AND USING DAIRY FARM BUSINESS SUMMARY	46
APPENDIX A		59
APPENDIX B		63

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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 IBMcompatible 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 ll 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 <u>DOS</u> 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.>.830), 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:*.830 ↔

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.

<u>Important</u> - 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. <u>Two floppy disk drives</u> (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 disk², 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 ←

C:+

(The symbol \leftarrow stands for a carriage return.)

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

³If 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 \$p\$g 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>.

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

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

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:≁J

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.

<u>Note</u>: 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

AGRICULTURAL ECONOMICS	
CORNELL UNIVERBITY	
[] Create/Update/Display Record [] Calculate and Print Farm Summar [] Verify Record [] Run Install Program [] Help [] Quit	ry

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 (\dagger or \downarrow) 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 \emptyset 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 \emptyset 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 $a \setminus or$ 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

.

⁴The 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

Туре ⊣

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. Enter the input data.

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.

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

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

MAIN MENU WITH FARM NUMBER PROMPT

COOPERATIVE EXTENSION	DATE	: 1/13/1986 / / /
Prepared by DEPARTMENT OF AGRICULTURAL ECONOMICS CORNELL UNIVERSITY Dairy Farm Business Summary		_/ NEW YORK
[] Post Previous Year's Data [] Create/Update/Display Record [] Verify Record [] []	[] [] [] Help Quit	Delete Record Calculate and Print Farm Summary Run Install Program

ENTER FARM NO

<u>Important</u> - 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 \leftarrow^{j} (return/enter) key, you can correct the error by using the backspace key, delete key or the \leftarrow key to erase the error, and type the correct entry. If you type \leftarrow^{j} before noticing the error, you can move back to the incorrect entry by using the \dagger 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 RDI Box 19		
Dairytown, NY 19876	For Cornell Use Only	Screen 1.
Phone no. 607-256-2299	Proc. number <u>38001</u>	Year 1985
	(🌱 complete, ()entered, ()ready

Type the farm number:

لم 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 checkin 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 name⁷, so enter $\leftarrow 1$ (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

 Farm No.
 38001

 Farm Name

 Dperator's Name

 Address

 City

 State

 County

 Regular []
 Irregular []
 DDP []

¹Determine 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 \uparrow 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:

- ↓ (return/enter). Keep pressing return until the cursor goes off the screen and you get the message below.
- 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	INF	ORMA	TION
FRAN	1 1 N L	winnin	1 4 0014

ſ				Verified	נא ז
	Farm No	38001			
	Farm Name	Sam Hill			
l	Operator's Name .	Sample Farmer			
l	Address	RD1 Box 19			
ŀ	City	Dairytown			
l	State	NY			
l	Zip	19876-			
l	County	ROCKLAND			
l	Phone	(607)256-2299			
	Regular []	Irregular	[×]	DDP []	
I			· .		

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

Move to Screen 2 by typing:

 \leftarrow 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 🛊	O
Machinery & Equipment Purchased Machinery & Equipment Sold	+ \$ - \$	0 0		
1985 Tax Depreciation	- \$	o		
Total Beginning Inventory After	Changes		• 9	00000
Machinery Appreciation (end less	s beginning a	fter chang	es) \$ -9	10000

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 \leftarrow^{\perp} (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 \leftarrow^{\perp} 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]

					8
				Screen 2.	
MACHINERY & EQUIPMENT INVENTORY &	DEPRECIATION (C	io not incl	lude leased	items)	
Beginning of Year Inventory	\$ 90,000	End of Ye	ar Invento	ry \$ 91,000	
Machinery & Equipment Purchased	+ 10,800				
Machinery & Equipment Sold	- 1250-				
1985 Tax Depreciation*	- 14,280 -				
Total Beginning Inventory After C	hanges			\$ 85,270	*
Machinery Appreciation (end less	beginning after	changes)		\$ 5,730	
			*********		5 6
arm No. 38001 MACHINERY AND E	QUIPMENT INVE	NTORN ANI	DEPRECIA	Scree TION	m #2
Machinery & Equipment Inve	ntory Beginni	ng \$ 900	000 Er	ad # 91000	
Machinery & Equipment Purc	hased	+ + 108	100		
Machinery & Equipment Sold		- \$- 12	250		
1985 Tax Depreciation		- 148	2 8 0		
Total Beginning Inventory	After Changes			\$ 85 270 *	÷
Machinery Appreciation (en	d less beginn	ing after	changes)	\$ 5730 [¥]	t

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 (4) key or \leftarrow (return/enter) to skip zero entries.

		Total	Total	
FEED & SUPPLY INVEN	<u>TORY</u>		: · · In	Screen 3.
Total Grown Feeds		\$ <u>3150</u> 0	\$ <u>43,98</u> 5	\$12,485
<u>PURCHASED FEEDS</u> : Dairy grain & conc. Dairy roughage Other lvatk. feed	20.7 = 170/1-	\$ <u>3400</u>	.18.T. ±1.75/7-\$ <u>3150</u>	
SUPPLIES: Machine: Parts Fuel, oil, grease Livestock: Semen Vet. supplies Other supplies Crops: Fartilizer Seeds Pesticidas Other:	1,999-1. 1,559-1.	\$ <u>200</u> _//S 		\$ -25 25 25
Total Food & Supplie	98	835365	<u>\$47,642</u>	

