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## MICRO DFBS



## A Guide to Processing <br> Dairy Farm Business Summaries in County and Regional Extension Offices for

## Micro DFBS Version 4.2

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## INTRODUCTION

This publication is a guide to using the Microcomputer Dairy Farm Business Summary (Micro DFBS) computer program for analyzing the financial and production performance of individual dairy farm businesses. County Cooperative Extension educators 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 have the capability to strengthen their dairy farm business analysis activities by calculating and printing the individual farm summaries for immediate use by the educator and farmer, at any time. After entry in the county, individual farm data are sent to the Department of Agricultural, Resource, and Managerial Economics at Cornell University for additional review prior to calculation of county, regional, and State summaries.

## HARDWARE REQUIREMENTS

Version 4.2 of the Micro DFBS program will run on IBM and IBM-compatible computers with a 386 processor (or higher) with a minimum of 640 K of random-access memory (RAM), 5 megabytes of free disk space, and at least one floppy disk drive. The WINDOWS ${ }^{\text {TM }} 3.1^{1}$ or higher operating system is needed.

Printers vary from one Extension office to another, and an effort is made to make the program work with as many printers as possible. Most printers capable of printing 10 characters per inch and 66 lines per page should work. Micro DFBS version 4.2 uses the default printer specified in the Windows ${ }^{\text {TM }}$ Print Manager.

Each farm summary printout is 12 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.

## VERSION 4.2 REVISIONS

Revisions made for Micro DFBS Version 4.2 include the following:

1. If the average net worth for a farm is negative, then "NA" will be printed on pages 1 and 3 for the rates of return on equity capital.
2. Current ratio, working capital, and working capital as a percentage of total expense have been added to the Balance Sheet Analysis on page 5.
3. Debt coverage ratio has been added to the Repayment Analysis on page 8.
4. Milk receipts net of milk marketing expense has been added to the Dairy Analysis on page 10.
5. Operating expense ratio, interest expense ratio, and a depreciation expense ratio have been added to the Capital and Labor Efficiency Analysis on page 11.
6. The annual cash flow worksheet on page 12 has been replaced with a three-year comparison of receipts and expenses on a per cow and per cwt. basis. The annual cash flow worksheet can be printed as optional output.
7. The constant used for the value of unpaid family labor and value of operator's labor is $\$ 1,600$ per month. This is based on the wage rate for all hired farm workers reported by the New York Agricultural Statistics Service.

[^0]8. The discount rates used in calculation of lease assets and liabilities are 9.25 percent at the beginning of year, and 8.75 percent at the end of the year. These are the typical interest rates paid by farm borrowers during the year.

## USING MICRO DFBS

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) installing MicroDFBS Version 4.2
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 above. If you are not familiar with the operation of your microcomputer and operating system, refer to your Windows ${ }^{\text {TM }}$ User's Manual.

## INSTALLING MICRO DFBS VERSION 4.2

You should have three installation disks and one data disk. You will need about 5 megabytes of hard disk space for the program and your data.

Insert the first installation disk in the floppy drive. From the Windows Program Manager, select File, Run. Type a:install in the space if the installation disk is in your A: drive; type b:intall if it is in your B: drive. Follow the directions on the screen. If you have existing \dfbs and \dfbs\database directories, you may want to copy the contents to another directory before installing the new program.

When installation of the program is complete, copy the contents of the data disk to the $\backslash$ dfbs $\backslash$ database $\backslash$ directory. Copy the files by using File Manager, Windows Explorer or DOS.

## START THE PROGRAM

Double-click on the Micro DFBS Version 4.2 icon to start the program.
You should see the main menu.


The main menu shows the options available in DFBS. Select an option by clicking the mouse on your choice, or by typing the underlined letter.

Data Menu is selected when entering the input data for a new farm or when editting existing data.
Report Menu is selected when you want to print or view all or part of the 12-page calculated report.
Utility Menu is selected when you need to delete a farm from the database or make backup copies of the database.

Exit to Operating System is selected to exit the Micro DFBS Verison 4.2 program and return to the Windows ${ }^{\text {TM }}$ Program Manager.

## ENTER THE INPUT DATA. ${ }^{2}$

The Data Menu 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 _), the mouse, or type a "d" (for data) to select the Data Menu option.

The Data Entry Menu is shown below.

"New Farm Input or Edit All Screens" is used when you are entering the farm data for the first time, even if the farm participated last year. Also use this option when proofreading or editing data when you want to move through all 14 input screens in sequential order.
"Edit Farm Using Single Screens" is used when you have previously entered the data for the farm and you want to go to selected screens.
"Return to Main Menu" exits the data entry menu.
Select "New Farm Input or Edit All Screens" by clicking on it with the mouse; or use the cursor key to highlight the option, then press <enter>.

The program will continue to Screen 1. The cursor begins in the field for "Year". The default year is one year less than the current date. For example, data entered in 1999 is assumed to be for a 1998 DFBS since that is the last complete calendar year. If you wish to do a DFBS for a different year, type it in the field "Year". If the year displayed is correct, press <enter> or click the mouse in the next field, Farm Number.

[^1]You will see a field to enter a farm number. The farm number assigned will be made up of your 2digit county number, followed by a 3-digit number identifying the individual farm. ${ }^{3}$

Important - select farm numbers carefully following the recommended procedure. You must assign the same number to the same farm each year and assign a new number to a new farm. This is essential for the first page of the summary, "Progress of The Farm Business", and page 8, "Repayment Analysis", to work properly.

If you make an error entering data and you notice it before typing the $\downarrow$ (return/enter) key, you can correct the error by using the backspace key to erase the error, or the _ key or mouse to move the cursor back and type the correct entry. If you press $\downarrow$ (return/enter) before noticing the error, you can move back to the incorrect entry by using the _ key or mouse, and then retype the number.

The top of the first page of the sample farm check-in form is shown below. The sample farm number is 46007 and the number is written in the space labeled "Processing number".

## CORNELL COOPERATIVE EXTENSION DAIRY FARM BUSINESS SUMMARY DATA CHECK-IN FORM

| Name__ 96eny 96obdein | County___Supfoth | SCREEN 1. |
| :---: | :---: | :---: |
| Farm Name |  |  |
| Address $\qquad$ 123 Dairy Rave 96 owazoille. $9 \% 2 \mathrm{y} 12345-1234$ | Proc. number__ _46007 | Year 1998 |
| Phone no._ $607-255-8429$ | ( $x$ )complete, ( ) entered, | ( )ready |
| Check if Certified Organic Milk Producer. $\mathcal{B}$ Year first became certified: $\qquad$ 1996 $\qquad$ | Update Screens: |  |

Type the farm number:
ك 46007
Micro DFBS will find the record for farm 46007. This record already contains data from the previous year, such as beginning of year inventory values and beginning of year assets and liabilities.

[^2]Screen 1 contains the farm name, address, and phone number from the boxed-in area at the top of page 1 of the check-in form. Screen numbers 2 through 14 correspond to the other 13 boxed-in areas of the check-in form. Worksheet screens 3,6 , and 7 correspond to the worksheets by the same number on the check-in form.

Screen 1 should look like Screen 1 below. The farm number and county are already inserted for you and the cursor is at the operator's name.

Enter the farmer's name. There is no farm name, so enter $\downarrow$ (return/enter) to move to the address line and type the rest of the farm information, (use the sample farm information from above).


At the bottom of the screen, find the classifications "Regular" and "Irregular". 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. Select the appropriate classification by clicking the mouse in the box and typing " X ".

Also at the bottom of Screen 1 is a box to check if the farm is a certified organic milk producer. To check the box, click the mouse in the box and type "X". Type $\downarrow$ (return/enter) to move to the space for the year certified and enter the year.

The box labeled "Verified" is for Cornell use.
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 mouse or _ or _ keys to move the cursor to "Farm Name" and type:

Holstein Haven $ل$ (return/enter)
There are three ways to get out of Screen 1 and move to the next screen:

1) $\lrcorner$ (return/enter). Keep pressing return until the cursor goes to the "proceed" $\Delta$ button and then to the next screen.
2) key. Keep pressing the down arrow key until the cursor goes to the "proceed" button and then to the next screen.
3) Use the mouse to select the "proceed" $\Delta$ button to go to the next screen.

Move to Screen 2 by clicking the mouse on the "proceed" $>$ button.

You should see Screen 2.


Part of page 1 of Henry Holstein'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. If there were previous year's data, the beginning of year inventory value will be displayed. If this value does not need to be revised, press $\lrcorner$ (return/enter) to move to the next item. If it needs to be changed, simply type the revised value over the existing one and $\lrcorner$ (return/enter). Enter the data called for. Use $\downarrow$ (return/enter) to move from one item to the next one below. Do not type commas or spaces within or to the left of numbers. Use the mouse, cursor $(\downarrow)$ key, or $\downarrow$ (return/enter) to skip zero entries. The last two items are calculated by Micro DFBS. When you have entered all the data for Screen 2, advance to Worksheet 3 by clicking the mouse on the "proceed" button.


## BAR MENU OPTIONS

The bar menu above the data input screen provides some useful options. These are selected by clicking the mouse on the menu item.
"Screens" allows you to open another data input screen for data entry or viewing. Click the mouse on the screen number you wish to open (WHEN DONE WITH THE SCREEN, CLICK THE MOUSE ON THE PROCEED > BUTTON TO CLOSE THE SCREEN. NOT CLOSING THE SCREEN COULD RESULT IN TOO MANY WINDOWS OPEN, AND COULD CAUSE AN UNEXPECTED CONDITION.)

Choose "Database", then "Browse" to view the entire database for the data input screen. Use this option to view previous year's data for the farm you are working on, or to view data from other farms. Use the scroll panels along the bottom and right side of the screen to view the data. Do not attempt to edit the data using Database, Browse. See Appendix D for a listing of field names and a description of each field name. You may change the order in which the columns are displayed. Do this by clicking and holding the mouse on the field name at the top of the column you wish to move. Then drag the column to where you want it in the database and then let go of the mouse button. In this
way you can position the fields you want to see next to each other. (This does not change the structure of the database in any way. This only changes the way you view the data.) To exit the "database" option, click the mouse on the control-menu box (appears as a red fox in Windows "95) in the upper left corner of the window, then select "next window" to go back to the data input screen. The column order will return to its original structure.
"Help" allows you to view diagnostic messages or make use of a calculator.
"Exit" returns you to the Data Entry Menu.

## ON-SCREEN DIAGNOSTICS

As data are entered in the input screens, you may see a message in a box displayed in the upper righthand corner. These are diagnostic statements that result from a series of checks performed on the data to look for values out of a range, missing data, or possibly incorrect data. When you see a diagnostic message displayed on the screen, check your data for accuracy. If you want more information than the diagnostic statement tells you, select "Help" from the bar menu above the screen. You will see a help screen as shown below.


Click the mouse on the "Topics" button to see the list of diagnostics by screen number. Press the "Help" button to return to the help screen. Click the mouse on the "Next" or "Previous" buttons to move down and up the list of diagnostic messages.

When finished using the help screen, be sure to close the window. Do this by clicking the mouse on the control-menu box in the upper left corner of the window, then select "Close". You may now continue with data entry.

To get back to the input screen when a diagnostic message is on the screen, click the mouse on the screen or type $\downarrow$ (return/enter).

## COMPLETE THE DATA ENTRY

Screens 3 through 14 and Worksheets 3, 6, and 7 are handled in a similar way as Screen 2 and, are designed to resemble the check-in form as closely as possible.

Now finish typing the farm information for Henry Holstein into Screens 3 through 14 and Worksheets 3,6 , and 7 using the data on the following pages. After Screen 14, you should be back to the Data Entry Menu.

The data for Worksheet 3, Grown Feed and Supply Inventory Worksheet, are entered across the rows. The "Total Value" columns are calculated as are the total beginning and ending grown feed and supply inventory. These totals are carried forward to Screen 3, Feed and Supply Inventory. If there were previous year's data, the beginning of year grown, feed, and supply inventory will be displayed.

## WORKSHEET 3. GROWN FEED INVENTORY WORKSHEET

Use this worksheet to calculate beginning and end year values of grown feed and supplies.

|  | January 1, 1998 |  |  |  |  | December 31, 1998 |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Item | Quant. | $\$$ per x Unit |  | $=$ | Total Value | Quant. | $\begin{array}{r} \text { \$ per } \\ \times \quad \text { Unit } \\ \hline \end{array}$ |  | $=$ | Total Value |
| GROWN FEED AND SUPPLIES: |  |  |  |  |  |  |  |  |  |  |
| Corn-HMSC or HMEC | 7,200 | \$ | 2.71 | \$ | 19.512.00 | 9.000 | \$ | 2.90 | \$ | 26.100 |
| Corn-dry, |  |  |  |  |  |  |  |  |  |  |
| Oats | 470 |  | 3.86 |  | 1.84 .20 | 500 |  | 3.50 |  | 1750 |
| Wheat | 531 |  | 2.24 |  | 1234.24 | 600 |  | 3.25 |  | 1.950 |
| Dry hay | 240 | \$ | 81.00 | \$ | 19,440.00 | 250 | \$ | 75.00 | \$ | 18,750 |
| Hay crop silage | 1125 |  | 40.0 |  | 45.000.00 | 1400 |  | 35.00 |  | 49.000 |
| Corn silage |  |  |  |  |  |  |  |  |  |  |
| Other |  |  |  |  |  |  |  |  |  |  |
| Grown supplies: bedding lumber |  | \$ |  | \$ |  |  | \$ |  | \$ |  |
|  |  |  |  |  | $\downarrow$ |  |  |  |  | $\downarrow$ |



Screen 3, Feed and Supply Inventory, has three columns, two of which are for data entry. The beginning and end year columns for purchased feeds and supplies are entered and the beginning and end year totals and inventory change column are computed. The totals for beginning and end year for the grown feed and supplies are calculated from Worksheet 3 . The check-in form has additional columns in Screen 3 for quantities and $\$$ per unit; however, these are work spaces. If there were previous year's data, the beginning of year inventory values will be displayed. The order of data entry is across the rows.

The inventory change for all feed and supplies is calculated by subtracting the beginning year inventory value from the end year inventory value. The inventory change for grown feeds is then transferred automatically to Screen 12, the accrual receipts screen. The inventory changes for purchased feeds and supplies are transferred to Screen 13, the accrual expenses screen.

| FEED \& SUPPLY INVENTORY | $\downarrow$ |  |  |  | $\downarrow$ | SCREEN 3. Invent. Change ${ }^{1}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Total Grown Feed and Supplies (from above) | \$ 87,000 |  |  | \$ | 97,550 | \$.-.---10.50. |
| PURCHASED FEED: (use p. 11 definitions) |  |  |  |  |  |  |
| Dairy grain \& conc. . . . . . x | $=\$ \quad 2600$ |  | x . | $=\$$ | 3000 | .-.......- ${ }^{400}$ |
| Dairy roughage ...32 ...100 | 3200 | .. 30 | ... 100 |  | 3.000 | ---------2000. |
| Nondairy feed |  |  |  |  |  |  |
| SUPPLIES: |  |  |  |  |  |  |
| Machine: Parts ...... x | $=\$ \quad 2.000$ |  | X | = | 2000 | \$.-.-.-.-. 0 |
| Fuel, oil, grease | 1000 |  |  |  | 1000 | --.-........ ${ }^{\text {e }}$ |
| Livestock: Semen | 1300 |  |  |  | 1000 | --------300 |
| Veterinary supplies | 400 |  |  |  | 500 | -------- ${ }^{100}$. |
| Bedding | 100 |  |  |  | 150 | ---------50. |
| Milking supplies | 75 |  |  |  | 50 | --......--25. |
| bST supplements | 50 |  |  |  | 25 | ---------25. |
| Other lvsk supplies | 0 |  |  |  | 0 | --.-...-.... ${ }^{\text {e }}$ |
| Crops: Fertilizer | 1250 |  |  |  | 0 | --------- ${ }^{-1250}$ |
| Seeds | 125 |  |  |  | 100 | ---------25. |
| Pesticides \& other | 1700 |  |  |  | 1000 | - --...-. 700 |
| Land, building \& fence | 500 |  |  |  | 200 | -.......-300 |
| Other: . . | 320 |  |  |  | 1000 | --......- 680. |
| Total Feed \& Supplies | \$...... 101620 |  |  | \$ | 10.75 |  |



Data entry in Screen 4, Livestock Inventory, starts with "leased dairy cows" then continues across the remaining rows. All totals are calculated. The "\$ per Head" columns are calculated after the "number of head" and "total value" entries are made for each row. If you prefer to enter "\$ per Head" values, the "Total Value" will be calculated.