Farm No. 38001	FEED & SUPPLY IN	VENTORY	Screen #3
Feed & Supply Inventory	Beg-Year	End Year	Inventory Change
Total Brown Feeds	\$ 31500	43985	12485
Purchased Feeds:			
Dairy Grain & Conc.	3400	\$ 3150	250
Dairy Roughage	♦ Ŭ	6 0	• 0
Other Lystk. Feed	\$ Ŭ	♦ Û	♦ Ŭ
Suppliesi			
Machine: Parts	\$ 200	• 225	• -25
Fuel, Gil, Grease	\$ 115	\$ 87	
Livestocki Semen		6 0	• 0
Vet. Supplies	50	\$ 70	• -20
Other Supplies	100	125	♦ -25
Crops: Fertilizer	6 0	♦ Ŭ	• 0
Seeds	• 0	● 0	• ° 0
Pesticides	♦ 0	\$ Ŭ	
Others	\$Ú	♦ Ŭ	€ Ŭ
Total Feed & Supplies	• 35365	 47642 	

⁸There 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.

						End of	Year Inveni	ory Usin	<u>g:</u>	
	Beg. o	f Year I	nyeni	ory	1	Beg. Yea	ir Prices End Ye		ar Prices	
	No.	ş per Head	TC V	ilue	No.	ş per <u>Head</u>	Total Valua	ş per <u>Head</u>	Total Velue	
airy Cows:										
	20	\$ 900	\$ 6	3000	80	\$ 900	\$ <u>72000</u>	\$ 800	\$64,000	
	-									
Total Dairy Cows	<u>70</u>		\$63	000	80		\$72,000		\$64,0 0 0	
leifers:							·			
.Bred Heiters	10	\$ 1000	\$10	000	20	\$1000	\$20,000	\$ 900.	\$18000	
Open . Year lings	20	750	15	000	<u>20</u>	750	15,000	650	13,000	
	20	500	10	2000	10	500	5,000	450	4,500	
Total Heifers	50		\$ 3.9	5,000	50		\$40000		\$3550	
Bulls & Other Lystk.:				,			r			
Dairy Steers	0	\$	\$	0	4	\$ 400	\$ 1600	\$ 400	\$ 1600	
		•••••				• • • • •		•••••		
Livestock	<u>.</u> .		\$.			\$1.60.0		\$ 1604	
Total Livestock			\$ 99	000			\$113600		\$ <i>]0[</i>]Q	

Farm No. 38001 LIVESTOCK I					RY		Scree	∌n #4
Leased Dairy Cows	End Y	r. 1	0		End of '	Year Inve	ntory Us	sing:
	Begin	ning of	Year		Beg. P	rices	End Pr	rices
	No.	\$ per Head	Total Value	No.	\$ per Head	Total Value	\$ per Head	Total Value
Dairy Cows:	70	\$ 900	\$ 63000	80	\$ 900	\$ 72000	\$ 800	\$ 64000
Total Dairy Cows	0 70	0	0 63000	0 80	0	0 72000	0	0 64000
Heifers:	10	1000	10000	20	1000	20000	9 00	18000
	20 20	750	15000	20	750 500	15000 5000	650 450	13000 4500
Total Heifers	50		35000	50		40000		35500
Bulls/Other Lystk	0	0	0	4	400	1600	400	1600
Total Bulle &	0	0	0	0	0	0	0	Û
Other Livestock	0		Ő	4		1600		1600
L 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.

<u>REAL ESTATE INVENTORY BALANCE</u> Land & Building Market Value: Beginning \$ <u>/90000</u> New Real Estate:*	Screen 5. End \$ <u>/95,000</u>
Land \$ + bldg. \$ <u>/0,300</u> = \$./0,300. Less lost capital*0	
- Value added + 10,300 Depreciation: from 1985 income tax** - 6615 Real estate sold: Amount received \$ <u>3000</u>	
Beginning of year value - <u>500</u> Total Beginning Value After Changes Real Estate Appreciation (end less beginning after change	\$193,185. •) \$

**Inc	lude	depre	ciation	on l	ouildings	in	ACRS	5-year	class	88	well	88	10	and	15-year	clesses
and	l non-,	ACRS (deprecia	ation	n from 19	85.										

arm No. 380	001 RI	EAL ESTATE	INVENTORY			80	ereen #5
Land and	Building Market	Value	Beginning #	190000		End	\$ 195000
New Real	Estate:						
Land \$	ΰ + Bldg.	10300	= \$ 103	00			
	Less	Lost Capit	al - •	0			
			= Value	Added	+ \$	10300	
Deprec	iation: From 198	5 Incom e Ta	BX		- \$	6615	
Rea	l e state sold:	Amount Re	aceived \$	3000			
		Beginning	g of Year Va	alue	- \$	500	
T. R	otal Beginning V eal Estate Appre	alue After ciation (e)	Changes nd less begi	inning -	after	changes)	<pre>\$ 193185 \$ 1815</pre>

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 \leftarrow^{\perp} (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.

<u>LIVESTOCK & BUSINESS DESCRI</u> Livestock	<u>PTION</u> Avg. No. <u>For Year</u>	Production 	Milking System	Screen 6. <u>Business Type</u>
Dairy cows (owned, rented & leased) Heifers (dairy) Bulls Other: Dairy, Steers4 (type) (#head)	<u>77</u> <u>50</u> [<u>8</u>]	<u>\(1)D.H.I.</u> (2)O.S. DHI# <u>/2345</u> (3)Other (4)None	(1)Bucket & carry (2)Dumping station (3)Pipeline (4)Herringbone par. (5)Other parlor	(1)Single prop. (2)Partnership (3)Corporation (4)Other
lbs. milk wold <u>///6,500</u> Avg. milk plant test <u>3.4</u>	<u>D</u> 	airy Housing (1)Stanchion (2)Freestall (3)Other	Financial Recordkeepi (1)CAHIS (2)Acct. Book (3)Agrifax (mail-in	ng System (4)On-Farm Computer only)(5)Other

Farm No. 38001

LIVESTOCK and BUSINESS DESCRIPTION

Screen #6

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	12345		
Others	8 w	i. u.		
Milk Production		Dairy Housing	Financial Records	ceeping System
milk sold (1b)	1116500	1 STANCHION	2 ACCT. BOOK	
Average Milk Pl 3.40% B.F.	ant Test			

	Work units per
	nead of 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	
Нау	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

Table 1. Work Units For Livestock and Crops

*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 Operator - 1 - 2 - 3 - 4 - 5 - 6 Family (paid employees) Family (unpaid) Hired (regular & seasonal Total	Full-Time Months /2 	Age Xeers Educ. ≤1 14 ▲8 16 — — — — — — — — — — — — — — — — — — — — — — — — — — — — — —	<u>Value of Management & Labor</u> \$ <u></u>
L <u>AND INVENTORY</u> Tillable land Pasture (nontillable) Woods & other nontillable Total	Acres Owned 200 30 /40 .390.	Acres Rente 	d <u>All Acres</u> - 2-60 40 165

Farm No. 38001

LABOR and LAND INVENTORY

Screen #7

.

LABOR INVENTORY Ful	1-Time Month	ns Age '	lears Educ.	Value of I	ngmt & labor
Operator - 1	12	51	14	\$15	000
- 2	12	28	16	\$150	000
- 3	0	0	0		0
- 4	0	0	0	•	0
- 5	0	0	0	\$	0
- 6	0	0	Ò	*	0
Family (paid emp.)	6				
Family (unpaid emp.)	3				
Hired (reg & seasonal	0				
Total	33	/ 12)	· 2.75	Worker Equ	ivalent
LAND INVENTORY	Acres	s Owned	Acres R	ented	All Acres
Tillable land	20	00	60		260
Pasture (nontillable)		30	10	•	40
Woods & other nontill	lable 16	50	5	i i i i i i i i i i i i i i i i i i i	165
Total	39	90	75	i	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 (ist cut only)	Total Production (all cuttings) Co	Dry Matter afficient***	Screen 8. Total Tons Dry Matter
Hay Crop (1st cut acres only)	120	********	*****	XXXXXXXXX
Hay	XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX	150 tons	,85	128
Hay crop silage	XXXXXXXXXXXXX	480 tons	.4	192
Corn silage	70	980 tons	,35	343
Other forage harvested	10	40 tone	.4	16
Corn for grain**	35	3300 dry sh. bu.	Tot, th DM	679
Oats	10	560 dry bu.		
Wheat		dry bu.		
Other:		/ Jw.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

TILLABLE LAND USE

Screen #8

	Acres (1st cut)	Total Produ (all cutti	ction ngs)	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	98 0	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	Ú	Ú	рц.		
Other	o	0	w.u.		
Tillable Pasture	15				
Idle Till. Acres	Ŭ				
Total Till. Acres	260				

and a second second

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.
AS	SETS	
	January 1, 1985	<u>December 31, 1985</u>
Total Farm Inventory	\$413,365	<u>\$ 434,742</u>
Other Farm Assets:	•	
Farm cash, checking, & savings	13,000	1200
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	\$	\$ 1600
Cash value life insurance	3000	3200
Nonfarm real estate	O	
Personal share auto	2000	1500
Stocks & bonds	O	
Household furnishings	5000	5000
Other	0	0
Total Nonfarm Assets	\$ 11,500	\$
TOTAL ASSETS (not including leases)	\$.453,365	\$463,467.

Farm No. 38001

FARM FAMILY FINANCIAL SITUATION--ASSETS

Screen #9

99999999999999999999999999999999999999	January 1, 1985	December 31, 1985
Total Farm Inventory Other Assets:	413365	\$ 434742
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	\$ 50 00
Öther	• 0	• 0
Total Nonfarm Assets	\$ 11500	\$ 113 00
TOTAL ABSETS	\$ 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. Ιf 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.

LIABILIT	(ES			<i>L</i>	EBT PAY	Ments*	Scr	een 10.
Creditor (The first 12 characters will be		Dec 31	Actual 198	5 Pymts,	Planne Beg.'86	d 1986) Amt.	Peyment S	Chedule Total
used as input.)	<u>1985</u>	1985	Principal	Interest	Rate	Pymts	Year_	Payment.
Long Term Debt (10 yea	rs & over	-)						
1st Bank Mta.	\$36000	\$ 35000	\$ 1000	\$ 3000	9.5	\$.32.6	* 12	\$3920
FLB	\$ 58000	\$ 60.000	\$ 2000	\$ 4000	11.	\$ 589	* 1.2	\$ 7068
	\$	\$	\$	\$		\$	x	\$
	\$	\$	\$	\$	_	\$	x	\$
Intermediate Term Deb (over 1 yr., under 10	t yrs.)							
First Bank	\$ 18,000	\$ 17000	\$ 2500	\$2100	121	\$378	x 17	\$453
PCA	\$ 33000	\$ 30000	\$ 3000	\$ 4500	14.	\$4.75	x 1.2	\$ 8100
·····	\$	\$	\$	\$	*	\$	x	\$
	\$	\$	\$	\$	•	\$	×	\$
	\$	\$	\$	\$	•	\$	x	\$
						happonde		annanan
Short Term Debt (1 yr	. or less \$)** \$	 s	s		\$	×	s
	s	\$	s	s		\$	×	* \$
Operating Debt***	\$ 16,000	\$ 15000	· ·	\$ 3000	net re in ope	duction erating	planned debt:	\$ <u>4000</u>
Accounts Payable****	\$ 5,500	\$ 16500		\$ 400	net re in acc	duction counts p	planned ayable:	\$1000
Total Farm Liab./Pymt	\$\$166,500	\$173,500.	\$ 8,500	\$ 17000	Total	Farm Lo	an Pymts	\$ 2862
Nonfarm Lieb./Pymts	\$_0_	\$ <u>`o</u> _	\$_0_	\$ 0	Total	Nonfara	n Pymts	s <u>o</u>
TOTAL LIAB./PYMTS (not including leases	\$ 166,5.0 0	\$173,500	\$.8,5.00	\$17, 00<u>0</u>0	Total	Payment		\$ 28,62