If there were previous year's data, the beginning of year inventory values will be displayed.

| LIVESTOCK <br> Number of leased and rented dairy cows at end of year <br> - 40 |  |  |  | SCREEN 4. |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  | December 31, 1998 Inventory Using: |  |  |  |  |  |  |  |
|  | Jan. 1, 1998 Inventory |  |  | No. | 1/1/98 Prices |  |  | 12/31/98 Prices |  |  |  |
|  | No. | $\$$ per Head | Total Value |  | $\$$ per Head |  | Total Value | $\$$ per Head |  | Total Value |  |
| Dairy Cows: .................. | 120 | \$ 1000 | \$ 120000 | 11. | \$ | 1000 | \$ 115000 | \$ | 100 | \$ | ${ }^{126500}$ |
| Total Dairy Cows |  |  | \$...-20000 | ...-15 |  |  | \$....15000 |  |  |  | . 266500 |
| Heifers: |  |  |  |  |  |  |  |  |  |  |  |
| Bred Heifers | 25 | \$ 850 | \$ 21250 | 30 | \$ | 850 | \$ 25500 | \$ | 900 | \$ | 27.000 |
| Open (6 mo. - bred) | 21 | -550 | 11550 | 20 |  | 550 | 11000 |  | 600 |  | 12000 |
| Calves ( $<6 \mathrm{mo}$.) | 53 | +400 | - 22000 | 55 |  | 400 | 22000 |  | 425 |  | ${ }^{23375}$ |
| Total Heifers | .. 101 |  | ......54800 | ......09 |  |  | .....58500 |  |  |  | .62375 |
| Bulls \& Other Livestock: |  |  |  |  |  |  |  |  |  |  |  |
| .................. |  | \$ | \$ |  | \$ |  | \$ | \$ |  | \$ |  |
| Total Bulls \& Other |  |  |  |  |  |  |  |  |  |  |  |
| Livestock |  |  | \$........ |  |  |  | \$........ |  |  |  | ..... |
| Total Livestock | .-..-2? |  | \$ 174800. | -..- ${ }^{2}$ ? 0 |  |  | \$...ri3500 |  |  |  | . 188875 |



The data for Screen 5, Real Estate Inventory, are entered in the following order: beginning year market value, end year market value, new land, new buildings, lost capital, nonfarm noncash transfer, depreciation, and real estate sold (total sale price, sale expenses, and note/mortgage held by seller). All remaining items are calculated.

If there were previous year's data, the beginning of year inventory value will be displayed. It may be revised, if necessary, by typing the new value over the existing one and $\downarrow$ (return/enter).

${ }^{1}$ Use Worksheet 4, page $2 .{ }^{2}$ Calculated value is a cash inflow to the farm. If part or all of this was converted to nonfarm, include that amount in "personal withdrawals \& family expenditures" (Screen 13, page 13).


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

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.

When entering the Average Milk Plant Test, the decimal must be typed.
Business description items in Screen 6 are entered by clicking the mouse on the down arrow of the drop-down box, then click on your selection. The appropriate business description item will be displayed on the screen. The DHI number requires an 8 -digit entry. The first 2 digits refer to the state, the next 2 digits refer to the county, and the last 4 digits are unique to the farm.

If there were previous year's data, the production record, milking system, business type, milking frequency, dairy housing, and financial recordkeeping system will have last year's data displayed. These items may be revised by clicking the mouse on the arrow of the drop-down box and then click on your selection.

| LIVESTOCK \& BUSINESS DESCRIPTION |  |  |  | SCREEN 6. |
| :---: | :---: | :---: | :---: | :---: |
|  | Avg. No. | Production | Milking System | Primary |
| Livestock | For Year | Record |  | Business Type |
| Dairy cows (owned, rented \& leased) | 157 | x(1)D.H.I. <br> (2) O.S. | (1)Bucket \& carry <br> (2)Dumping station | (1)Single prop. |
|  |  |  |  | © (2)Partnership |
| Heifers (dairy) | -_ ${ }^{101}$ | DHI\#2 $1_{46123}$ | -(3)Pipeline | (3)Corporation |
| Bulls |  | (3)Other <br> (4)None <br> bST Usage <br> \% of Herd: | 을 (4)Herringbone par. <br> _(5)Other parlor | Primary Financial Recordkeeping System |
| Other: (type) (\# head) | $\overline{\left[\overline{\text { w.u. }{ }^{1}}\right]}$ |  |  |  |
|  |  |  |  |  |
|  |  |  | Dairy Housing | _(1)ELFAC II <br> (2)Account Book |
| Lbs. milk sold | Milking | 里 (1) $<25 \%$ | (1)Stanchion/ |  |
| 3.5000 | Frequency <br> _(1) $2 x / d^{2}{ }^{2}$ <br> 브⑵ $3 x / d a y^{3}$ <br> (3)Other ${ }^{4}$ | - (2)25-75\% <br> _(3) $>75 \%$ $\qquad$ (4)Stopped using in ' 98 (5)Not Used | Tie-Stall | 프﹎(4)On-Farm Computer (Software: $\qquad$ <br> (5)Other |
| Avg. milk plant test $3.7 \%$ butterfat |  |  | 우 (2)Freestall <br> (3)Combination |  |
|  |  |  |  |  |
|  |  |  |  |  |


| Cornell Cooperative Extension Dairy Farm Business SummaryLIVESTOCK BUSINESS DESCRIPTION |  |  |  | , -\|回|x |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | Farm\# | 46007, Year 1998 SCREENG |  |
| Livestock | Avg. No. For Year | Production Record |  |  | Milking System |  |
| Dairy cows [owned. rented \& leased] | 157 | 1 D.H.I. | $\bullet$ |  | 4 Herringbone | - |
| Heifers [dairy] | 101 | DHI\# |  |  | Dairy Housing |  |
| Bulls | 0 | 21461234 |  |  | 2 Freestall | - |
| Other: in work units | 0 | bST Usage \% of Herd: |  |  | Primary <br> Business Type |  |
| Lbs. milk sold |  | 1 < 25\% | - |  | 2 Partnership | $\checkmark$ |
| Avg. milk plant | Milking Frequency |  |  |  | Primary Financial <br> Record Keeping System |  |
| test 3.70 \%B.F. | 2 all cows | d 3x/day |  |  | 4 On-Farm com |  |

Table 1. Work Units For Livestock and Crops

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

[^3]In Screen 7, the order of data entry for the labor and land inventory is across the rows. To enter a value with decimals in the full-time months column, you must type the decimal point. The total months of labor, worker equivalent, and land inventory totals are calculated. If there were previous year's data, the entire land inventory section will be displayed. If revisions need to be made in this data, simply type over the existing values and $\downarrow$ (return/enter). The "all acres" column and the "total" row will be recalculated.

| LABOR INVENTORY | Full-Time Months | Age | Years Educ. | Value of | f Management | CREEN 7. <br> \& Labor |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Operator -1 | - ${ }^{13}$ | - 45 | - ${ }^{\text {年 }}$ |  | \$ | 225000 |
| -2 | [13 |  | - ${ }^{16}$ |  | \$ | 30.000 |
| -3 |  |  |  |  | \$ |  |
| -4 |  |  |  |  | \$ |  |
| - 5 |  |  |  |  | \$ |  |
| -6 |  |  |  |  | \$ |  |
| Family (paid employees) |  |  |  |  |  |  |
| Family (unpaid) |  |  |  |  |  |  |
| Hired (regular \& seasonal) | $\underline{22}$ |  |  |  |  |  |
| Total | $\ldots$...-60 $\div 12$ | .. | 5.0 Worker Eq | valent |  |  |
| LAND INVENTORY | Acres Owned |  | Acres Rented |  | All Acres |  |
| Tillable land | 300 |  | 150 |  | 450 |  |
| Pasture (nontillable) | - 10 |  | $\square \square^{0}$ |  | $\square-10$ |  |
| Woods \& other nontillable | $\square{ }^{13}$ |  |  |  | 13 |  |
| Total | ......... ${ }^{323}$ |  | ............. ${ }^{150}$ |  | ............473 |  |



| LAND INVENTORY | Acres Owned | Acres Rented | All acres |  |
| :--- | :---: | ---: | ---: | ---: |
| Tillable land |  | 300 | 150 | 450 |
| Pasture [nontillable] | 10 | 0 | 10 |  |
| Woods \& other nontillable | 13 | 0 | 13 |  |
| Total |  | 323 | 150 | 473 |

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 14). If the farm uses rotational grazing, type an " X " in the box next to tillable pasture acres. The order of data entry is across the rows. Total Tillable Acres and the Total Tons Dry Matter column are the calculated values.

| TILLABLE LAND USE | Acres (1st cut only) | Total Production (all cuttings) | Dry Matter Coefficient ${ }^{6}$ | SCREEN 8. Total Tons Dry Matter |
| :---: | :---: | :---: | :---: | :---: |
| Hay Crop (1st cut acres only) | 180 | xxxxxxxxxxxxxx | xxxxxxxxxxx | xxxxxxxxxxxxx |
| Hay | xxxxxxxxxxx | 280 tons | . 88 | -246 |
| Hay crop silage | xxxxxxxxxxx | 900 tons | . 40 | 360. |
| Corn silage | 10 | 2.080 tons | . 35 | 728 |
| Other forage harvested |  | tons |  |  |
| Corn for grain ${ }^{5}$ | 100 | M.148 dry sh. bu. | Total ton DM | 1334 |
| Oats | 15 | 900 dry bu. |  |  |
| Wheat | 15 | 800 dry bu. |  |  |
| Other: |  | ]w.u. ${ }^{1}$ |  |  |
| Tillable pasture | 30 | [__ $x_{]}$] Check if Rotational Grazing milking herd at least 3 months of year, changing paddock at least every 3 days, and more than $30 \%$ of the forage consumed during the growing season was from grazing. |  |  |
| Idle tillable acres |  |  |  |  |
| Total tillable acres | -----450 |  |  |  |


| W Cornell cooperative Extension Dairy Farm Business Summary |  |  |  | - - - 区 |
| :---: | :---: | :---: | :---: | :---: |
| TILLABLE LAND USE | $\begin{gathered} \text { Acres } \\ \text { [1st cut only] } \end{gathered}$ | Farm\# 46007. Year 1998 SC |  | REEN8 |
|  |  | $\begin{array}{cc} \begin{array}{c} \text { Total Production } \\ \text { [all cuttings] } \end{array} \\ \hline \end{array}$ | Dry Matter Coefficient | Total Tons Dry Matter |
| Hay Crop [1st cut acres only] | 180 |  |  |  |
| Hay Hay crop silage |  | ${ }_{200}^{280}{ }^{\text {90, }}$ tons | .88 .40 | 246 360 |
| Corn silage | 110 | 2080 tons | 35 | 728 |
| Other forage harvested | 0 | 0 tons | 00 | 0 |
| Corn for grain | 100 | 11148 dry sh. bu. | Total ton DM | 1334 |
| Oats | 15 | 900 dry bu. |  |  |
| Wheat | 15 | 800 dry bu. |  |  |
| Other:.................... | 0 | 0 work units |  |  |
| Tillable pasture | 30 | X Enter an "x" if R | Rotational Grazi | milking |
| Idle tillable acres | 0 | herd at least 3 month at least every 3 days. | ths of year, chan ys. | ging paddock |
| Total tillable acres | 450 |  |  |  |

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, the entire beginning year column will be displayed.

FARM FAMILY FINANCIAL SITUATION

|  | ASSETS |  | SCREEN 9. |  |
| :---: | :---: | :---: | :---: | :---: |
|  | January 1, 1998 ${ }^{1}$ |  | December 31, 1998 |  |
| Total Farm Inventory ${ }^{2}$ |  |  | \$ | 967/50. |
| Other Farm Assets: |  |  |  |  |
| Farm cash, checking \& savings | \$ | 3.500 | \$ | 875 |
| Accounts receivable ${ }^{3}$ |  | -35000 |  | 29825 |
| Farm Credit stock |  | 2000 |  | 1500 |
| Other stock \& certificates |  | -25 |  | ${ }^{25}$ |
| Prepaid expenses ${ }^{4}$ | x | 300 x | x | 400 x |
| Total Farm Assets | \$ | 89025 | \$ | 1000070 |
| Nonfarm Assets: ${ }^{5}$ - |  |  |  |  |
| Personal cash, checking \& savings | \$ | 12000 | \$ | 1000 |
| Cash value life insurance |  | 6000 |  | 6200 |
| Nonfarm real estate |  | 10.500 |  | H000 |
| Personal share auto |  | 14.280 |  | 12860 |
| Stock \& bonds |  | 7.000 |  | 8.500 |
| Household furnishings |  | 8000 |  | 8000 |
| Other (include mortgages \& notes) |  | 0 |  | 0 |
| Total Nonfarm Assets | \$ | 57780. |  | . 57560. |
| TOTAL ASSETS (not including leases) | \$ | 948025. | \$ | 1057.639 |



Financial leases are entered in Screen 10. The columns titled "amount of each payment", "no. of payments in 1998", "no. of payments/full year", and "no. of payments remaining" from the data checkin form are entered on Screen 10. The total 1998 expense column is calculated. The order of data entry is across rows.


| Cornell Cooperative Extension |  |  |  |  | -回区 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Leased item | Amount of each Payment | No. of Payments in 1998 | Farm\# 46007. Year 1998 |  | SCREEN10 |
|  |  |  | $\begin{gathered} \text { Total } \\ 1998 \\ \text { expense } \\ \hline \end{gathered}$ | No. of payments/ full year | No. of payments remaining |
| Cattle: $\qquad$ \$ $\qquad$ | 80 0 0 | $\underbrace{12} \begin{array}{r}\text { Total } \\ 0 \\ 0\end{array}$ | 960 0 0 960 | 12 <br> 0 <br> 0 | $\mathbf{6}$ <br> $\mathbf{0}$ <br> $\mathbf{0}$ |
| Equipment $\qquad$ | 400 0 0 |  | 4800 <br> 0 <br>  | 12 <br> 0 <br> 0 | 3 0 0 |
| Structures: $\qquad$ \$ $\qquad$ | 800 <br> 0 <br> 0 | ${ }^{12} \begin{array}{r}\text { 12 } \\ 0 \\ 0\end{array}{ }^{\text {Total }}$ | 9600 0 0 9600 | 12 <br> 0 <br> 0 | 40  <br> 00  <br> 0  <br>   |

Screen 11, Liabilities and Planned Debt Payment Schedule, is divided into two screens (Screen 11A and Screen 11B). Screen 11A contains the Long Term and Intermediate Liabilities and Debt Payments. Screen 11B contains the Short Term, Operating Debt, Accounts Payable, Advanced Government Receipts, and Nonfarm Liabilities and Debt Payments. To move from Screen 11A to Screen 11B, click on the proceed $>$ button. To get back to Screen 11A from Screen 11B, click on the "Screens" choice in the bar menu and select "Screens 11A \& B". When done with Screen 11A, click the mouse on the proceed $>$ button to close the window.

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.


When entering the interest rate planned for next year, you must type the decimal. The values entered in the "Amount of Payments" and "Payments Per Year" columns will be multiplied together to arrive at a total annual planned payment.

The "Farm Credit Stock" values at the top of Screen 11B are displayed. These values were entered as assets in Screen 9. The order of data entry is across the rows. The calculated values are the rows for Total Farm Liabilities/Payments and Total Liabilities/Payments. If there were previous year's data, the creditor description and beginning year liability columns will be displayed. Do not move the previous year's data to a different input line. The planned payments from previous year's data are used in the calculation of current portion for long term and intermediate term debt.

| W Cornell Cooperative Extension Dairy Farm Business Summary _- |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| FARM FAMILY FINANCIAL SITUATION$\qquad$ |  |  |  | Farm\# 46007. Year 1998 SCREEN11aDEBT PAYMENTS |  |  |  |  |
| Creditor (only first 12 characters used] | Amount |  | Amt of New Borrowings | Actual 1998 <br> Payments |  | Planned 1999 |  |  |
|  | Jan. 1. | Dec. 31. |  |  |  | Int. <br> Rate | Amt. <br> of <br> Payment | Pymts per Year |
|  | 1998 |  |  | Principal | Interest |  |  |  |
| Long Term Debt[ $\geq$ 10yrs.] |  |  | [\$] | [\$] | [\$] | [\%] | [\$] | [no.] |
| FLB | 202000 | 198400 | 0 |  | 17500 | 9.00 0.00 | 1700 | 12 0 |
|  |  |  | 0 | 0 | 0 | 0.00 | 0 | 0 |
|  |  |  | 0 | 0 | 0 | 0.00 | 0 | 0 |
|  | 0 |  | 0 |  | 0 | 0.00 | 0 | 0 |
| Intermediate Term Debt[>1yr., <10yrs] |  |  |  |  |  |  |  |  |
| PCA <br> First Bank John Deere | 110000 | 80500 |  | 29500 | 11500 | 12.00 | 3300 | 12 |
|  | 99000 | 95240 | 10000 | 3760 | 7130 | 7.40 | 1000 | 12 |
|  | 45000 | 133800 | 100000 | 11200 | 0 | 12.00 | 2000 | 12 |
|  | 0 | 0 | 0 |  | 0 | 0.00 | 0 | 0 |
|  | 0 | 0 | 0 | 0 | 0 | 0.00 | 0 | 0 |
|  | 0 | 0 | 0 | 0 | 0 | 0.00 | 0 | 0 |
|  | 0 | 0 | 0 | 0 | 0 | 0.00 | 0 | 0 |
|  | 0 | 0 | 0 | 0 | 0 | 0.00 | 0 | 0 |
|  |  |  |  |  | 0 | 0.00 |  | 0 |



Worksheet 6 is used to calculate the changes in operating accounts receivable. Enter the ending and beginning accounts receivable in the appropriate receipt category. The change in accounts receivable column and the totals for ending and beginning year will be calculated. The changes in accounts receivable will be carried forward to Screen 12, Summary of Receipts and Changes in Inventory and Accounts Receivable. If there were previous year's data, the beginning year values will be displayed.