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.

arm No. 38001		LIABIL	ITIE	S & PLANN	ED	DEBT PA	YMI	ENT S	CHEDUL	E	Scree	m #10
Li	abil	ities:						Del	ot Pay	menti		
		Amo	unt		A	ctual P	ym	nts	Plann	ed Pay	yment	Sched.
	Jan	uary 1, 1985	Dec	ember 31, 1985	Pr	incipal		Int.	Beg. Int.	1986 Rate	т	otal
*Long Terms 1st Bank Mtg FLB	\$ \$ \$ \$	36000 58000 0 0	\$ \$ \$ \$	35000 60000 0 0	* * *	1000 2000 0 0	\$ \$ \$ \$	3000 4000 0 0	9. 11. 0.	50% 00% 00% 00%	\$ \$ \$	39 20 70 68 0 0
*Intermediate: First Bank PCA	\$ \$ \$ \$ \$	18000 33000 0 0 0	\$ \$ \$ \$	17000 30000 0 0 0 0		2500 3000 0 0 0	****	2100 4500 0 0 0	12. 14. 0. 0.	00% 00% 00% 00%	\$ \$ \$ \$	4539 8100 0 0

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

•

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

· ······

Li	abil	ities	1					De	ebt Pag	ymenti		
	Amount							Mnt s	Plan	ned Pay	ment	Sched.
L	anua 19	ry 1, 95	Dec	ember 31, 1985	Pr	incipal		Int.	Beg. Int.	1986 Rate		Total
#Short Termi					1		* •					
		0		0		0	- \$	0	0.	00%	\$	o
		0	- \$	O		Ó		0	(o.	00%	\$	0
+Operating Deb	t								.Net	Reducti	on F	lanned
		16000		15000				3000	Oper.	Debt		4000
#Accounts Pava	bles				1				Net	Reducti	onf	lanned
	\$	5500	\$	16500			\$	400	Accts	Payabl		1000
*Total Farm Li	ab. /	Pymts			l				. Tota	1 Farm	Loar	
	\$ 1	66500		173500		8500	\$	17000		Payment		28627
#Nonfarm Liab.	/Pvm	t 18 z			1				. Tota	1 Nonfa	irna -	
		0		0		0	\$	0		Pavment		0
	YMTS	• • • • •			Γ.					·		
	\$ 1	66500	\$	173500		8500	•	17000	TOTA	L PYMTE	3 \$	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.

				Ser	een 11.
Leased item	Amount of each payment	No. of payments in 1985	Total 1985 expense	No. of payments/ full year	No. of payments remaining
Cartle:	\$		\$		
Equipment: Tractor	\$_170	Total 12	\$.20.4.0		24
		Total	\$ 20.40**		
Structures:	\$	Total	\$*		

Ú

Ó

\$ \$

*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 FINANCIAL LEASES Total 1985 No. of Payments/ No. of No. of Payments in 1985 Payments Amount of Leased Item Each Pymt Expense Full Year Remaining Cattle \$ Ó Ô \$ Ô Ó Ô \$ 0 \$ Ó 0 \$ Ó 0 \$ 0 Ô Total \$ 0 170 12 2040 Equipment \$ \$ 12 \$ 0 Ô \$ 0 Ø \$ Ó Ô \$ \$ Ő 0 Total 2040 Structures \$ 0 0 \$ \$ 0 0

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Total

Screen #11

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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	1 12.
Receipts	Cash Receipts +	Change in Inventory*	Change in Accounts + <u>Receivable**</u>	Accrual Receipte
HIIK 116500 1bs.	\$ <u>151,850</u>	*****	\$ 1825	\$153675
Dairy Cattle	9,540	\$ 14,000	-1,000	22,540
Dairy Calves	1630	****	- 300	1330
Other Livestock		1,600	ang a di panangang mga pang mga nang nang nang nang nang nang na	1,600
Crops	400	12,485		12,885
Government Receipts	230	****		230
Custom Machine Work	250	xx xxxxxx		250
Gas Tax Refunds Ocher: Pat., Refunds s. 200.	160	*****		
\$				
Total Other	200	*****	Minute programme and an and an	200
TOTAL ACCRUAL RECEIPTS	\$ 164,260	\$ 28,085	\$ 525	\$ 192, 870
Nonfarm Cash Receipte	•	*		
Nonferm Income	\$ 4000	*****	******	\$ 4000

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	8 230			0	230
Cust Mach Work	\$ 250			\$ O	\$ 250
Gas Tax Refunds	\$ 160			\$ 0	160
Other	• 200		1 x	• 0	\$ 200
TOTAL	\$ 164260		\$ 28085	\$ 525	• 192870
NONFARM CASH RECPT	8				
Nonfarm Income	\$ 4000				\$ 4000