## WORKSHEET 6. CHANGES IN OPERATING ACCOUNTS RECEIVABLE

| Account Number or Description | $\begin{aligned} & \text { Balance } \\ & 12 / 31 / 98 \\ & \hline \end{aligned}$ | - | $\begin{gathered} \text { Balance } \\ 1 / 1 / 98 \\ \hline \end{gathered}$ | $=$ | Change in <br> Accounts <br> Receivable | Allocation(Option:go directly to Scr.12,p.10) |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  | Receipt Category |  | $\begin{aligned} & \mathrm{gin} \\ & \mathrm{Rec} . \\ & \hline \end{aligned}$ |
| Milk Receipts: | 24:500 | - | 26651 | $=$ | - -2,5] | Milk | \$ | $-2.51$ |
|  |  |  |  |  |  | Dairy cattle |  |  |
| Eropu $^{\text {cosen }}$ | \$ ${ }^{5325}$ | - | \$ 73.9 | $=$ | \$ -2024 | Dairy calves |  |  |
| Cudoun | \$ | - | \$ | = | \$ -1000 | Other livestock |  |  |
|  |  |  |  |  |  | Crops <br> Government receipts |  | $-2.024$ |
|  | \$ |  |  |  |  |  |  |  |
|  |  |  | \$ | $=$ | \$ | Custom mach. work |  | -1000 |
|  |  |  |  |  |  | Gas tax refunds |  |  |
| TOTAL | \$ 29825 | - | \$ 35000 | $=$ | \$ | Other: |  |  |
| Must agree with: | (Screen 9) |  | (Screen 9) |  | (Screen 12) | ====equals====> | \$ | -5175 |



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 changes in accounts receivable are displayed. They were entered in Worksheet 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. The change in advanced government receipts is calculated from the liabilities entered in Screen 11B.

There is work space to itemize other receipt items but, only the total is entered. The calculated values include the change in inventory column, change in accounts receivable column, accrual receipts column, and the total accrual receipts row.

SUMMARY OF 1998 RECEIPTS AND CHANGES IN INVENTORY AND ACCOUNTS RECEIVABLE



Worksheet 7 is used to calculate the changes in operating accounts payable. Enter the account description, ending and beginning accounts payable and the appropriate code for the expense category. You may enter more than one account payable for a code. All the lines for that code will be totaled and displayed to the right of the expense category. The change in accounts payable columns and the totals for ending and beginning year will be calculated. The changes in accounts payable will be carried forward to Screen 13, Summary of Expenses and Changes in Inventory and Accounts Payable. If there were previous year's data, the account description and beginning year values will be displayed.

WORKSHEET 7. CHANGES IN OPERATING ACCOUNTS PAYABLE
Complete only if you have operating accounts payable.



Screen 13, Summary of Year's Expenses and Changes in Inventory or Prepaid Expenses and Accounts Payable, is divided in two screens (Screen 13A and Screen 13B). Screen 13A contains the hired labor, feed, machinery, and livestock expense categories. Screen 13B contains the crops, real estate, other, and nonfarm expense categories. To move from Screen 13A to Screen 13B, click the mouse on the proceed $>$ button. To get back to Screen 13A from Screen 13B, click the mouse on the "Screens" choice in the bar menu and select "Screens 13A \& B". When done with Screen 13A, click on the proceed button to close the window.

The change in inventory values in the "change in inventory or prepaid expenses" 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 change in accounts payable column is also displayed. These values are calculated from the data entered in Worksheet 7. The calculated values are the changes in inventory, changes in accounts payable, accrual expenses column, and the total accrual expenses row.

SUMMARY OF 1998 EXPENSES \& CHANGES IN INVENTORY \& ACCOUNTS PAYABLE

| See page 11 for instructions. <br> Farm Expenses | Cash <br> Amount Paid | Change in Inventory or Prepaid Expenses | $\begin{array}{r} \text { Change in } \\ +\quad \text { Accounts } \\ \text { Payable } \\ \hline \end{array}$ |  | REEN 13A. <br> Accrual <br> Expenses |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Hired Labor | \$ 48,750 | \$x_X | \$ |  | \$ ......48750. |
| Feed (see Guideline 2 on page 11) |  |  |  |  |  |
| Dairy grain \& concentrate | 10.000 | .........- 400 | 15325 |  | .-...- ${ }^{124929 .}$ |
| Dairy roughage | 20000 | ........-200 |  |  | ...... 202000 |
| Nondairy feed | 0 |  |  |  | ........- 0 |
| Machinery |  |  |  |  |  |
| Machine hire, rent \& lease | 9300 | x |  |  | ----.-9300. |
| Machinery repairs \& farm vehicle exp. | 40200 |  |  |  | ..... 402200 |
| Fuel, oil \& grease | 14,000 |  | $-200$ |  | ....3800 |
| $\underline{\text { Livestock }}$ |  |  |  |  |  |
| Replacement livestock | 500 | $\mathrm{x} \quad \mathrm{x}$ |  |  | ......-- ${ }^{500}$ |
| Breeding | 5000 | ........-300 |  |  | .-...-5300. |
| Veterinary \& medicine | 10.650 | .......... ${ }^{100}$ | $-2200$ |  | ....... ${ }^{83505}$ |
| Milk marketing | 8400 | x__ x |  |  | .-....-8400. |
| Bedding | 5000 | -.........50 |  |  | .-.-... 4950 |
| Milking supplies | 4000 | ..........-25 |  |  | .......4029 |
| Cattle lease \& rent | 960 | x |  |  | ---.-960. |
| Custom boarding | 7.000 | x _ 100 x |  |  | ---6900. |
| bST | 4000 | -........-- ${ }^{-25}$ |  |  | .-..... ${ }^{4025}$ |
| Other livestock expense | Other livestock expense |  |  |  |  |
| Crops |  |  |  | SCR | REEN 13B. |
| Fertilizer \& lime | 17,000 | -1250 |  |  | ${ }_{18250}$ |
| Seeds \& plants | 8.300 | $-25$ |  |  | 8325 |
| Spray, other crop expense | 8000 | $-700$ |  |  | 8.700 |
| Real Estate |  |  |  |  |  |
| Land, building \& fence repair | 6000 | -...-...-300 | 22.000 |  | .-...-28300 |
| Taxes | 8.500 | x |  |  | ....... 8.800 |
| Rent \& lease | 9600 | x |  |  | ------. 9600. |
| Other |  |  |  |  |  |
| Insurance | 4.000 | $\mathrm{x} \quad \mathrm{C}$ |  |  | .......-4000 |
| Utilities (farm share) | ${ }^{13800}$ | $x$ ___ $x$ | ${ }^{25}$ |  | .-.... ${ }^{13825}$ |
| Interest | 38.130 | x____x |  |  | ....... 38830 |
| Miscellaneous | 5.000 | .-....- 680 |  |  | . 43220 |
| TOTAL OPERATING | \$.........46630 | \$.......1498 | \$......34.900 |  | \$ ......42995 |
| Expansion livestock | \$ 0 | $\mathrm{x} \quad \mathrm{x}$ |  |  | \$ ..........0 |
| Purchase of other stock \& certificates (exclude Farm Credit stock) |  |  |  |  | \$ 1000 |
| Nonfarm Cash Expenses |  |  |  |  |  |
| Personal withdrawals \& family expend |  |  |  | \$ | 47.960 |


| W Cornell Cooperative Extension Dairy Farm Business Summary |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| SUMMARY OF 1998 EXPENSES \& CHANGES IN INVENTORY \& ACCOUNTS PAYABLE |  | $\nabla$ Farm\# 460 | 07. Year 199 | SCREEN13a |
| Fam Expenses | Cash Ammunt Paid | Change in Invent. or Prepaid Fxp | Change in Accts. = Payahle. | Accrual Fxpenses |
| Hired Labor | \$ 48750 | \$ 0 | \$ 0 | \$ 48750 |
| Feed [see Guideline 2 on page 11] |  |  |  |  |
| Dairy grain \& concentrate | 110000 | 400 | 15325 | 124925 |
| Dairy roughage | 20000 | -200 | 0 | 20200 |
| Nondairy Feed | 0 | 0 | 0 | 0 |
| Machinery |  |  |  |  |
| Machine hire, rent \& lease | 9300 | 0 | 0 | 9300 |
| Machinery repairs \& farm vehicle exp. | 40200 | 0 | 0 | 40200 |
| Fuel, oil $\%$ grease | 14000 | 0 | -200 | 13800 |
| Livestock |  |  |  |  |
| Replacement livestock | 500 | 0 | 0 | 500 |
| Breeding | 5000 | -300 | 0 | 5300 |
| Veterinary ${ }^{\text {t }}$ medicine | 10650 | 100 | -2200 | 8350 |
| Milk marketing | 8400 | 0 | 0 | 8400 |
| Bedding | 5000 | 50 | 0 | 4950 |
| Milking supplies | 4000 | -25 | 0 | 4025 |
| Cattle lease/rent | 960 | 0 | 0 | 960 |
| Custom boarding | 7000 | 100 | 0 | 6900 |
| bST expense | 4000 | -25 | 0 | 4025 |
| Other livestock expense | 440 | 0 | 0 | 440 |


| W Cornell Cooperative Extension Dairy Farm Business Summary |  |  |  |  |  |  | - 回x |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| SUMMARY OF 1998 EXPENSES \& CHANGES IN INVENTORY \& ACCOUNTS PAYABLE |  |  |  | Farm\# 46007. Year 1998 SCREEN13b |  |  |  |
| Farm Expenses | Cash <br> Amount Paid | Change in Invent. or Prepaid Exp |  | Change in Accts Payahle. |  | $=$ Accrual Fxpenses |  |
| Crops |  |  |  |  |  |  |  |
| Fertilizer $\%$ lime | \$ 17000 | \$ | -1250 | \$ | 0 | \$ | 18250 |
| Seeds \% plants | 8300 |  | -25 |  | 0 |  | 8325 |
| Spray, other crop expense | 8000 |  | -700 |  | 0 |  | 8700 |
| Real Estate |  |  |  |  |  |  |  |
| Land, building, fence repair | 6000 |  | -300 |  | 22000 |  | 28300 |
| Taxes | 8500 |  | 0 |  | 0 |  | 8500 |
| Rent \% lease | 9600 |  | 0 |  | 0 |  | 9600 |
| Other |  |  |  |  |  |  |  |
| Insurance | 4000 |  | 0 |  | 0 |  | 4000 |
| Utilities [farm share] | 13800 |  | 0 |  | 25 |  | 13825 |
| Interest | 38130 |  | 0 |  | 0 |  | 38130 |
| Miscellaneous | 5000 |  | 680 |  | 0 |  | 4320 |
| TOTAL OPERATING | \$ 406530 | \$ | -1495 | \$ | 34950 | \$ | 442975 |
| Expansion Livestock | \$ 0 | \$ | 0 | \$ | 0 | \$ | 0 |
| Purchase of other stock $*$ certificates [exclude Farm Credit stock] |  |  |  |  |  | \$ | 1000 |
| Personal withdrawals \% family expenditures |  |  |  |  |  | \$ | 47960 |

The final screen, Screen 14, contains optional input. The first section is where the breakdown of crop expenses are entered. 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 13B. The rows for hay crop, corn, and pasture 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 13B.

The second section of Screen 14 is the input for deferred tax calculations. Enter tax basis, market value, and proprietorship or partnership information.

OPTIONAL INPUT


| BREAKDOW／N OF1998 ACCRUAL CROP EXPENSES BY CROP <br> Crop | Accrual Fertilizer t．Lime |  | Farm\＃46007．Year 1998 SCREEN14aAccrual Seeds <br> \＆PlantsAccrual Spray， <br> Other Crop Expenses |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |
| Hay Crop［silage $z_{\text {dry }}$ d Corn［silage ${ }^{*}$ grain） Pasture All Other Crops | \＄ | 5000 | \＄ | 350045000 | \＄ | 100060000 |
|  |  | 12000 |  |  |  |  |
|  |  | 500 |  |  |  |  |
|  |  | 750 |  | 325 |  | 1700 |
| Totals from Screen 13 | \＄ | 18250 | \＄ | 8325 | \＄ | 8700 |

## OPTIONAL INPUT FOR DEFERRED TAX CALCULATIONS

It will be assumed that：［1］farm assets not listed below will not significantly influence deferred tax liability ［2］all gain on machinery and purchased livestock is ordinary gain

Tax Basis［undepreciated balancel of：［as of December 31，1998）
Purchased livestock［included in livestock inventory，Screen 4］
Machinery $\%$ equipment（included in machinery inventory，Screen 2］
Building \＆improvements［included in Real Estate inventory，Screen 5］
Part that is single purpose livestock structure，silos，$\%$ grain bins［\％or \＄］
Land（included in land and building inventory，Screen 5］
Operator residences［included in land t building inventory，Screen 5］
Nonfarm assets（included in Screen 9）


Cornell cooperative Extension Dairy Farm Business Summary
OPTIONAL INPUT FOR DEFERRED TAX CALCULATIONS
Farm\＃46007．Year 1998
SCREEN14b cont．

Market Value of：
Operator residences［included in land $\%$ bldg．inventory，Screen 5］
Single purpose livestock structure，silos $\&$ grain bins［ $\$ \mathbf{~ o r} \%$ of R．E．inventory］
Purchased livestock［ $\$$ or \％or livestock inventory）


Proprietorship：
Tax filing status
Nonfarm income of operator on which self－employment tax was paid


Partnership Information：
Tax Filing Status
Percent Share of Farm
Adjusted Gross Income
Percent Ownership of：
Current Assets
Livestock
Machinery
Real Estate
Nonfarm Assets Listed
Nonfarm Income of operator on which self－employment tax was paid


When data entry is completed, click the mouse on the proceed $>$ button to go back to the data entry menu.

## VERIFY THE DATA.

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

Use the Data Entry Menu option, "New Farm Input or Edit All Screens", to move through each screen for the farm, proofreading the data for errors. If an error is found click the mouse in the left portion of the data field until a vertical bar appears. Then type the correct value. When you press <enter>, any calculations on the screen will be calculated

## CALCULATE AND PRINT FARM SUMMARY. ${ }^{5}$

You are now ready to calculate and print a dairy farm business summary. From the Main Menu select Single Farm Report by clicking on it with the mouse or by typing "R".

The following screen will be displayed:


[^4]The "Year of Report" field is highlighted when you enter the Report Query screen. If the year is not correct for the report you want to print, type the correct year and press <enter>. (The "beep" indicates that the field is full.) The cursor moves to the "farm number" field. The farm number shown is for the farm you used last. If this is not the farm number you want to print a report for, type the correct farm number and press <enter>. The cursor moves to the "Title" field. If this is not the title you want printed on each page of the report, type the correct title and press <enter>. If you have not generated a report for this farm before, it is not necessary to click the "recalculate?" box. The calculations will be done automatically. If you have made corrections in the data, however, since it was last printed then do check the recalculate box. Click the mouse on the proceed $>$ button to perform the calculations for the farm report.

When the calculations are completed, you will see the following report screen:


To choose the pages you want to view on the screen or print, click the mouse on the arrow $(\downarrow)$ of the drop-down box labeled "choose pages". You may select "All" to print or view all the pages, or select a page description to print or view one page at a time.

| Progr. | $=$ Page 1, Progress of the Farm Business |
| :--- | :--- |
| Income | $=$ Page 2, Income Statement |
| Inc.(cont.) | $=$ Page 3, Income Statement, continued |
| Bal. | Page 4, Balance Sheet |
| Bal. Analy. | $=$ Page 5, Balance Sheet Analysis |
| Owner Equity | $=$ Page 6, Statement of Owner Equity |
| An. Cash Flow | Page 7, Annual Cash Flow Statement |
| Repaym. Analy. | $=$ Page 8, Repayment Analysis |
| Crop Analy. | $=$ Page 9, Cropping Program Analysis |
| Dairy Analy. | Page 10, Dairy Analysis |
| Cap/Lab. Analy. | $=$ Page 11, Capital \& Labor Efficiency Analysis |
| Rec. \& Exp. | $=$ Page 12, Receipts \& Expenses per cow \& per cwt. |
| Opt. Cash Flow St. | $=$ Optional Annual Cash Flow Statement |
| Opt. Cash Flow wks. | $=$ Optional Annual Cash Flow Worksheet |
| Diagnostics | $=$ Diagnostic Page |

Opt. Cond. Bal. St. = Condensed Balance Sheet Including Deferred Taxes
Once you have selected the page (or pages) to print or view, click the mouse in the box before "Preview" if you want to see the page on the screen before printing. An " $X$ " will appear in the box. (To unselect "Preview", click in the box again, and the "X" goes away.) With the preview box checked, click on the proceed $>$ button to view the page on the screen. The page is difficult to read, so click the mouse on the "Zoom In" button. Then use the scroll bars along the bottom and right side of the window to view the part of the page you wish to read. Or, position the magnifying glass icon over the area of the page you want to view and click the mouse. When done viewing the page, click on the "OK" button. You will be prompted "Do you want to print this report?" Press <enter> to return to the Report Query screen. Type a "Y" to print the page you just viewed.

To print the page without first previewing it on the screen, click the mouse in the box before "Print", then click on the proceed $>$ button. The program will print to the port and printer that are specified in your Windows ${ }^{\text {TM }}$ print manager.

To return to the main menu, click the mouse in the box in front of "Exit", then click on the proceed $>$ button.

## CHECK THE DIAGNOSTICS PAGE

The diagnostics page is 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 beginning on page 50 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.

## UPDATE OR DISPLAY A RECORD

Select the "Edit Farm Using Single Screens" option on the data entry menu to update a farm record. The program will take you to Screen 1, where the year and farm number are entered. The Screen 1 data will be displayed. Edit it if necessary. Click the mouse on "Screens" in the bar menu and select the screen to update. Use the cursor keys or mouse to move to the appropriate value and retype the new value over the old one. Important: If totals or calculated values appear on the screen, be sure to press return or use the _ arrow key to move out of the field that was updated so the calculated items will be recalculated. Close the screen when done updating by clicking on the proceed $>$ button. You may now move to another screen to make more changes in data or return to the main menu, by clicking on the proceed button in screen 1.

## SET NEW SCREEN DIRECTORY

It is possible to work with a different set of databases than those that are in your $\mathrm{c}: \backslash \mathrm{dffbs} \backslash \mathrm{database}$ directory (the default). Select "Set New Screen Directory" from the "Utilities Menu". In the space for "Screen Database Directory" enter a path name such as a: or c:\dfbs\data2, wherever the data files are that you want to work with (scrn*.*, old*.*, and wksht*.*). When you exit the DFBS program, the setting reverts to the default of $\mathrm{c}: \backslash \mathrm{dfbs} \backslash$ database.

## DELETE A RECORD

To delete a farm record, select "Utility Menu " on the main menu. Select "Delete Farm From Tables" on the Utility Menu. You will be prompted for a year and farm number. You will be asked confirmation of the year and farm record to delete.

## MAKE BACKUP COPIES OF THE DATA

To make a backup copy of your county/regional data, select "Utility Menu" from the main menu. Select "All Data Backup" on the utility menu. You will be prompted for the disk drive where the copied files should be stored. The files scrn*.*, old*.*, and wksht*.* will be copied from your data directory on the hard drive. Make a copy to a floppy disk to send to Cornell. Also, make a backup for your files.

## MAKE SELECTED COPY OF THE DATA

Use the utility menu option, "Selected Farm Copy" when you want to put one or more farms' data on a floppy disk. When prompted enter the disk drive and path where the selected farms' data should be stored. A list of the farms by year will be displayed. These are the farm records that are included in the scrn*.*, old*.*, and wksht*.* files in the c:ldfbs $\backslash$ database directory (or the data directory you are working with if you used "Set New Screen Directory"). Select one farm record by clicking the mouse on the farm number for the appropriate year. A " $\sqrt{ }$ " will appear before the farm number. Select more than one farm record by holding down the "Control" key while clicking the mouse on the farm numbers for the appropriate years. For example, to create a diskette with data for farm number 46007, select 46007 for 1995,46007 for 1996,46007 for 1997 , and 46007 for 1998 . This will provide the data necessary when printing the report for the "Progress of the Farm Business". After selecting the farm records, press "Escape" to continue or click the mouse outside the farm number list box. You will be prompted to enter a diskette if you haven't already done so, then press any key to continue. The files generated will be named scrn1.dbf, scrn1.cdx, scrn2.dbf, scrn2.cdx, etc.; the same filenames of the data in $\mathrm{c}: \backslash \mathrm{dfbs} \backslash$ database. If files by these same names already exist on your destination drive, they will be overwritten.

## APPEND FARM FILES TO DATABASE

Use the utility menu option, "Append Farms to Tables", when you want to add a farm record to the data that is in c:\dfbs\database (or wherever your screen directory is currently set). An existing farm record will not be overwritten. To replace a farm record first use "Delete Farm From Tables" to delete the farm, then add the farm using "Append". After entering the disk drive where the new records are to be retrieved, there will be a listing of the farms by year that are on the disk drive. Select one farm for one year by clicking the mouse on the farm number. A " $\sqrt{ }$ " will appear before the farm number. Select more than one farm by holding down the "Control" key and clicking the mouse on the farm numbers. Press "Escape" to continue or click the mouse outside the farm number list box.

To leave the Micro DFBS program, select "Exit to Operating System" on the main menu.

CORNELL COOPERATIVE EXTENSION
Prepared by DEPARTMENT OF AGRICULTURAL,
RESOURCE, AND MANAGERIAL ECONOMICS
CORNELL UNIVERSITY, Ithaca, New York
Name $\qquad$
Address

1998 DAIRY FARM BUSINESS SUMMARY

Farm No. 46007


## PROGRESS OF THE FARM BUSINESS

| SELECTED FACTORS | 1996 |  | 1997 |  | 1998 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Size of Business |  |  |  |  |  |  |
| Avg \# of cows |  | 137 |  | 147 |  | 157 |
| Avg \# of heifers |  | 90 |  | 95 |  | 101 |
| Milk sold, lbs. |  | 2805230 |  | 3200000 |  | 3500000 |
| Worker equiv. |  | 3.17 |  | 5.00 |  | 5.00 |
| Total tillable acres |  | 450 |  | 450 |  | 450 |
| Rates of Production |  |  |  |  |  |  |
| Milk sold per cow, lbs. |  | 20476 |  | 21769 |  | 22293 |
| Hay DM per acre, tons |  | 3.1 |  | 3.4 |  | 3.4 |
| Corn silage per acre, tons |  | 16.4 |  | 18.9 |  | 18.9 |
| Labor Efficiency |  |  |  |  |  |  |
| Cows per worker |  | 43 |  | 29 |  | 31 |
| Milk sold per worker, lbs. |  | 884931 |  | 640000 |  | 700000 |
| Cost Control |  |  |  |  |  |  |
| Grain \& conc. purch. as \% milk sales |  | 36\% |  | 32\% |  | 29\% |
| Dairy feed \& crop exp. per cwt. milk | \$ | 6.05 | \$ | 5.64 | \$ | 5.15 |
| Labor and mach, costs per cow | \$ | 1011 | \$ | 1470 | \$ | 1388 |
| Operating cost of prod. milk per cwt. | \$ | 11.87 | \$ | 12.04 | \$ | 11.01 |
| Capital Efficiency (average for year) 6689 |  |  |  |  |  |  |
| Farm capital per cow |  | 6689 | \$ | 6658 | \$ | 6234 |
| Machinery and equipment per cow | S | 1397 | \$ | 1509 | \$ | 1413 |
| Asset turnover ratio |  | 0.43 |  | 0.48 |  | 0.52 |
| Profitability |  |  |  |  |  |  |
| Net farm income w/o apprec. | \$ | -605 | S | - 37800 | \$ | 6100 |
| Net farm income w/ appreciation | \$ | 1420 | \$ | -19650 | \$ | 24250 |
| Labor \& management income per op/mgr | \$ | -9116 | \$ | -38142 | \$ | -16492 |
| Rate return on equity capital w/apprec. |  | -15.2\% |  | -23.5\% |  | -12.6\% |
| Rate return on all capital w/apprec. |  | -1.5\% |  | -5.6\% |  | -1.2\% |
| Financial Summary \$ 407636 |  |  |  |  |  |  |
| Farm net worth, end year | \$ | 387696 | \$ | 407636 | \$ | 407636 |
| Debt to asset ratio |  | 0.58 |  | 0.60 |  | 0.60 |
| Farm debt per cow | \$ | 3502 | \$ | 3996 | \$ | 3998 |
| Cash flow coverage ratio |  | 0.23 |  | 0.49 |  | 0.63 |
| PARTNERSHIP , ON-FARM COMPUTER |  | OWNER | F | LL-TIME | RY | * |


| EXPENSES | Cash <br> Amount paid |  | Change in Invent.* or Prepaid Exp. |  |  | Changes in Accts <br> + Payable** |  |  | Accrual <br> Expenses |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Hired Labor | \$ | 48750 | \$ | 0 | < | \$ | 0 | \$ | 48750 |
| Feed 124925 |  |  |  |  |  |  |  |  |  |
| Dairy grain \& conc. |  | 110000 |  | 400 |  |  | 15325 |  | 124925 |
| Dairy roughage |  | 20000 |  | -200 |  |  | 0 |  | 20200 |
| Nondairy |  | 0 |  | 0 |  |  | 0 |  | 0 |
| Machinery |  |  |  |  |  |  |  |  |  |
| Mach. hire, rent/lease |  | 9300 |  | 0 | < |  | 0 |  | 9300 |
| Machinery repairs/veh. |  | 40200 |  | 0 |  |  | 0 |  | 40200 |
| Fuel, oil \& grease |  | 14000 |  | 0 |  |  | -200 |  | 13800 |
| Livestock |  | 500 |  | 0 |  |  | 0 |  | 500 |
| Replacement livestock |  | 5000 |  | - 0 |  |  | 0 |  | 5300 |
| Breeding |  | 50650 |  | -300 |  |  | - |  | 5300 8350 |
| Veterinary \& medicine |  | 10650 8400 |  | 100 0 |  |  | -2200 0 |  | 8350 8400 |
| Milk marketing |  | 8400 5000 |  | 50 |  |  | 0 |  | 84950 |
| Bedding Milking supplies |  | 5000 4000 |  | - 50 |  |  | 0 0 |  | 4950 |
| Cattle lease/rent |  | 960 |  | 0 | < |  | 0 |  | 960 |
| Custom boarding |  | 7000 |  | 100 |  |  | 0 |  | 6900 |
| bST expense |  | 4000 |  | -25 |  |  | , |  | 4025 |
| Other livestock expense |  | 440 |  | 0 |  |  | 0 |  | 440 |
| Crops 17000 -1250 18250 |  |  |  |  |  |  |  |  |  |
| Fertilizer \& lime |  | 17000 |  | -1250 |  |  | 0 |  | 18250 |
| Seeds \& plants |  | 8300 |  | -25 |  |  | 0 |  | 8325 |
| Spray, other crop exp. |  | 8000 |  | -700 |  |  | 0 |  | 8700 |
| Real Estate 6000 |  |  |  |  |  |  |  |  |  |
| Land/bldg/fence repair |  | 6000 |  | -300 |  |  | 22000 |  | 28300 |
| Taxes |  | 8500 |  |  | < |  | 0 |  | 8500 |
| Rent \& lease |  | 9600 |  |  | << |  | 0 |  | 9600 |
| $\begin{array}{llllll}\text { Other } & 4000 & 0 \ll & 0 & 0000\end{array}$ |  |  |  |  |  |  |  |  |  |
| Insurance |  | 13800 |  |  | << |  | 25 |  | 13825 |
| Utilities (farm share) |  | 38130 |  |  | < |  | 0 |  | 38130 |
| $\begin{array}{llll}\text { Miscellaneous } & 5000 & 680 & 0\end{array}$ |  |  |  |  |  |  |  |  |  |
| TOTAL OPERATING | \$ | 406530 | \$ | -1495 |  | \$ | 34950 | \$ | 442975 |
| Expansion livestock | \$ | 0 | \$ |  | < | \$ | 0 | \$ | 0 |
| Machinery depreciation |  |  |  |  |  |  |  | \$ | 34000 |
| Building depreciation |  |  |  |  |  |  |  | \$ | 10000 |
| TOTAL ACCRUAL EX |  |  |  |  |  |  |  | \$ | 486975 |

[^5][^6]
## INCOME STATEMENT (continued)



RETURN TO OPERATOR(S)LABOR \& MANAGEMENT



| Financial Ratios |  | Farm Business |
| :--- | :--- | :---: | :---: |$\quad$ Farm \& Nonfarm


| Debt Levels | Per Cow |  | Per Tillable Acre Owned |  |
| :---: | :---: | :---: | :---: | :---: |
| Total farm debt | \$ | 3998 | \$ | 2066 |
| Long term debt |  | 1436 |  | 742 |
| Intermediate + Long-term |  | 3154 |  | 1630 |
| Intermediate + Current |  | 2563 |  | 1324 |


| Farm Inventory |  | Real <br> Estate |  | Machinery <br> Equipment | Livestock |  | Feed \& Supplies |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Beginning of Year | \$ | 385000 | \$ | 188000 | \$ | 174800 | \$ | 101620 |
| Purchases |  | $40000^{*}$ |  | 100000 |  |  |  |  |
| + Noncash Transfer to Farm |  | 10000 |  | 2500 |  |  |  |  |
| - Lost Capital |  | 5000 |  |  |  |  |  |  |
| - Net Sales |  | 10250 |  | 300 |  |  |  |  |
| - Depreciation |  | 10000 |  | 34000 |  |  |  |  |
| $=$ Net Investment |  | 24750 |  | 68200 |  | -1300** |  |  |
| Appreciation |  | 8250 |  | -6200 |  | 15375 |  |  |
| End of Year | \$ | 418000 | \$ | 250000 | \$ | 188875 | \$ | 110575 |

[^7]
## STATEMENT OF OWNER EQUITY (RECONCLLIATION)

| Beginning of year farm net worth |  |  | FARM BUSINESS |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | S | 387696 |
| Net farm income without appreciation |  | \$ | 6100 |  |  |
| + Nonfarm cash income |  | + | 26500 |  |  |
| - Personal withdrawals and family expenditures excluding nonfarm borrowings |  | - | 41960 |  |  |
| RETAINED EARNINGS |  | = |  | +\$ | -9360 |
| Nonfarm noncash transfers to farm |  | \$ | 13550 |  |  |
| + Cash used in business from nonfarm capital |  | + | 2600 |  |  |
| - Note/mortgage from farm real est. sold (nonfarm) |  | - | 0 |  |  |
| CONTRIBUTED/WITHDRAWN CAPITAL |  | = |  | +5 | 16150 |
| Appreciation |  | \$ | 18150 |  |  |
| - Lost captial |  | - | 5000 |  |  |
| CHANGE IN VALUATION EQUITY |  |  |  | +\$ | 13150 |
| IMBALANCE/ERROR |  |  |  | -\$ | 0 |
| End of year farm net worth |  |  |  | = \$ | 407636 |
| Change in net worth with appreciation |  |  |  | \$ | 19940 |
|  |  | arm <br> siness |  |  |  <br> Nonfarm |
| Change in net worth |  |  |  |  |  |
| Without appreciation | \$ | 1790 |  |  |  |
| With appreciation | \$ | 19940 |  | S | 14720 |

The Statement of Owner Equity has two purposes: It allows (1) verification that the accrual income statement and market value balance sheet are interrelated and consistent (in accountants' terms, they reconcile) and (2) identification of the causes of change in equity that occurred on the farm during the year. The Statement of Owner Equity allows you to determine to what degree the change in equity was caused by (1) earnings from the business, and nonfarm income, in excess of withdrawals being retained in the business (called retained earnings), (2) outside capital being invested in the business or farm capital being iemoved from the business (called contributed/withdrawn capital), and (3) increases or decreases in the value (price) of assets owned by the business (called change in valuation equity).