AN THE CONTRACTOR OF THE DESCRIPTION OF THE

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.			Sc:	reen 13.
Expenses	Cash Amount paid	Change in Inventory	Change in + Accounts Payable* =	Accrual Expenses
Hirad Labor	\$ 5200	\$xxxxxxxx	\$	\$ 5200
<u>Feed</u> Dairy grain & concentrate Dairy roughage Other livestock feed	37,480 0 0	250	6000	4.3.7.3.0.
<u>Machinery</u> Machine hire, rent & lease Machinery repairs & parts Auto expense (farm share) Fuel, oil & grease	2040 7,430 500 6,880	******** - <u>2 5</u> ******** 2 8	1500	2040 8,205 500 .6,108
<u>Livestock</u> Replacement livestock Breeding Veterinery & medicine Milk marketing Cattle lease/rent Other livestock expense	1,800 1300 3120 9,560 5,190	××××××××××××××××××××××××××××××××××××××	-500	. J,800 .2,300 .2,600 .9,560 .9,560
<u>Crops</u> Fertilizer & lime Seeds & plants Spray, other crop expense	7710 3250 2640		2200	9910 4050
<u>Real Estate</u> Land, building, fence repair Taxes Insurance Rent & lease	6350 3600 2730 7200	****** ******* ******** *******		. 6350 . 36AQ . 2730 . 2730
<u>Other</u> Telephone (farm share) Electricity (farm share) Interest paid Miscellaneous	700 4,200 17,000 2,330	*******		700 4200 17000
TOTAL ACCRUAL EXPENSES Expansion livestock	\$ <u>33210</u> \$ <u>9000</u>	\$ <u></u> 208 xxxxxxxx	\$ //000	\$ 9,000
<u>Nonfarm Cash Expenses</u> Personal withdrawals & family expenditures**	\$ <u>/7,000</u>	******	*****	\$ 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	C	ESC)	то	60	то	SCREEN	13	A)	Screen	#13
	SUMMARY	OF YEARS	EXPENSES	8	CHAN	IGES	IN	11	VENTORY	8	ACCOUNTS	PAYABLE	

Expenses	Ca Amo	sh unt Paid	Chan + Inve	ge In ntory	Char + Accts	nge In 5 Payable	= (Accrual Expenses
Hired Labor	*	5200			\$	0	\$	5200
FEED								
Dairy Grain/Conc		37480	*	250	\$	6000		43730
Dairy Roughage		0	\$	0	\$	0	*	0
Other Lystk Feed		0	\$	0	\$	0	\$	O
MACHINERY								
Mach Hire/Rent/Ls	5 \$	2040			\$	0		2040
Mach repair/parts	\$ \$	7430	\$	-25	\$	1500	\$	8905
Auto Expense		500			\$	0	\$	500
Fuel Dil & Grease		6880		28	\$	0		6908
LIVESTOCK								
Replacement Lyst	€ \$	1800			\$	0		1800
Breeding		2300	\$	0	*	0	\$	2300
Vet & Medicine		3120	\$	-50	\$	-500	\$	2600
Milk Marketing	\$	9560			\$	o	\$	9560
Cattle Lease	\$	0				0		0
Other Lystk Exp	\$	5190	\$	-25	\$	400	*	5565

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

. .

Expenses	C Am	ash ount Paid +	C 1	Cha (nv	inge rento	In ry	+	C F	hai	nge In :s Pay.	ך ¢	ot a fo	il Expenses or Year
CROPS													
Fertilizer/Lime	- \$	7710		\$		0			۰.	2200		\$	9910
Seeds & Plants	- \$	3250		\$		0			\$	800		\$	4050
Spray/Other Exp		2640		\$		Ŭ			\$	600		\$	3240
REAL ESTATE													
Land/Bldg Repair	\$	6350							\$	0		*	6350
Тахев	- \$	3600							\$	O		\$	3600
Insurance	\$	2730							. ۲	0		*	2730
Rent/Lease	- \$	1200							\$	0		\$	1200
OTHER													
Telephone	- \$	700							\$	0		\$	700
Electricity	- \$	4200							\$	0		\$	4200
Interest Paid	- \$	17000							\$	o		\$	17000
Miscellaneous	- \$	2330		\$		0			\$	0		\$	2330
TOTAL	₿ <u>1</u>	33210	\$		208			\$	1 :	1000		144	418
Expansion Lystk. NDNFARM EXPENSE	\$	9000							\$	o		\$	900 0
Personal Withdraw	1 \$	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 doller amo equal amounts in	ounts, totals be n right column e	low should of Screen 13.
Nay crop (silage & dry)	\$ 3074	\$ 1098	\$ 690
Corn (silage & grain)	6125	2609	2480
All other crops	711		
Total	\$ 9916	\$ 4050	+3 <u>240</u>

Farm No. 38001

Screen #14

BREAKDOWN OF 1985 CROP EXPENSES BY CROP

Crop	Fer	rtilizær Limæ	5# & P1	eds ants	Spra) Crop	/, Other Expenses
Er An	ntær nount	dollar amo s in right	u nts, tot column c	als below of screen	should a 13A.	equa l
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 <u>don't skip this step</u>.

Use the 4 cursor key to move down to "Verify Record" in the main menu and type \leftarrow^{j} . 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. <u>Calculate and print farm summary</u>.9

You are now ready to calculate and print a dairy farm business summary. Use the 4 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.