## ANNUAL CASH FLOW STATEMENT

## CASH FLOW FROM OPERATING ACTIVITIES


$=\quad$ Net Provided from Reserves
IMBALANCE (ERROR)

Farm No. 46007
Page 8
December 23, 1998

REPAYMENT ANALYSIS

| Debt Payments |  | Planned <br> for 1998 | * |  | Made in 1998 |  |  | Planned or 1999 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Long term | \$ | 20400 |  | \$ | 21100 |  | \$ | 20400 |
| Intermediate term |  | 75600 |  |  | 63090 |  |  | 75600 |
| Short term |  | 30000 |  |  | 28800 |  |  | 30000 |
| Operating (net reduction) |  | 1500 |  |  | 0 |  |  | 1500 |
| Accounts payable (net reduction) |  | 40000 |  |  | 0 |  |  | 40000 |
| Total | \$ | 167500 |  | \$ | 112990 |  | \$ | 167500 |
| $(\%$ made of planned $=67 \%)$ |  |  |  |  |  |  |  |  |
| Per cow | \$ | 1067 |  | \$ | 720 |  |  |  |
| Per cwt 1998 milk | \$ | 4.79 |  | \$ | 3.23 |  |  |  |
| Percent of total 1998 receipts |  | 34 | \% |  | 23 | \% |  |  |
| Percent of 1998 milk receipts |  | 38 | \% |  | 26 | \% |  |  |

* If on Business Summary in 1997

| Cash Flow Coverage Ratio |  | Debt Coverage Ratio |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Cash Farm Receipts | \$ 490050 | Net Farm Income (w/o apprec.) | \$ | 6100 |
| - Cash Farm Expenses | 406530 | + Depreciation |  | 44000 |
| + Interest Paid (cash) | 38130 | + Interest Paid (accrual) |  | 38130 |
| - Net Personal Withdrawals from Farm** | 15460 | - Net Personal Withdrawals from Farm** |  | 15460 |
| $(\mathrm{A})=$ Amount Available for Debt Service | 106190 | $\left(A^{\prime}\right)=$ Repayment Capacity |  | 72770 |
| (B) = Debt Payments Planned for 1998 | 167500 | (B) = Debt Payments Planned for 1998 |  | 167500 |
| (A/B) Cash Flow Coverage |  | ( $\mathrm{A}^{1 / B}$ ) Debt Coverage |  |  |
| Ratio for 1998 | 0.63 | Ratio for 1998 |  | 0.43 |

** Personal withdrawals \& family expenditures less nonfarm income and nonfarm money borrowed.

CROPPING PROGRAM ANAL YSIS

| LAND | OWNED | RENTED | TOTAL |
| :---: | :---: | :---: | :---: |
| Tillable | 300 | 150 | 450 |
| Nontillable Pasture | 10 | 0 | 10 |
| Other Nontillable | 13 | 0 | 13 |
| Total | 323 | 150 | 473 |
|  |  | TOTAL | PRODUCTION |
| CROP YIELDS | ACRES | PRODUCTION | PER ACRE |
| Dry hay |  | 246 Tons DM |  |
| Hay crop silage |  | 360 Tons DM |  |
| Total Hay Crop Production | 180 | 606 Tons DM | 3.37 Tons DM |
| Com silage | 110 | 2080 Tons | 18.91 Tons |
|  |  | 0 Tons DM | 0.00 Tons DM |
| Other forage Total Forage | 290 | 1334 Tons DM | 4.60 Tons DM 11148 Bushels |
| Corn grain | 100 | 11148 Bushels | 111.48 Bushels 60.00 Bushels |
| Oats | 15 | 900 Bushels | 60.00 Bushels <br> 53.33 Bushels |
| Wheat | 15 | 800 Bushels | 53.33 Bushels |
| Other crops | ${ }^{0}$ |  |  |
| Tillable pasture | 30 0 |  |  |
| Idle tillable land | 450 |  |  |


| CROP RELATED ACCRUAL EXPENSES |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | TOTAL PER |  |  | ALL CORN |  | CORN SLILAGE |  | CORN GRAIN/ |  |
| CROP EXPENSES |  | TILL. ACRE |  |  | PER ACRE |  | /TON DM |  | DRY SHELL BU |  |
| Fert. \& lime |  | \$ |  |  | \$ | 57.14 | \$ | \$ 8.63 | \$ | 0.51 |
| Seeds \& plants |  |  |  |  |  | 21.43 |  | 3.24 |  | 0.19 |
| Spray \& other crop exp. |  |  |  |  |  | 28.57 |  | 4.32 |  | 0.26 |
| Total Crop Expense |  | \$ |  |  | \$ | 107.14 | \$ | \$ 16.19 | \$ | 0.96 |
|  |  | --HA | RO |  |  |  |  | ---PASTURE | CROP |  |
| CROP EXPENSES |  | PER ACRE |  | ON DM |  |  | PER T | TILL. ACRE | PER TOT | AL ACRE |
| Fert. \& lime | \$ | 27.78 | \$ | 8.25 |  |  | \$ | 16.67 | \$ | 12.50 |
| Seeds \& plants |  | 19.44 |  | 5.78 |  |  |  | 0.00 |  | 0.00 |
| Spray \& other crop exp. |  | 5.56 |  | 1.65 |  |  |  | 0.00 |  | 0.00 |
| Total Crop Expense | \$ | 52.78 | \$ | 15.68 |  |  | \$ | 16.67 | \$ | 12.50 |

MACHINERY
Fuel, oil \& grease
Mach. repair \& farm vehicle exp.
Machine hire, rent \& lease
Interest ( 0.05
Depreciation
Total Machinery Cost

TOTAL
\$ 13800
40200
9300
11093
34000
\$ 108393

PER TILLABLE ACRE
\$ 30.67
89.33
20.67
24.65
75.56
\$ 240.87

DAIRY ANALYSIS

| Dairy Inventory | Dairy Cows |  | Heifers |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | Bred |  |  |  | Open |  |  | Calves |  |  |
|  |  |  | No. |  | alue |  | No. |  | Value | No. |  | Value |
| Beg. of year | 120 | \$ 120000 | 25 | \$ | 21250 |  | 21 | \$ | 11550 | 55 | \$ | 22000 |
| + Change in Inv. (w/o apprec.) |  | -5000 |  |  | 4250 |  |  |  | -550 |  |  | 0 |
| + Appreciation |  | 11500 |  |  | 1500 |  |  |  | 1000 |  |  | 1375 |
| =End of year | 115 | \$ 126500 | 30 | \$ | 27000 |  | 20 | \$ | 12000 | 55 | \$ | 23375 |
| Total End |  |  |  |  |  |  |  |  |  |  |  |  |
| (incl. leased) | 155 |  |  |  |  |  |  |  |  |  |  |  |
| Average Number | 157 |  | 101 | , | ge Grou | ups |  |  |  |  |  |  |
| Milk Production |  |  |  |  |  |  |  |  |  |  |  |  |
| Total milk sold |  |  |  |  | 00000 | lbs |  |  |  |  |  |  |
| Milk sold per cow |  |  |  |  | 22293 | lbs. |  |  |  |  |  |  |
| Average milk plant test |  |  |  |  | 3.70 | \% butte |  |  |  |  |  |  |
| Accrual Receipts From | Dairy |  |  |  |  | Total |  |  | er Cow |  |  | er Cwt. |
| Milk |  |  |  |  | \$ | 435349 |  | \$ | 2773 | \$ |  | 12.44 |
| Dairy Cattle (including | culls) |  |  |  |  | 19100 |  |  | 122 |  |  | 0.55 |
| Dairy Calves |  |  |  |  |  | 4500 458949 |  |  | 29 2924 |  |  | 0.13 13.12 |
| Total |  |  |  |  |  | 458949 426949 |  | \$ | 2924 2719 | \$ |  | 13.12 12.20 |
| Net Milk Receipts |  |  |  |  |  | 426949 |  | \$ | 2719 | \$ |  | 12.20 |
| Accrual Costs and Profitability |  |  |  |  |  |  |  |  |  |  |  |  |
| Operating cost of produc | cing mik |  |  |  | \$ | 385249 |  | \$ | 2454 | \$ |  | 11.01 |
| Purchased inputs cost of | produ | cing milk* |  |  |  | 429249 |  |  | 2734 |  |  | 12.26 |
| Total cost of producing | milk |  |  |  |  | 523332 |  |  | 3333 |  |  | 14.95 |
| Net Farm Income with a | apprec. |  |  |  |  | 24250 |  |  | 154 |  |  | 0.69 |
| Net Farm Income without | ut appr |  |  |  |  | 6100 |  |  | 39 |  |  | 0.17 |
| Dairy Related Accrual Expenses |  |  |  |  |  |  |  |  |  |  |  |  |
| Purchased dairy grain \& | conce | trates |  |  | \$ | 124925 |  | \$ | 796 | \$ |  | 3.57 |
| Purchased dairy roughag |  |  |  |  |  | 20200 |  |  | 129 |  |  | 0.58 |
| Total Purchased Dair | y Feed |  |  |  |  | 145125 |  |  | 924 |  |  | 4.15 |
| Purchased grain \& concentrates |  |  |  |  |  |  |  |  |  |  |  |  |
| Purchased feed and crop | pexp. |  |  |  | \$ | 180400 |  | \$ | 1149 | \$ |  | 5.15 |
| Purchased feed and crop exp. |  |  |  |  |  |  |  |  |  |  |  |  |
| Breeding |  |  |  |  | \$ | 5300 8350 |  | \$ | 34 53 | \$ |  | 0.15 0.24 |
| Veterinary \& medicine |  |  |  |  |  | 8350 8400 |  |  | 53 54 |  |  | 0.24 0.24 |
| Milk marketing |  |  |  |  |  | 8400 4950 |  |  | 54 32 |  |  | 0.24 0.14 |
| Bedding Milking supplies |  |  |  |  |  | 4025 |  |  | 26 |  |  | 0.14 0.12 |
| Cattle lease |  |  |  |  |  | 960 |  |  | 6 |  |  | 0.03 |
| Custom boarding |  |  |  |  |  | 6900 |  |  | 44 |  |  | 0.20 |
| bST expense |  |  |  |  |  | 4025 |  |  | 26 3 |  |  | 0.12 0.01 |
| Other livestock expense |  |  |  |  |  |  |  |  |  |  |  |  |

D.H.I.C, Herringbone , Freestall , 3x/day , bST Usage $=<\mathbf{2 5 \%}$
*Total cost of producing milk excluding unpaid family labor and operator's labor, management and capital.

CAPITAL \& LABOR EFFICIENCY ANALYSIS
Capital Efficiency (Average for Year)


| Labor Cost | Total |  | Per Cow |  | Per Cwt. |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Value of Operator (s) |  |  |  |  |  |  |
| Labor (\$ $1600 /$ month)* | \$ | 41600 | \$ | 265 | \$ | 1.19 |
| Family unpaid (\$1600 /month)* |  | 19200 |  | 122 |  | 0.55 |
| Hired |  | 48750 |  | 311 |  | 1.39 |
| Total Labor | \$ | 109550 | \$ | 698 | \$ | 3.13 |
| Machinery Cost (see page 9) | \$ | 108393 | \$ | 690 | \$ | 3.10 |
| Total Labor \& Machinery Costs | \$ | 217943 | \$ | 1388 | \$ | 6.23 |

*When comparing to previous years data, please note 1990 constants used in calculations were $\$ 1250 /$ month for both the Value of Operator(s) Labor and Unpaid Family Labor. In 1991, these values were $\$ 1,300 /$ month, in $1992=\$ 1,350 /$ month, $1993=\$ 1,400 /$ month, $1994,1995=\$ 1,450 /$ month, $1996=\$ 1,500 /$ month, and 1997=\$1,550/month

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RECEIPTS AND EXPENSES PER COW AND PER CWT, 1996 - 1998

|  | 1996 |  | 1997 |  | 1998 |  |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: |
| Item | Per Cow | PerCwt | Per Cow | Per Cwt | Per Cow | Per Cwt |
| Average Number of Cows <br> Cwt of Milk Sold | 137 | 28052 | 147 | 3000 | 157 | 35000 |

ACCRUAL OPER, RECEIPTS

| Milk | \$ | 2442 | \$ | 11.92 | \$ | 2663 | \$ | 12.23 | \$ | 2773 | \$ | 12.44 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Dairy cattle |  | 258 |  | 1.26 |  | 130 |  | 0.60 |  | 122 |  | 0.55 |
| Dairy calves |  | 29 |  | 0.14 |  | 31 |  | 0.14 |  | 29 |  | 0.13 |
| Other livestock |  | 0 |  | 0.00 |  | 0 |  | 0.00 |  | 0 |  | 0.00 |
| Crops |  | 63 |  | 0.31 |  | 143 |  | 0.66 |  | 134 |  | 0.60 |
| Miscellaneous receipts |  | 80 |  | 0.39 |  | 89 |  | 0.41 |  | 83 |  | 0.37 |
| Total | \$ | 2872 | \$ | 14.03 | \$ | 3056 | \$ | 14.04 | \$ | 3141 | S | 14.09 |

## ACCRUAL OPER EXPENSES

| Hired Labor \$ | 182 | \$ | 0.89 | \$ | 332 | \$ | 1.52 | \$ | 311 | \$ | 1.39 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Dairy grain \& concentrate | 876 |  | 4.28 |  | 850 |  | 3.90 |  | 796 |  | 3.57 |
| Dairy roughage | 109 |  | 0.53 |  | 137 |  | 0.63 |  | 129 |  | 0.58 |
| Nondairy feed | 0 |  | 0.00 |  | 0 |  | 0.00 |  | 0 |  | 0.00 |
| Machine hire/rent/lease | 73 |  | 0.36 |  | 63 |  | 0.29 |  | 59 |  | 0.27 |
| Mach.repair + vehicle exp. | 285 |  | 1.39 |  | 273 |  | 1.26 |  | 256 |  | 1.15 |
| Fuel, oil \& grease | 102 |  | 0.50 |  | 94 |  | 0.43 |  | 88 |  | 0.39 |
| Replacement livestock | 22 |  | 0.11 |  | 3 |  | 0.02 |  | 3 |  | 0.01 |
| Breeding | 33 |  | 0.16 |  | 36 |  | 0.17 |  | 34 |  | 0.15 |
| Veterinary \& medicine | 94 |  | 0.46 |  | 57 |  | 0.26 |  | 53 |  | 0.24 |
| Milk marketing | 61 |  | 0.30 |  | 57 |  | 0.26 |  | 54 |  | 0.24 |
| Bedding | 32 |  | 0.16 |  | 34 |  | 0.15 |  | 32 |  | 0.14 |
| Milking supplies | 25 |  | 0.12 |  | 27 |  | 0.13 |  | 26 |  | 0.12 |
| Cattle lease | 7 |  | 0.03 |  | 7 |  | 0.03 |  | 6 |  | 0.03 |
| Custom boarding | 44 |  | 0.21 |  | 47 |  | 0.22 |  | 44 |  | 0.20 |
| bST expense | 22 |  | 0.11 |  | 27 |  | 0.13 |  | 26 |  | 0.12 |
| Other livestock expense | 36 |  | 0.18 |  | 3 |  | 0.01 |  | 3 |  | 0.01 |
| Fertilizer \& lime | 145 |  | 0.71 |  | 124 |  | 0.57 |  | 116 |  | 0.52 |
| Seeds \& plants ${ }^{\text {' }}$ | 57 |  | 0.28 |  | 57 |  | 0.26 |  | 53 |  | 0.24 |
| Spray/other crop expense | 50 |  | 0.24 |  | 59 |  | 0.27 |  | 55 |  | 0.25 |
| Land, bldg., fence repair | 41 |  | 0.20 |  | 193 |  | 0.88 |  | 180 |  | 0.81 |
| Taxes | 58 |  | 0.29 |  | 58 |  | 0.27 |  | 54 |  | 0.24 |
| Real estate rent/lease | 66 |  | 0.32 |  | 65 |  | 0.30 |  | 61 |  | 0.27 |
| Insurance | 26 |  | 0.12 |  | 27 |  | 0.13 |  | 25 |  | 0.11 |
| Utilities | 95 |  | 0.46 |  | 94 |  | 0.43 |  | 88 |  | 0.40 |
| Interest paid | 292 |  | 1.43 |  | 259 |  | 1.19 |  | 243 |  | 1.09 |
| Miscellaneous | 29 |  | 0.14 |  | 29 |  | 0.14 |  | 28 |  | 0.12 |
| Total Oper. Exp. | 2862 |  | 13.98 |  | 3013 |  | 13.84 |  | 2821 |  | 12.66 |
| Expansion Livestock | 0 |  | 0.00 |  | 0 |  | 0.00 |  | 0 |  | 0.00 |
| Machinery Depreciation | 15 |  | 0.07 |  | 231 |  | 1.06 |  | 217 |  | 0.97 |
| Real Estate Depreciation | 0 |  | 0.00 |  | 68 |  | 0.31 |  | 64 |  | 0.29 |
| Total Expenses | 2876 |  | 14.05 |  | 3313 |  | 15.22 |  | 3102 |  | 13.91 |
| Net Farm Income w/o apprec | -4 |  | -0.02 |  | -257 |  | -1.18 |  | 39 |  | 0.17 |

## ANNUAL CASH FLOW STATEMENT

Cash Inflows
Beginning farm cash, checking \& savings ..... \$ ..... 3500
Cash farm receipts ..... 490050
Sale of assets: Machinery ..... 300
Real estate ..... 10250
Other stock \& certificates ..... 1725
Money borrowed (intermediate \& long term) ..... 100000
Money borrowed (short term) ..... 30000
Increase in operating debt ..... 500
Nonfarm income ..... 26500
Cash from nonfarm capital used in business ..... 2600
Money borrowed - nonfarm ..... 6000
TOTAL ..... \$
671425
Cash Outflows
Cash farm expenses ..... \$ 406530
Capital purchases: Expansion livestock ..... 0
Machinery ..... 100000
Real estate ..... 40000
Other stock \& certificates ..... 1000
Principal payments (intermediate \& long-term) ..... 48060
Principal payments (short term) ..... 27000
Decrease in operating debt ..... 0
Personal withdrawals \& family expenditures, including nonfarm debt payments ..... 47960
Ending farm cash, checking \& savings ..... 875
TOTAL ..... $\$$ ..... 671425
Imbalance (error) ..... \$

## DIAGNOSTIC REPORT

## LIVESTOCK INVENTORY

Livestock appreciation $>$ change in inventory. Appreciation $=15375$ Change in Inventory $=\mathbf{- 1 3 0 0}$ LIVESTOCK AND BUSINESS DESCRIPTION

Milk per cow is outside normal range, equals 22293
ASSETS AND LIABILITIES
Scheduled debt payments $>35 \%$ of milk sales
Debt per cow $>\$ 3,500,=3998$

## RECEIPTS

Government receipts $>\$ 5000,=10950$
Gas tax refund in excess of $\$ 500,=700$

## MANAGEMENT PERFORMANCE MEASURES

Net Farm income w/o appreciation $<\$ 10,000$ or $>\$ 50,000,=6100$
Labor and management income per operator $<\$ 0$ or $>\$ 30,000,=-16492$
Rate of return on equity capital w/o appreciation is $<=0 \%$ or $>10 \%,=-17.1$
Cash flow coverage ratio $<.8$ or $>1.2,=0.63$
Cash inflow $=\$ 671425$, cash outflow $=\$ 671425$, imbalance $=\$ \quad 0$
OTHER
Farm coded irregular
Dairy Farm
Full-Time Farm
Owner Farm

## CONDENSED BALANCE SHEET INCLUDING DEFERRED TAXES December 31, 1998

| ASSETS |  | LIABILITIES \& NET WORTH |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  |  | Current debt \& payables | \$ | 130814 |
|  |  | Current deferred taxes | \$ | 31415 |
| Total Current Assets | - 141675 | Total Current Liabilities | \$ | 162229 |
|  |  | Intermediate debt \& leases | \$ | 266387 |
|  |  | Intermediate deferred taxes | \$ | 99772 |
| Total Inter. Assets | S 440910 | Total Inter. Liabilities | \$ | 366159 |
|  |  | Long term debt \& leases | \$ | 222509 |
|  |  | Long term deferred taxes | \$ | 47745 |
| Total Long Term Assets | S 444761 | Total Long Term Liab. | \$ | 270254 |
| TOTAL FARM ASSETS | \$ 1027346 | TOTAL FARM LIABILITIES | \$ | 798642 |
|  |  | Farm Net Worth |  | 228704 |
|  |  | Percent Equity (Farm) |  | 22.26\% |
|  |  | Nonfarm debt | \$ | 5000 |
|  |  | Nonfarm deferred taxes | \$ | 6075 |
| Total Nonfarm Assets | \$ 57560 | Total Nonfarm Liabilities | \$ | 11075 |
| TOTAL ASSETS | \$ 1084906 | TOTAL LIABILITIES | \$ | 809717 |
|  |  | Total Net Worth | \$ | 275189 |
|  |  | Percent Equity (Total) |  | 25.37\% |

Deferred taxes represent an estimate of the taxes that would be paid if the farm were sold on the balance sheet date. Accuracy is dependent on the accuracy of the market values and the tax basis data provided. Any tax liability for assets other than livestock, machinery, land, buildings, and nonfarm assets is excluded. It is assumed that all gain on purchased livestock and machinery is ordinary gain and that listed market values are net of selling costs. The effects of investment tax credit carryover and recapture, carryover of operating losses, alternative minimum taxes and other than average exemptions and deductions are excluded because they have only minor influence on the taxes of most farms. However, they could be important.

OPTIONAL CASH FLOW WORKSHEET

| Item |  | Total | Receipt or Expense |  |  |  | Expected Change | $\begin{gathered} 1999 \\ \text { Projection } \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | Cow |  |  |  |  |
| Average Number of Cows |  | 157 |  |  |  |  |  |  |
| Cwt. of Milk Sold |  | 35000 |  |  |  |  |  |  |
| ACCRUAL OPERATING RECEIPTS |  |  |  |  |  |  |  |  |
| Milk | \$ | 435349 | \$ | 2773 | \$ | 12.44 |  | \$ |
| Dairy cattle |  | 19100 |  | 122 |  | 0.55 |  |  |
| Dairy calves |  | 4500 |  | 29 |  | 0.13 |  |  |
| Other livestock |  | 0 |  | 0 |  | 0.00 |  |  |
| Crops |  | 21026 |  | 134 |  | 0.60 |  |  |
| Miscellaneous receipts |  | 13100 |  | 83 |  | 0.37 |  |  |
| Total | \$ | 493075 | \$ | 3141 | \$ | 14.09 |  | \$ |
| ACCRUAL OPERATING EXPENSES |  |  |  |  |  |  |  |  |
| Hired Labor | \$ | 48750 | \$ | 311 | \$ | 1.39 |  | \$ |
| Dairy grain \& concentrate |  | 124925 |  | 796 |  | 3.57 |  |  |
| Dairy roughage |  | 20200 |  | 129 |  | 0.58 |  |  |
| Nondairy feed |  | 0 |  | 0 |  | 0.00 |  |  |
| Machine hire/rent/lease |  | 9300 |  | 59 |  | 0.27 |  |  |
| Mach repair + vehicle exp. |  | 40200 |  | 256 |  | 1.15 |  |  |
| Fuel, oil \& grease |  | 13800 |  | 88 |  | 0.39 |  |  |
| Replacement livestock |  | 500 |  | 3 |  | 0.01 |  |  |
| Breeding |  | 5300 |  | 34 |  | 0.15 |  |  |
| Veterinary \& medicine |  | 8350 |  | 53 |  | 0.24 |  |  |
| Milk marketing |  | 8400 |  | 54 |  | 0.24 |  |  |
| Bedding |  | 4950 |  | 32 |  | 0.14 |  |  |
| Milking supplies |  | 4025 |  | 26 |  | 0.12 |  |  |
| Cattle lease |  | 960 |  | 6 |  | 0.03 |  |  |
| Custom boarding |  | 6900 |  | 44 |  | 0.20 |  |  |
| bST expense |  | 4025 |  | 26 |  | 0.12 |  |  |
| Other livestock expense |  | 440 |  | 3 |  | 0.01 |  |  |
| Fertilizer \& lime |  | 18250 |  | 116 |  | 0.52 |  |  |
| Seeds \& plants |  | 8325 |  | 53 |  | 0.24 |  |  |
| Spray/other crop expense |  | 8700 |  | 55 |  | 0.25 |  |  |
| Land, bldg., fence repair |  | 28300 |  | 180 |  | 0.81 |  |  |
| Taxes |  | 8500 |  | 54 |  | 0.24 |  |  |
| Real estate rent/lease |  | 9600 |  | 61 |  | 0.27 |  |  |
| Insurance |  | 4000 |  | 25 |  | 0.11 |  |  |
| Utilities |  | 13825 |  | 88 |  | 0.40 |  |  |
| Miscellaneous |  | 4320 |  | 28 |  | 0.12 |  |  |
| Total less Interest Paid | \$ | 404845 | \$ | 2579 | \$ | 11.57 |  | \$ |
| NET ACCRUAL OPERATING INCOME |  |  |  |  |  |  |  |  |
| (w/o interest paid) | \$ | 88230 | \$ | 562 | \$ | 2.52 |  | \$ |
| - Change in lvstk/crop inv.. |  | 8200 |  | 52 |  | 0.23 |  |  |
| - Change in accounts rec. |  | -5175 |  | -33 |  | -0.15 |  |  |
| - Change in feed/supply inv. |  | -1495 |  | -10 |  | -0.04 |  |  |
| + Change in accts. payable* |  | 34950 |  | 223 |  | 1.00 |  |  |
| NET CASH FLOW | \$ | 121650 | \$ | 775 | \$ | 3.48 |  |  |
| - Net family withdrawals |  | 15460 |  | 98 |  | 0.44 |  |  |
| Available for Farm | \$ | 106190 | \$ | 676 | \$ | 3.03 |  | \$ |
| - Farm debt payments** |  | 112990 |  | 720 |  | 3.23 |  |  |
| Available for Farm Investment | \$ | -6800 | \$ | -43 | \$ | -0.19 |  | \$ |
| - Capital purchases <br> Additional Capital Needed |  | 141000 |  | 898 |  | 4.03 |  | \$ |

* Less change in account payable for interest. ** See page 8.


## 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 are missing, inconsistent or outside a "normal" expected range. Each diagnostic statement should be carefully scrutinized to help insure that the data are 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.

## Screen No.

## MACHINERY AND EQUIPMENT INVENTORY

2. "Machinery owned but no machinery depreciation."

Check to see if machinery depreciation was collected on the check-in form (Screen 2) and not entered or if an entry error is present. Machinery could be rented from a partner in the business with the market value being reported, but not the depreciation. In situations where machinery is rented from a partner, it is preferable to enter machinery inventory values and depreciation for business analysis purposes. However, check to make certain machinery rental payments have been removed as a cash expense, but that debt payments on machinery remain.
2. "Machinery depreciation $=\mathrm{n} \%$ of beginning inventory plus new machinery." (When $\mathrm{n}<$ $5 \%$ or $\mathrm{n}>20 \%$ )

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.
2. "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.
2. "Machinery appreciation $=-\$ \mathrm{n}$. " [When $\mathrm{n}<(-) 10 \%$ of beginning machinery inventory]

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

## FEED AND SUPPLIES

3. "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.
3. "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

4. "End of year (bred, open, or calf) heifer inventory at beginning prices $>$ beginning of year inventory but no increase in (bred, open, or calf) 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).
4. "End of year (bred, open, or calf) heifer inventory at beginning prices < beginning of year inventory, but no decrease in (bred, open, or calf) heifer 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).
4. $\quad$ Change in cow values $/$ head $>\$ 100$, change $=\$$ $\qquad$ ."

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.
$4,10 \& 13 . \quad$ "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 10 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.
4. "Livestock appreciation is $<\$ 0=\$$ $\qquad$ ."

Livestock values fell from beginning to end of year (Screen 4). Check to make certain this occurred.
4. "Livestock appreciation $>$ change in inventory, $=\$$ $\qquad$ ."

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.
$4 \& 13$. "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.
$4 \& 12 . \quad$ "Dairy cow numbers decreased $\qquad$ and dairy cattle sales $<\$ 400 /$ head."

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

Did dairy cow numbers decrease (Screen 4) and, if so, were the prices received for cull cows low or did a higher proportion of cows die, or was the sales revenue not accurately reported (Screen 12)? Check the accuracy of input data.
4. "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 4). Check to see if this is accurate.
4. "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 4). Check to see if this is accurate.
4. "Number of cows $=0$, total value $=\$ x . " \quad($ Where $x>0)$ "Number of cows $=x$, total value $=\$ 0 . " \quad($ Where $x>0)$ (Also for heifers and bulls and other livestock.)

There is missing data. If number of livestock is entered there must be a corresponding value for those livestock. If a value for livestock is entered, the number of livestock must be entered.

## REAL ESTATE INVENTORY

5. "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.
5. $\quad$ LLost capital $>0.50$ of real estate purchased $=$ $\qquad$ ."

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.
$5 \& 7 . \quad$ "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.
5. "Land is owned but no beginning land and building inventory value."

If land is owned, a market value was not entered (Screen 5). Land owned may have incorrectly been entered. The above stated possibilities should also be explored.
5. "Building depreciation $>4 \%$ of beginning real estate."

Building depreciation is greater than "normally" expected (Screen 5). 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.
5. $\quad$ 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

$6 \& 4 . \quad$ "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.
6. "Milk per cow $=$ n pounds." $($ When $\mathrm{n}<8,000$ or $\mathrm{n}>20,000)$

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.
$6 \& 7 . \quad$ "Milk per worker $=n$ pounds." $($ When $\mathrm{n}<200,000$ or $\mathrm{n}>900,000)$
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.
$6 \& 4$. "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.
$6 \& 4 . \quad$ "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.
6. "Invalid business description."

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

## LABOR

7. $\quad$ Single proprietorship but operator \#2 months $>0$."

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.
7. $\quad$ Operator \#N months > 16." (Where N is operator 1 through 6.)

It is possible to have operator months greater than 12 when converting to months of labor based on 230 hours/month (Screen 6). If an operator enters more than 16 months per year they would be working more than 72 hours per week. Check for accuracy.
$7 \& 13 . \quad$ "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.
$7 \& 13 . \quad$ "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.
$7 \& 6 . \quad$ "Partnership or corporation but operator labor is $\leq 12$ 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

$7 \& 13 . \quad$ "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.
7. "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 any owned and rented land has been omitted (Screen 7).
8. "Hay crop yield is $<2$ or $>4$ tons DM per acre. Yield is $\qquad$ ."

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).
8. "Corn silage yield is $<2.5$ or $>7$ tons DM per acre. Yield is $\qquad$ ."

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.
8. "Corn grain yield is $<50$ or $>120$ bushels per acre. Yield is $\qquad$ ."

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.
8. "Oat yield is $<40$ or $>100$ bushels per acre. Yield is $\qquad$ ."

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).
8. "Tons DM harvested per cow $<4$ or $>12=$ $\qquad$ ."

Tons of dry matter harvested is outside "normal" range. Check dry matter harvested calculations, cow numbers, and feed purchases for consistency.
$7 \& 8 . \quad$ "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.

## FINANCIAL LEASES

$10 \& 13 . \quad$ "Leases cattle but no lease expense."
Cattle are leased (Screen 10) 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.
$10 \& 13 . \quad$ "Leases equipment but no lease expense."
Equipment is leased (Screen 10), 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.
$10 \& 13 . \quad$ "Leases structures but no lease expense."
Structures are leased (Screen 10), 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.

## ASSETS AND LIABILITIES

11\& 12. "Scheduled debt payments $>0.35$ of milk sales $=$ $\qquad$ \%."

Scheduled debt payments are 10 percentage points above the average (Screens 11 and 12). Check milk sales and debt payment schedule for accuracy.
$11 \& 5 . \quad$ "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.
$11 \& 9 . \quad$ "Farm net worth $<0.30$ of farm capital. NW $=$ $\qquad$ ."

Farm net worth is lower than normal (Screen 11). Check all calculations for accuracy. Falling asset values and increased borrowing may have contributed.

11\&6. $\quad$ Debt per cow $>\$ 3,500=\$$ $\qquad$ ."

Debt per cow is above average. Check for accuracy of data (Screens 6 and 11).
$9 \& 12 . \quad$ "Accounts receivable $<5 \%$ of milk sales."
The December milk check may not have been included as an account receivable (Screen 9). Check to see if all accounts have been included.
$9 \& 11 . \quad$ "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 11). Check to see if this is correct.
11. "Principal payment exceeds liability."

If no new money was borrowed, the amount of principal paid should not be greater than the beginning year liability amount. Check to make certain the data are accurate.

11A. $\quad$ 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 11).

11A. "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 11).

11B. "Short-term planned payments $>120 \%$ of short-term debt."
Short-term planned payments are higher than expected. Check for accuracy of entries (Screen 11).

11B. "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 11). Check to see if interest is included.

11B. "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 11). Check to make certain interest and penalties have not been included.
11. "Liability $>0$ but no scheduled payment, liability $=\$$ $\qquad$ ."

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 11). Check to make certain the data are accurate.
11. "Decrease in $\qquad$ liability from beginning to end year does not equal principal paid. Did refinancing occur?"
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 are accurate (Screen 11).
11. "Amount of money borrowed entered ( $\qquad$ ) does not equal calculated money borrowed ( $\qquad$ )."
If a value was entered in the "amount of new borrowings" column (Screen 11), it should equal the calculated value for money borrowed. The formula for calculating money borrowed is: (end year liability - beginning year liability) + principal paid. Check to make certain the data are accurate (Screen 11).

## RECEIPTS

12 \& 6. $\quad$ Milk price $<\$ 11$ or $>\$ 15$. Price $=\$$ $\qquad$ per cwt."

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

12 \& 8. "Tillable crop acres per cow $>4$, but $\$ 0$ crop sales."
Tillable crop acres per cow are high (Screen 7) but no 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).
12. "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.
12. "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.
12. $\quad$ Government receipts, other receipts or miscellaneous receipts $>\$ 5,000$. ."

Government receipts, other receipts or miscellaneous receipts are greater than normally expected. Verify that the entry is correct (Screen 12) and that other receipt categories are not more appropriate.
12. "Gas tax refund in excess of $\$ 500 . "$

Gas tax refund is greater than normally expected. Verify that the entry is correct (Screen 12) and that other receipts have not been included here.

12 \& 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.

## EXPENSES

13. "Hired labor expense $<\$ 1,100$ or $>\$ 2,500$ per month, $=\$$ $\qquad$ per month."