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

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

¹⁰If 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

 $^{^{11} {\}rm If}$ there is an I/O error F3 during calculation, follow the instructions in Appendix B.

NEW YORK COOPERATIVE EXTENSION

Prepared by
*

DEPARTMENT OF AGRICULTURAL ECONOMICS
*

CORNELL UNIVERSITY
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Name
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Address
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Address
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1985 DAIRY FARM BUSINESS SUMMARY

FARM NO. 38001 PROCEESS OF THE 1	FADM 1	TICTNECC	JA	NUARY 30	,]	L986
PROGRESS OF THE	rann I	DUSTRESS				
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	2	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 sa	les	288		298		28%
Dairy feed & crop exp. per cwt. m	ilk \$	4.38	\$	4.17	\$	5.46
Labor and mach. costs per cow	\$	786	\$	868	\$	821
Capital Efficiency (average for year	r)					
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	\$	1 9 315	\$	-5881	\$	13602
Labor & management income	\$	-11529	\$	-19844	\$	2974
Rate return on equity capital w/ap	pprec	-5.48		-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.*						

31 2

INCOME STATEMENT

						Cha	nge in		
		Cash	Cl	nang a in		Acc	ounts		Accrual
EXPENSES	Amo	ount paid +	I	nventory*	+	Pay	able**	*	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	1	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	3	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					Ō		4200
Interest paid	•	17000					Ō		17000
Miscellaneous		2330		0			0		2330
TOTAL OPERATING	\$	133210	\$	208		\$	11000	Ş	\$ 144418
Expansion livestock	\$	9000				\$	0	Ś	\$ 9000
Machinery depreciation								Ś	\$ 14280
Building depreciation								Ś	6615
TOTAL ACCRUAL EXPENSI	ES							Ş	\$ 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

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the year.

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JANUARY 30, 1986

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THUL NOT JOOVI						0141011		/ 1/00
	INCOME	ST	ATE	MENT (conti	nue	1)		
					Ch	ange in T		
	Cash		Ch	ange in	A	ccounts		Accrual
RECEIPTS	Receipts	+	In	ventory* +	Re	ceivable	æ	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.

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

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1985 BALANCE SHEET

_		LIABILITIES & NET	WURTH	Dec. 03
an. 1	Dec. 31		Jan, I	Dec. 31
		Current		
	•	Accounts payable	\$ 5500	\$ 16500
13000	\$ 1200	Operating debt	16000	15000
12500	13025	Short term:		_
35365	47642		0	0
60865	\$ 61867	Total	\$ 21500	\$ 31500
		Intermediate		
63000	64000	First Bank	18000	17000
0	0	PCA	33000	30000
35000	35500		0	0
0	1600		0	0
90000	91000		Ō	0
4817	3448	Financial lease	-	-
		(cattle/mach.)	4817	3448
3000	3200	(,,		
195817	\$ 198748	Total	\$ 55817	\$ 50448
		Long-Term		
		lst Bank Mtg	36000	35000
190000	195000	FLB	58000	60000
0	0		0	0
190000	\$ 195000		Ō	Ō
	•	Fin. lease (struc)	0	0
		Total	\$ 94000	\$ 9 5000
446682	\$ 455615	Total Farm Liab.	\$ 171317	\$ 176948
	N	ONFARM NET WORTH	<u> 7 2/3305</u>	<u> 7 2/800/</u>
'an I			Tan 1	Dec 31
an. T	Dec. JI	Nonfarm Liab.	\$ 0	\$ 0
í •			•	•
1500	\$ 1600			
	•			
3000	3200			
0	0			
2000	1500			
	0			
5000	5000			
0000	5000			
11500	\$ 11300	NONFADM NET WODTH	\$ 11500	\$ 11300
	FARM	& NONFARM	<u> </u>	<u> </u>
		Total Farm &		
		Nonfarm Liab.	\$ 171317	\$ 176948
		FARM & NONFARM		-
458182	\$ 466915	NET WORTH	\$ 286865	\$ 289967
	Ann. 1 13000 12500 35365 60865 63000 0 35000 90000 4817 3000 190000 190000 190000 446682 An. 1 1500 3000 2000 0 11500	All.1Dec.31 13000 \$ 1200 12500 13025 35365 47642 60865 \$ 61867 63000 64000 0 0 35000 35500 0 1600 90000 91000 4817 3448 3000 3200 95817 198748 190000 195000 0 195000 0 195000 446682 \$ 45682 \$ 1500 \$ 1600 3200 0 0 2000 1500 0 0 11500 \$ 11500 \$ 11500 \$ 11500 \$ 11500 \$ 11500 \$ 11300 $7ARM$	Image: 1 Dec. 31 Current Accounts payable 13000 \$ 1200 12500 13025 35365 47642 60865 \$ 61867 Total Intermediate 63000 64000 First Bank 0 0 Financial lease 63000 91000 9000 4817 3448 Financial lease (cattle/mach.) 3000 3200 195817 \$ 198748 Total Long-Term Ist Bank Mtg 190000 195000 Fin. lease (struc) Total 190000 195000 Fin. lease (struc) 0 0 0 190000 195000 Fin. lease (struc) 0 0 0 190000 \$ 195000 Fin. lease (struc) 0 0 0 190000 \$ 195000 Fin. lease (struc) 0 0 0 1500 \$ 1600 3000 3000 3200 0 0	III. 1 Dec. 31 Current Accounts payable \$ 5500 13000 \$ 1200 Operating debt 16000 12500 13025 Short term: 0 60865 \$ 61867 Total \$ 21500 Intermediate 63000 64000 First Bank 18000 0 0 0 0 1500 1600 0 0 0 1600 0 0 0 1600 0 0 90000 91000 0 0 0 4817 3448 Financial lease 0 (cattle/mach.) 4817 36000 0 90000 195000 Fin. lease (struc) 0 190000 195000 0 0 190000 195000 0 0 190000 195000 0 0 1500