Expenses 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.
$13 \& 3$. "Nondairy feed inventory or expense is $>0$, but no nondairy livestock in inventory."
The nondairy feed expense and inventory category should include what is fed to beef cattle, horses, chickens, sheep, etc. Check to see that dairy feed was not entered as nondairy feed.
13. "Total accrual (item) expenses are negative."

An accrual expense (Screen 13) would not likely be a negative value. Check the data for accuracy. Values in the column "Cash amount paid" cannot be negative. It is possible to have negative values in the "Change in Acct. Payable" column; however, an offsetting value in "Cash Amt. Paid" calculates to a positive accrual expense. It is possible to have negative values in the "Change in Inventory" column calculated from entries made on page 2, Screen 3. However, this indicates a decrease in that inventory item and, therefore, would be added when calculating the accrual expense.
$13 \& 5 . \quad$ "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.

13 \& 11. $\quad$ "Farm liabilities $>\$ 0$ but no interest expense, liabilities $=\$$ $\qquad$ ."

Farm liabilities exist (Screen 11), 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.

13 \& 11. "Interest expense on Screen 13 does not equal interest payments on Screen 11."
The total farm liability interest (Screen 11) does not equal cash interest expense (Screen 13). Check to see if data was collected and entered correctly. These two totals must be identical.
$13 \& 10 . \quad$ "Cattle lease expense $>\$ 0$, but no lease information."
Cattle lease expense is reported (Screen 13), but lease information is missing (Screen 10). Record the information on Screen 13 once the existence of an actual lease has been verified.

13 \& 5. "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.
$13 \& 12 . \quad$ "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.

13 \& 4. $\quad$ Expansion livestock per head of additional dairy cattle $=\$$ $\qquad$ ."

Check the accuracy of this value. It should be about the average cost of purchased livestock.
$13 \& 9 . \quad$ "Total change in prepaid expenses entered as an expense (\$ $\qquad$ ) does not equal the total prepaid expenses change entered as an asset (\$ $\qquad$ ).

The total change in prepaid expenses in Screen 13 does not equal the total prepaid expenses change in Screen 9. There must be a data acquisition or data entry problem.
$13 \& 11 \mathrm{~B}$. "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 11 does not equal the total accounts payable change on Screen 13. There must be a data acquisition or data entry problem.
$13,12 \& 6$. "Operating cost of producing milk is $<\$ 8$ or $>\$ 12 / \mathrm{cwt} .,=\$$ $\qquad$ ."

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).
$13,12,7 \& 6$. "Total cost of producing milk is $<\$ 10$ or $>\$ 16 / \mathrm{cwt} .,=\$$ $\qquad$ ."

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).

## MANAGEMENT PERFORMANCE MEASURES

$13 \&$ 12. $\quad$ Net farm income w/o appreciation $=\$ n . "($ When $\mathrm{n}<\$ 10,000$ 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.
$13 \&$ 12. $\quad$ 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.
$13 \&$ 12. "Labor and management income per operator $<\$ 0$ or $>\$ 30,000=\$$ $\qquad$ ."

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

Feed purchases as a percent of milk sales is outside the "normally" expected range. Check feed purchases (Screen 13) for accuracy, check to see if crop yields are high and/or a large number of crop acres per cow exists.

13\& 12. "Rate of return on equity capital w/o appreciation $=\mathrm{n} \%$. . (When $\mathrm{n} \leq 0 \%$ 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.
$13,12 \& 11$. "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.

11\&9. "Debt to asset ratio $<0.3,=$ $\qquad$ ."

Debt to asset ratio is very low. Check asset values and liabilities for accuracy.
13, $12 \& 11$. "Cash flow coverage ratio $<0.8$ or $>1.2$."
Cash flow coverage ratio is outside "normal" range. Check receipt and expense items as well as debt payments made for accuracy.

13, $12 \&$ 11. $\quad$ "Cash inflow $=\$ n$, cash outflow $=\$ n$, imbalance $=\$ n "$
These values are printed for all farms.

## CROP EXPENSES

14. "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.
14. "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.
14. "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.
14. "Total crop expenses per acre of hay crop is $>\$ 150$ or $<\$ 20=\$$ $\qquad$ ."

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.

## OTHER

"Farm coded irregular" - A farm is coded irregular when data are incomplete, missing or judged to be inaccurate.
"Farm coded part-time" - A farm is coded part-time when operator months are less than six months and total labor months are less than 12.
"Farm coded renter" - A farm is coded renter when no tillable land is owned or the real estate inventory at end year $=0$.
"Farm coded cash-crop" - A farm is coded dairy-cash crop when cash crop sales amounted to more than 10 percent of accrual milk sales.

APPENDIX A

HOW TO COMPLETE DAIRY FARM BUSINESS SUMMARY DATA CHECK-IN FORMS

## HOW TO COMPLETE DAIRY FARM BUSINESS SUMMARY DATA CHECK-IN FORMS

## Screen 1. Cooperator's Name and Address (page 1)

Fill in the name of the operator(s) of the farm business, the farm name if there is one, the address, and the county's record project in which he or she is participating. Use the list of processing numbers provided by Cornell to assign numbers to new cooperators and to confirm numbers used for continuing cooperators.

Please indicate if a farm is to be coded "irregular" at the top of the check-in form. An "irregular" farm has missing or inaccurate data and will not be included in the county, regional, or state summary.

## Worksheet 1. Machinery and Equipment Purchased (page 1)

The only item from this section required to complete a farm business summary is the total machinery and equipment purchased. Worksheet 1 is included to provide a workplace for the operator, manager or managers to calculate this information. If prior to completion of the check-in forms the farm business has an accurate, up-to-date machinery and equipment inventory there is no particular need to copy that information onto Worksheet 1.

If completion of the worksheet is required, list all new or used machinery and equipment acquired during the year and the "boot" amount paid or obligated to pay on each item. List the market value of items traded-in and make the inventory checks in order to substantiate beginning and end inventory values. Check reported capital expenditures with the inventory book for the business. New items should be inventoried at "boot" plus market value of trade-in less first year's depreciation. Loss or increase in market value may occur from date of purchase to year end. Adjust year end value recorded in inventory to represent year end market values of machinery and equipment purchased. Make sure traded items are removed from this year's inventory. Do not include any leased items. We will assume the list of capital purchases and dollar amount reported here are correct and it will take precedence over other lists that may be included in the record.

## Worksheet 2. Machinery and Equipment Sold or Destroyed (page 1)

List machinery and equipment that was disposed of by outright sales and items that were destroyed by fire, flood, and other disasters. Do not list items traded-in here. Report insurance received from machinery destroyed and check to see that all dispositions are removed from the end inventory. Add insurance received from machinery destroyed to total machinery and equipment sold and enter the total in Screen 2.

As with the machinery and equipment purchased, only the total machinery and equipment sold (including insurance proceeds) is required to complete a business summary; consequently, if the farm records are complete and accurate, Worksheet 2 is not needed for input and need not be used.

## Screen 2. Machinery and Equipment Inventory and Depreciation (page 1)

The information to be collected in this section is required to calculate the ownership costs incurred in maintaining an inventory of owned machinery and equipment and to calculate the increase (or possibly decrease) in the value of the machinery complement resulting from changes in the price level of farm machinery and equipment. The fixed cost of maintaining the equipment inventory is charged as a business expense while machinery appreciation is credited toward the ownership income of the farm business.

Probably the most difficult information to obtain in this section is the beginning and end-of-year inventory. If this cooperator had a business summary the previous year, the end of the year inventory is the beginning of year inventory for this year. The cooperator then must inventory and determine the market value of machinery and equipment as of December 31 of the year for which you are summarizing. Do not include any leased items.

Machinery and equipment purchased and machinery and equipment sold are the totals from Worksheets 1 and 2 discussed above. If an alternative source of complete information for purchases and sales is available, it is not necessary to complete Worksheets 1 and 2.

Machinery and equipment received from "Noncash Transfer to Farm" is entered in Screen 2. Include machinery and equipment received as a gift/inheritance or converted from nonfarm to a farm business asset.

The next item is machinery and equipment depreciation as calculated for tax purposes. This value is used as the charge against the farm business for the use of the machinery and equipment complement. It is obtained by taking 1998 regular tax depreciation, excluding buildings and cattle from ACRS and MACRS depreciation. Including the Section 179 expensing allowance could bias depreciation upward. Excluding it could bias depreciation downward. Include it if used on a regular, ongoing basis. Exclude and convert to annual depreciation if used on an irregular, occasional basis.

End-of-year inventory less the total beginning inventory after changes is equal to machinery appreciation. This value is then used as the contribution toward ownership income from machinery and equipment.

If machinery appreciation appears to be too high or too low given changes in prevailing machinery and equipment prices during the year, one might consider some of the following possible causes:

If change in inventory due to price appears to be too high, check the following possible causes:
a) There are more new items in the inventory book than listed as capital purchases.
b) New items were not depreciated this year or were valued at "list price" rather than at a value based on cost.
c) Trade-ins and other dispositions were not removed from book.
d) Machinery was revalued upward during the year and beginning inventory was not adjusted in the same direction.

If change in inventory due to price appears to be too low, check these possible causes:
a) New items were not all listed in inventory book.
b) Items acquired through trade were not valued correctly.
c) Items no longer in use were removed from end inventory or devaluated without corresponding changes to beginning inventory.
d) Machinery was revalued downward during the year and beginning inventory was not adjusted in the same direction.

## Worksheet 3. Grown Feed and Supplies Inventory Worksheet (page 2)

This worksheet is used to calculate the grown feed and supplies (bedding and lumber) inventory at the beginning and end of year. Include only feed and supplies grown or produced by this farmer. Space is provided to enter quantities of the various grown feed and supplies, their market value per unit, and the calculated market value for each grown item. The total values of the grown feed and supplies at beginning and end of year are calculated and entered in the appropriate spaces in Screen 3. The change will be computed and will appear on Screen 12 as a change in crop inventory. Inventory growth will produce a positive change or increase in crop receipts.

If winter wheat is grown, be sure to include in grown feed end-of-year inventory (Worksheet 3 ) the value of the crop based on the cost incurred in growing it.

## Screen 3. Feed and Supply Inventory (page 2)

Report beginning and end market values of purchased feed and supplies in Screen 3. Workspace is provided for the quantity and market value per unit for the purchased feed and supply categories to assist in the calculation of the total value for each item at beginning and end of year. Of course, if an accurate accounting was made for the previous year, the end-of-year inventory should be used for the beginning-ofyear inventory for this year. The beginning-of-year data is not optional; it is required.

Purchased dairy grain and concentrate inventory should include the concentrate, minerals, protein, and grain for the dairy herd including heifers, calves, and bulls. Non-dairy feed inventory includes all feed purchased for livestock such as horses, beef cattle, sheep, chickens, etc.

Many year-end purchases made by farmers are payments made for the next year's feed and supplies. The feed or supplies purchased with these payments must be identified to make them legal tax deductions. Therefore, year-end purchases of feed and supplies must be included in inventory (Screen 3), they are not prepaid expenses (Screen 9).

Unused silage bags should be entered as supplies in the "land/bldg./fence" category.
The footnote for Screen 3 explains how inventory changes are computed and their effect on accrual expenses.

## Screen 4. Livestock Inventory (page 3)

Report all leased dairy cows at end of year in the space provided. This number will be added to owned dairy cows at end of year when computing debt levels per cow.

For owned livestock, this section is used to obtain information on the inventory of livestock at the beginning and end of the year and to separate the change in inventory during the year into the change (a) that results from changes in numbers and/or quality of livestock and (b) that result from price changes during the year. The screen is designed to help inventory the livestock by categories. The heifer inventory allows space for three categories: bred heifers, open heifers (six months to breeding), and calves (under six months). The information required is the number and value at the beginning of the year, the number and value at the end of the year using beginning-of-year prices, and the value at the end of the year using end-of-year prices. The value per head columns are calculated. If you prefer, the values per head may be entered and the total value columns will be calculated.

The quantity and value for beginning-of-year inventory can either be taken from last year's end-of-year inventory if accurate information is available or can be calculated based on the livestock on hand and the value per head at the beginning of the year.

The end-of-year inventory is more complex since the livestock numbers at the end of the year need to be valued both at beginning-of-year prices and at end-of-year prices in order to separate the increase in inventory into two parts. Unless large numbers of animals have been purchased of a different quality or the composition of the animals in the group has been altered significantly during the year, the value per head using the beginning-of-year prices is the same as the value per head in the beginning-of-year inventory. Situations which could result in the value per head in the beginning-of-year inventory and the value per head using beginning-of-year prices for the end-of-year inventory being different include: 1) the purchase of a large number of animals of higher quality than those previously in the herd, and 2) the average age of calves in the end inventory being two or three months more than those in the beginning inventory. Finally, the end-of-year inventory at end-of-year prices is the same number of head as for the end-of-year inventory at the beginning-of-year prices times the value per head based on the market price of the livestock on December 31 of the summary year.

## Worksheet 4. Land and Buildings Purchases and Sales (page 2)

In this section, only the totals for cost and lost capital of new purchases and capital improvements, and sale price/amount received of capital sales and losses are required. If the cooperator has an accurate record of his or her real estate transactions, these totals can be taken from that record; if the cooperator does not, Worksheet 4 can be used to assist in calculating the totals.

## Screen 5. Real Estate Inventory Balance (page 3)

This section must be completed to confirm changes in the market value of real estate during the year.
a) Report the beginning-of-year market value (previous year's end-of-year value) net of estimated sale expenses.
b) Enter the cost of new purchases and capital improvements for land and buildings and subtract lost capital. Value added (the difference between cost of new real estate and lost capital) is that proportion of the new investment that adds to the market value of the farm.

Enter the value of real estate that has come into the farm business during the year from gifts/inheritances and from conversion of nonfarm real estate to farm real estate.
c) Building depreciation from 1998 tax return is used as an estimate of a total building depreciation charge for the year. Be sure to include depreciation on single purpose agricultural structures, grain bins, fences, tile, and silos as well as general purpose buildings.
d) Deduct the net sale price of real estate sold. For example, a five acre lot sold for $\$ 25,000$ with $\$ 1,000$ of sale expenses and a mortgage of $\$ 15,000$ held by the seller would be entered as follows:

| Real Estate Sold: | Total sale price | $\$ 25,000$ |  |
| :--- | :--- | :--- | :--- |
|  | Sale expenses | $-1,000$ |  |
|  | Net sale price |  | $-\$ 24,000$ |
|  | Note/mortgage held by seller | $-15,000$ |  |
|  | Net cash amt. rec'd. in 1998 | $=9,000$ |  |

The "note/mortgage held by seller" of $\$ 15,000$ must be entered as an "Other Nonfarm Asset" in Screen 9, page 6. If the seller is not the mortgage holder, there would be no entry in the "note/mortgage held by seller" space and the "Net cash amount received in 1998" would then equal $\$ 24,000$.

The calculated value, "net cash amount received in 1998", is a cash inflow to the farm. If part or all of this was converted to nonfarm, include that amount as a "personal withdrawal and family expenditure" in Screen 13B.
e) Beginning market value plus value added from real estate purchased, minus depreciation and the value of sales, equals total beginning value after changes.
f) End-of-year market value (net of estimated sale expenses) less the total beginning value after changes is equal to real estate appreciation.

## Screen 6. Livestock and Business Description (page 5)

The average number of cows for the year is a key factor. It can be taken from the DHIA or other herd testing records. It is the average number of cows in the herd each month totaled and divided by 12 . It includes dry cows as well as cows in milk. It includes leased cows. It is not an average of beginning and ending inventory numbers. Also report the average number for year of dairy heifers and bulls. If the data are being entered on a computer in the county, enter the work units for other livestock. Use Table 1 of the MicroDFBS User's Manual as a guide.

Total pounds of milk sold is the total weight reported by the milk plant. Average milk plant test is not used to convert to a 3.5 equivalent. It is used as a reference only.

Check the appropriate item under Production Record, Milking System, Business Type, Milking Frequency, bST Usage, Dairy Housing, and Primary Financial Recordkeeping System.

Under production record, if DHI or Owner-Sampler are checked, enter the 6 -digit DHI number. Providing the DHI number allows possible coordination with the Animal Science Department by combining DHI and DFBS data. If DHI data were used, no individual farm data would be identified. Providing the DHI number does not provide DHI or Animal Science people access to DFBS data.

Under milking frequency, check " $2 \mathrm{x} /$ day" if all cows were milked twice a day for the entire year. Check " $3 \mathrm{x} /$ day" if all cows were milked three times a day for the entire year. Check "other" if a portion of the herd was milked three or more times a day, or the total herd was milked three or more times a day for part of the year, or if the total herd was milked more than three times a day for the entire year.

If bST was used in 1998, check the appropriate "\% of herd" category. For example, if a dairy farmer started supplementing his cows on November 1, and supplemented 100 percent of the eligible cows in both November and December, he would select option 1, less than or equal to 25 percent. The calculation would be 100 percent multiplied by 2 months of usage divided by 12 possible months for supplementation in $1998=$ 16.7 percent. Eligible cows are defined as those cows that are 64 or more days in milk.