BALANCE SHEET ANALYSIS

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Financial Ratios			Farm	Business	Farm 8	i No	onfarm
Percent equity Debt to asset ratio Total Long-term Intermediate/cur	rent			61% 0.39 0.49 0.31			62% 0.38
Debt Analysis							
Accounts payable as Long-term liabiliti	s % of total	debt f		98			
total debt		-		54%			
Current & intermed: as % of total deb	late liabili ot	ties		468			
Debt Levels		_		Per T:	illable		
Total farm debt		\$ <u>Per</u>	<u>Cow</u> 12	Acre \$ 8	Owned 385		
Long-term debt	- 4-	11	88		475		
intermediate/curren	10	10.	64	4	10		
Farm Capital							
	Real Estate	Maci & Equ	hinery uipment	Lives	stock	Fe Suj	eed & oplies
Beginning of Year	\$ 190000	\$	90000	\$ 98	3000	\$	35365
Purchases	10300*	:	10800				
- Lost Capital	0						
- Sales	500		1250				
- Depreciation	6615	:	14280				
= Net Investment	3185		-4730	19	5600**		
Appreciation	1815		5730	-1:	2500		
End of Year	\$ 195000	\$	91000	\$ 10:	1100	\$	47642

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* \$ 0 Land + \$ 10300 Building.
 ** See page 9, Dairy Inventory Analysis, for dairy cow and heifer inventory detail.

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35

ANNUAL CASH FLOW STATEMENT

Cash Inflows

Beginning farm cash, checking & savings	\$ 13000
Cash farm receipts	164260
Sale of assets: Machinery Real estate	1250 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 Machinery	9000 10800		
	Real estate	10300		
Principal payments	(intermediate & long-term)	8500		
Principal payments	(short-term)	0		
Decrease in operation	ing debt	1000		
Nonfarm debt paymen	nts	0		
Personal withdrawal	ls & family expenditures	17000		
Ending farm cash, o	checking & savings	1200		
TOTAL			\$ 19]	1010
Imbalance (error)			\$	0

REPAYMENT ANALYSIS

Debt Payments	<u>f</u>	Planned or 1985*	 Made in 1985	<u>f</u>	Planned or 1986
Long term	\$	10988	\$ 10000	\$	10988
Intermediate term		12639	12100		12639
Short-term		0	ο		ο
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 Set	rvice	\$ 35050
(B) = Debt Payments Planned for 19	85	\$ 28627
(A / B) Cash Flow Coverage Ratio f	or 1985	1.22

** Personal withdrawals & family expenditures less nonfarm income.

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CROPPING PROGRAM ANALYSIS

Land	Owned		Rent	ced		Total
Tillable	200			60		260
Nontillable	30			10		40
Achem montillable	160			E		165
Other noncillabie	100			75		105
TOTAL	390			15		400
			Tot	tal	Produc	ction
Crop Yields		Acres	Produ	uction	Per A	Acre
Dry hay			128	Tons DM		
Hay crop silage			192	Tons DM		
Total Hay Crop P	roduction	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	0.00	Bushels	0.00	Bushels
Other grops		0	Ŭ	04011010	0100	24211010
Millahle pasture		15				
IIIIante hascale		10				
		0				
Total tillable acro	65	260				

Crop Related Accrual Expenses

							Co	rn			
	Total/		Hay C	Cro	qq			Pe	r Ton	Ot	her
	Till.				Per			Co	rn Sil.	Cr	ops
Crops	Acre	Per	Acre	- 5	Con DM	Pe	er Acre	E	quiv.*	Pe	r Acre
Fert. & lime	\$ 38.12	\$	25.62	\$	9.61	\$	58.33	\$	3.97	\$	35.55
Seeds & plants Spray/other	15.58		9.15		3.43		24.85		1.69	·	17.15
crop expense Total Crop	\$ 12.46 66.15	\$	5.75 40.52	\$	2.16 15.19	\$	23.62 106.80	\$	1.61 7.28	\$	3.50 56.20

Machinery To	otal	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 silage as fed.	e eq	uivalent using 5.88	bus	hels = 1 ton
Crop/Cow Factors				

crop/con ruocorb	
Total Tillable Acres per Cow	3.38
Total Forage Acres per Cow	2.60
Harvested Forage Dry Matter per Cow	8.82

38 **9**

D	AIRY	ANA	LYS	IS		-				
Dedama Tanan de anno 1	Da	airy	Cor	NB			N7	He	ifer	S
Dairy inventory		<u>er</u>	-	vari	<u>16</u>		Num	Jer		varue
Beginning of Year + Change in Inventory	•	70	\$	63(000			50	\$	35000
(without appreciation)				9(000					5000
+ Appreciation				-8(000					-4500
= End of Year	1	80	Ş	64	000			40	Ş	35500
Total End (incl. leased)		80								
Average Number		77						50		
Milk Production										
Total milk sold		1	116	500	lbs					
Milk sold per cow			14	500	lbs	•				
Average milk plant test			3	.40	* b	utt	erfat			
Accrual Receipts From Dairy		Tot	al			Pe	r Cow			Per Cwt.
Wil	ć	152	675			ė	1006		ć	12 76
MILK Daimy cattle (including culls)	ą	100	5/0		i	7	7330		Ş	T3.10
Dairy calues (Including Culls)		24	220				293			2.02
Daily Calves		1	330				1/			0.12
Total	\$	177	545		1	\$	2306		\$	15.90
Accrual Cost of Producing Milk	-									
Whole Farm Method										
Operating cost of producing mi	lk Š	105	223		1	Ś	1367		Ś	9.42
Total cost of producing milk	+					Ŧ	200.		•	2110
excluding operator's labor,										
management & capital		136	768				1776			12.25
Total cost of producing milk		180	701				2347			16.18
Detwo Deleted Recurs! Tomeses										
Daily Related Accidal Expenses										
Purchased dairy grain										
& concentrates	\$	43	730		1	\$	56 8		\$	3.92
Purchased dairy roughage			0				0			0.00
Total Purchased Dairy Feed		43	730				568			3.92
Purchased grain & concentrates										
as * of milk receipts			28	*						
Purchased feed & crop exp.	Ş	60	930		1	Ş	791		Ş	5.46
Purchased reed & crop exp.			4.0	٥.						
as a of milk receipts		2	40° 200	6			20		*	0 01
Veterinary & medicine	4	2	200		i	4	30		Ş	0.21
Milk marketing			560				34			0.23
Cattle leage		7	000				424 A			0.00
Other livestock expense	Ś	5	565		(ŝ	72		ġ	0.00
	*	5				T	, 4		*	0.00

D.H.I, PIPELINE, STANCHION.

Capital Efficiency	(Average for	Year)		
Farm capital \$ Real estate Machinery & equip.	<u>Per Worker</u> 154201 32909	Per Cow \$ 5507 2500 1175	Per Tillable Acre \$ 1631 348	Per Tillable <u>Acre Owned</u> \$ 2120 963
Capital Turnover, ye	ears 2	2.26		
Labor Force	Months	Age	Years of Education	Value of Labor & Mgmt.
Operator number 1 Operator number 2 Family paid Family unpaid Hired	12 12 6 3 0	51 28	14 16	\$ 15000 \$ 15000
Total	33 / 3	12 = 2.75 2.00	Worker Equival Operator/Manag	lent ger Equivalent
Labor Efficiency				
	Tot	tal	Pe	r Worker
Cows, average no. Milk sold, lbs. Tillable acres Work units	1116	77 500 260 8 08		28 406000 95 294
Labor Cost	-	<u>Fotal</u>	Per Cow	Per Till Acre
Value of Operator(s Labor (\$800/month Family unpaid (\$550 Hired)) \$ /month)	19200 1650 5200	\$249 21 68	\$ 73.85 6.35 20.00
Total Labor	\$	26050	\$ 338	\$ 100.19
Machinery Cost	\$	37158	\$ 483	\$ 142.92
Total Labor & Machi	nery Costs \$	63208	\$ 821	\$ 243.11

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11	

ANNUAL CASH FLOW WORKSHEET

JANUARY 30, 1986

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	Receipt	or Expense	Expected	1986
Item	Total	Per Cow	Change	Projection
Average Number of Cows	77			
-				
ACCRUAL OPERATING RECEIPTS		*		•
M11K	\$ 153675	\$1995.78		\$
Dairy cattle	22540	292.73		
Dairy Calves	1530	1/.2/		
Crops	12000	20.70		
Miscellaneous receints	12005	10/.54		
Total	\$ 192870	\$2504.81		\$
rotur	¢ 192070	42304101		۷
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, blog., rence repair	6350	82.47		
Taxes	3600	46.75		
Insurance Real estate ment/lease	2/30	35.45		
Medi estate rent/lease	1200	15.58		
Missollanoona	4900	03.04		
Total Logg Interest Daid	6 107/10	3U.20 61654 70		A
iotal Less interest Faid	\$ 12/410	\$1054.78		ېې
NET ACCRUAL OPERATING INCOM	E			
(w/o interest paid)	<u>\$</u> 65452	\$ 850.03		Ś
- Change in lystk/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		Ś
- 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			43 familie	\$

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. <u>Important</u>: If totals or calculated values appear on the screen, be sure to press return or use the \downarrow 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. <u>Display a record</u>.

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. <u>Help</u>

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: \leftarrow (Or DIR C: \leftarrow 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

-	(DIF	۲>	1-07-86	11:39a
	(DIF	۹>	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)) 13	327104 byt	es 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 PCXXXX¹³ 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.000. 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 Øl 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:

<u>Message</u>	<u>Interpretation</u>	<u>Solution</u>
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.

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 <u>Check-In Form</u>

MACHINERY AND EQUIPMENT INVENTORY

1. "Machinery owned but no machinery depreciation."

Check to see if machinery depreciation was collected on the checkin 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]</pre>

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.

"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."</p>

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 \geq 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, \$_____."</pre>

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, \$_____."</pre>

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

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

<u>OTHER</u>

"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

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		<u>Example^{a/}</u>
Total Accrual Operating Expenses		\$144,418
Less: Total Accrual Receipts	\$19 2,8 70	
Less Accrual Milk sales	<u>-153,675</u>	
Accrual Receipts Less Milk Sales		<u>- 39,195</u>
Operating Cost of Producing Milk ^{D/}		\$105,223
Total Accrual Expenses		\$174,313
Family Labor Unpaid		+ 1,650
Accrual Receipts Less Milk Sales		<u>- 39,195</u>
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

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

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

<u>b</u>/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.

- <u>c</u>/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.
- <u>d</u>/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

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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.