If bST is no longer being used on any of the herd, check "Stopped using in 1998". If bST was never used, check "not used".

## Screen 7. Labor Inventory (page 5)

Begin by identifying the operators of the farm. Operators should include all individuals who are integrally involved in the operation and management of the farm business. They are not limited to those who are the owner of a sole proprietorship or are formally a member of a partnership or corporation. In instances where a husband and wife operate and manage the farm as a team both may be included as operators. The labor input of each operator should then be specified in months. In some instances where one or more operators of the farm business have other work occupying their time, such as operating an off-farm enterprise, directing a farm organization or managing of the family; less than 12 months would be appropriate. In order to calculate more accurate labor efficiency factors, operator months greater than 12 are also possible. Convert average weekly operator hours to months using 4.3 weeks/month and 230 hours/month. For example, Operator \#1 works, on average, 60 hours per week, which converts to 13.5 months per year:
$\left(\frac{60 \text { hours } / \text { week x } 4.3 \text { weeks } / \text { month }}{230 \text { hours } / \text { month }}\right)$ X 12 months worked $=13.5$ full - time months

In addition, for each operator, indicate their age, their years of education, and the estimated value of their management and labor input. This value should be based on what that person could earn in a similar capacity in similar employment. Any farm expenses for labor or perquisities for these operators should be excluded from the labor expenses entered later in the input. This exclusion will probably be most relevant for corporations but may also apply to other businesses.

In addition, the total months of family labor who are paid, the months of family labor not paid, and the total full-time months of hired labor should be recorded. The full-time months can then be totaled and divided by 12 to determine the worker equivalent.

The conversion to full-time, worker-month equivalents is necessary; conversion is not always easy but is very important to an accurate summary. A high school student may provide three months of worker-month equivalent labor during the 10 month school year by working part-time. Convert hourly labor on the basis of 230 hours per month. There are 4.3 weeks in a month. Below is a formula for converting hours per week to full-time months:
Full - time months $=\left(\frac{\text { No. hours } / \text { week x } 4.3 \text { weeks } / \text { month }}{230 \text { hours }}\right)$ X No. months worked

## Screen 7. Land Inventory (page 5)

The purpose of this section is to obtain a complete accounting of the owned and rented acreages included as a part of this farm business. First, the tillable acres owned and rented should be entered. Tillable acres should include all acres that normally are cropped, either in row crops, hay crops, or cropland pasture. Pasture acres owned and rented should include all acres of pasture that are not cropland. Nontillable woodland and other acres owned would then be included and the three would add to total acres owned, rented and to the total acres in the farm business.

## Screen 8. Tillable Land Use (page 5)

The purpose of this section is to obtain a complete accounting of the tillable acres in the farm business and an accurate record of the cropping program of the farm business. This record is an essential part of the business summary.

The forage crops should be separated into hay, hay crop silage, corn silage, and other forage crops harvested (could include green chop, small grain silage, and sudan/sorghum silage). Enter only the first cut acres for all hay crops on the first line. Find instructions for allocating hay crop acres to pasture below. The measure of production of the roughages is the total tons of dry matter. The intermediate columns of total production and dry matter coefficient are used to assist in calculating the total tons of dry matter. Total production of all hay crops are divided into dry hay and hay crop silage. The total production of corn for grain, oats, and wheat should be reported on a dry bushel equivalent. Worksheet 5 is included on the opposite page for conversion of corn to a dry shelled basis.

Clear seeding acres should be entered under hay unless another crop is grown on those acres and considered the major crop in which case the acres are entered with the major crop. Acres used to grow winter wheat should be entered with the crop grown during the regular growing season.

After the acreages and production of the harvested crop enterprises have been reported, the acres of tillable cropland included in pasture and the acres of idle tillable cropland should be recorded. Check the box next to tillable pasture if rotational grazing or intensive pasture has been used at least three months of the year for the milking herd, changing the paddock at least every three days and more than 30 percent of the forage consumed during the growing season was from grazing. When the same field is used for both hay crop and
pasture, allocate the acreage between hay crop and pasture according to its estimated share of dry matter produced from the field. For example, if hay
crop silage was harvested from a 20 acre field on May 30th and the field was intensively grazed for the rest of the season, approximately the same quantity of dry matter was grazed as was ensiled. Allocate 10 acres to hay crop and 10 acres to pasture. Do not include pasture production in total production from hay crop.

The total of all of the acres in each of the enterprises should be the total tillable acres. This total should then be compared to the total tillable acres recorded above in the land inventory. Furthermore, if this cooperator was in the summary the previous year and has not had a change in owned or rented acres, the tillable acres should be exactly the same as they were in the previous year.

## Screen 9. Farm Family Financial Situation - Assets (page 6)

The assets section of the Farm Family Financial Situation requires entry of all farm and nonfarm assets for beginning and end of year. Total farm inventory is calculated from the previously-entered inventory sections. If a cooperator had a business summary the previous year, the end-year assets are the beginningyear assets for this year.

The x $\qquad$ x spaces for prepaid expenses indicates optional input; i.e., the entire concept of prepaid expenses may be ignored if you feel it has no significant affect on the profitability of the business. Items that can be inventoried (such as dairy grain, seeds, and fertilizer) should not be included as prepaid expenses; they should be entered in the purchased feed and supply inventory, Screen 3, page 2.

Do not enter negative numbers for "Farm cash, checking \& savings". If there is a negative checkbook balance, it should be considered money borrowed and included in operating debt, and a zero entered for farm cash, checking, and savings.

Nonfarm assets for partnerships and corporations should include nonfarm assets of all families in the business or none at all.

Mortgages or notes held from the sale of farm real estate should be included as "Other Nonfarm Assets".

See the footnotes at the bottom of page 6 of the check-in form for further guidelines to completing the assets section.

## Screen 10. Financial Leases (page 7)

The purpose of this table is to help calculate the expenses associated with financial leases and to determine the present assets and liabilities for the leased items. Include those items for which the farmer originally had an obligation to make specific payment for more than one year. Do not include items such as: machines rented per hour or day; buildings, equipment and, cattle rented from a family member; payments on purchase contracts.

The total yearly expense is calculated by multiplying the amount of each payment times the number of payments for the year. The total yearly expenses for each item are added to get the total expense for cattle, equipment, and structures. The totals must be entered under expenses on page 13. The total expense for cattle is entered under cattle lease; the total expense for equipment is entered under machine hire, rent and lease; and the total expense for structures is entered under real estate rent/lease.

Enter the number of payments in a full year and the number of payments remaining for each item. From this information present values for assets and liabilities can be computed for the leased items.

## Worksheet 6. Changes in Operating Accounts Receivable (page 7)

The purpose of Worksheet 6 is to assist in calculating the changes in operating accounts receivable and to allocate the changes to the appropriate receipt category for entry in Screen 12, page 10.

Note: To calculate the correct change in accounts receivable, subtract the beginning of year balance (January 1, 1998) from the end of year balance (December 31, 1998) to get the change in accounts receivable. Worksheet 6 is designed to produce the right calculation when used correctly.

The total of the column "Balance, December 31, 1998" in Worksheet 6 must equal the value in Screen 9, page 6 for "Accounts Receivable, December 31, 1998". The total of the column "Balance, January 1, 1998" in the worksheet must equal "Accounts Receivable, January 1, 1998" in Screen 9. See the bottom of page 7 of the check-in form for further guidelines to recording changes in accounts receivable.

## Screen 11. Farm Family Financial Situation - Liabilities (pages 8 and 9)

The liabilities and debt payments sections of the Farm Family Financial Situation require entry of all liabilities for beginning and end of year, the principal and interest actually paid in 1998, the interest rate at the beginning of 1999, and the planned payments for 1999. If a cooperator had a business summary the previous year, the end-year liabilities are the beginning-year liabilities for this year.

The primary objective in classifying liabilities is to identify the correct term of the loan. Long-term and intermediate term loans will be analyzed separately in the summary. If more liabilities exist than there are lines for, liabilities for the same term may be combined. Do not include leased items, they are entered in Screen 10.

The "Amount of New Borrowings" column is optional input. If the amount of money borrowed in 1998 is entered, this value will be compared to the calculated value for money borrowed ((End year liability beginning year liability) + principal paid). If the two values do not agree, a diagnostic will be printed. The calculated value for money borrowed will be used in the Annual Cash Flow Statement.

For Farm Credit liabilities, be sure the proceeds amount is entered as the liability (i.e., exclude Farm Credit stock). The amount of Farm Credit stock will be displayed under Intermediate Term Debt. These values are automatically carried over from Farm Credit stock assets entered in Screen 9, page 6.

If refinancing occurred during 1998, use of the "Amount of Debt Refinanced" column will help you arrive at more accurate values for "Amount of New Borrowings" and "Actual 1998 Principal Payments". The amount of the "old" loan refinanced should be entered as a negative number in the "Amount of Debt Refinanced" column. The "new" loan or refinanced amount added to existing loans is entered as a positive number. These entries offset each other; therefore, the total of the "Amount of Debt Refinanced" column would always be zero. The amount of debt refinanced would not be included in the "Amount of New Borrowings" or the "Actual 1998 Principal Payments" columns.

Include debt payments for all liabilities listed. If no payments are made, please enter zero. In the event of a deferred loan (except FmHA), add the interest to the end year liability, enter the interest as paid (under debt payments, Screen 11 and interest expense, Screen 13), and enter the interest amount as money borrowed. Enter the beginning 1999 interest rate and planned payments for 1999. In the case of an FmHA Deferred Loan, the unpaid interest is not converted to principal; therefore, the interest would be included as an account payable.

The total of the farm interest actually paid in 1998 (7th column) should equal the interest expense entered in Screen 13B, page 13.

The "Nonfarm Liability/Payments" line includes debt incurred for all nonfarm assets purchased. For example, if a pleasure boat was purchased using debt capital, record the beginning and end of year nonfarm loan balances, amount of new borrowing for the boat, actual payments made on the boat or any other nonfarm loan during the year, and next year's planned payments. If the farmer prefers not to record nonfarm liabilities, any new nonfarm borrowings must also be excluded from "personal withdrawals and family expenditures" in Screen 13B, page 13.

See the footnotes at the bottom of pages 8 and 9 of the check-in form for additional guidelines to completing this section.

## Screen 12. Summary of 1998 Receipts and Changes in Inventory and Accounts Receivable (page 10)

Record the 1998 cash receipts and changes in accounts receivable in Screen 12. The "Change in Inventory" column is calculated by the computer program from entries previously made in Screen 3 (grown feeds inventory) and Screen 4 (livestock inventory) and Screen 11 (advanced government receipts). Use Worksheet 6 on page 7 to assist in the calculation of changes in accounts receivable. The "Accrual Receipts" column is the total of the first three columns.

Enter the amount received for sale of stock and certificates other than Farm Credit stock. This value will be used in the calculation of appreciation of stock and certificates to be included as ownership income.

The section at the bottom of Screen 12 is used to record nonfarm cash inflows. The last line in Screen 12 is for noncash capital transferred to the farm business for cattle, crops, etc., excluding machinery (enter in Screen 2) and real estate (enter in Screen 5).

See the bottom of page 10 of the check-in form for further guidelines to recording the farm and nonfarm receipts.

## Worksheet 7. Changes in Operating Accounts Payable (page 12)

The purpose of Worksheet 7 is to assist in calculating the changes in operating accounts payable and to allocate the changes to the appropriate expense category for entry in Screen 13, page 13. If there are no operating accounts payable, do not use the worksheet, go directly to Screen 13 on page 13. When Worksheet 7 is used, enter the end of year balance, then enter and subtract the beginning of year balance to obtain the correct change in accounts payable. Assign and allocate changes in accounts payable to the appropriate expense categories using the codes 1-28. Use one worksheet line per code assigned.

The total of the column "Balance 12/31/98" in Worksheet 7 must equal the value in Screen 11, page 9 for "Accounts Payable, December 31, 1998". The total of the column "Balance $1 / 1 / 98$ " in the worksheet must equal the value in Screen 11 for "Accounts Payable, January 1, 1998". See the bottom of page 12 of the check-in form for further guidelines to recording changes in accounts payable.

## Screen 13. Summary of 1998 Expenses and Changes in Inventory and Accounts Payable (page 13)

Record the 1998 cash expenses and changes in accounts payable in Screen 13. Be sure to include as cash expenses any items paid directly by a bank through use of a "line-of-credit". Payment on the "line-ofcredit" is a reduction in the account payable to the bank. Use Worksheet 7 on page 12 to assist in the calculation of changes in accounts payable. The "Accrual Expenses" column is the result of cash expenses less changes in inventory or prepaid expenses plus the changes in accounts payable.

The "change in inventory or prepaid expenses" column contains both calculated values and optional input values. The change in inventory items ( $\quad \ldots \ldots$ spaces) are calculated by the computer program from entries previously made in Screen 3 (purchased feed and supplies inventory). The change in prepaid expense items (x $\qquad$ x spaces) are optional input (i.e., the entire concept of prepaid expenses may be ignored if you feel it has no significant affect on the profitability of the business). The total change in prepaid expenses must equal the difference between prepaid expense totals in Screen 9, page 6 (end year-beginning year).

Enter the amount spent for purchase of stock and certificates other than Farm Credit stock. This value will be used in the calculation of appreciation of stock and certificates to be included as ownership income.

Enter all personal withdrawals and family expenditures in the space provided at the bottom of Screen 13. Do not skip this entry. It is necessary for the Annual Cash Flow Statement to balance and also for an accurate Cash Flow Coverage Ratio to be calculated. Include all cash withdrawals plus all additional nonfarm expenses paid with farm cash or from farm accounts, e.g., income tax, self-employment tax, life insurance, and wages of corporate owner-operators. Include withdrawals used for nonfarm loan payments, savings, and investments as well as family living expenses. Include borrowed capital used for nonfarm purchases, providing it has been entered as a nonfarm liability in Screen 11, page 9. E.g., if a pleasure boat was purchased using debt capital, in the year of purchase the amount borrowed and any payments made during the year must be included as a family expenditure. If any or all "Nonfarm Cash Income" has been excluded from the value entered in Screen 12, page 10, you must also exclude any family expenses paid from that income.

See page 11 of the check-in form for further guidelines to recording farm expenses.

## Screen 14. Optional Input (page 14)

## Breakdown of 1998 Crop Expenses by Crop

In most cases it is possible to identify on which crop large purchases of inputs were used. Use field records, and dates and descriptions for large transactions.

Record the breakdown of crop expenses for hay crop, corn, pasture, and other crops in the top section of Screen 14A. The "Total" line at the bottom of the screen must equal the accrual expenses on Screen 13B, page 13, for fertilizer and lime, seeds and plants, and spray and other. Calculate the accrual expense for these
three crop expense categories on Screen 13B by totaling "Cash Amount Paid" - "Change in Inventory" + "Change in Accounts Payable". The "Change in Inventory" values are calculated from the beginning and end year inventory values in Screen 3, page 2 (end year minus beginning year $=$ change in inventory).

The computer program will display on Screen 14A the total accrual expenses for the crop expense categories from Screen 13B at the time of data entry. The "All other crops" line will be calculated using the accrual expense totals less the values entered in the first three lines of the screen for hay crop, corn, and pasture.

Unless you have a better basis for allocation, allocate lime expenses proportionately across all crop acres, to allow for the fact that benefits extend to crops grown in future years, not just the first year. Charge fertilizer, chemical, and seed costs to the crop applied to. Of course, fertilizer and chemicals can have carryover effects on future crops as well, but in most cases, it would be impossible to accurately allocate these carryover effects.

## Optional Input for Deferred Tax Calculations

A balance sheet including deferred taxes can be printed for those farms that are able to complete this section of Screen 14. It is assumed that (1) farm assets not listed in this section will not significantly influence deferred tax liability, and (2) all gain on machinery and purchased livestock is ordinary gain. Enter tax basis information for assets previously entered in inventory. Operator residences should be included in tax basis for "buildings \& improvements" as well as for "operator residences" if it was included in the Real Estate Inventory in Screen 5. Enter market values for operator residences; single purpose livestock structure, silos, and grain bins; and, purchased livestock. Enter proprietorship and partnership information. Spousal partners filing a joint tax return must combine their ownership in one column. The partner's percent share of farm adjusted gross income must include current cattle sales as well as Schedule F net farm profits. The partner's percent ownership of nonfarm assets must be based on only those included in Screen 9.

APPENDIX B

DFBS
DATA CHECK-IN FORM

## CORNELL COOPERATIVE EXTENSION <br> DAIRY FARM BUSINESS SUMMARY DATA CHECK-IN FORM




SCREEN 2.
MACHINERY \& EQUIPMENT INVENTORY \& DEPRECIATION (do not include leased items)

Beginning of Year Inventory
Machinery \& Equipment Purchased
Noncash Machinery Transfer to Farm
(e.g., gifts \& inheritances)

Machinery \& Equipment Sold
1998 Tax Depreciation ${ }^{2}$
Total Beginning Inventory After Changes
Machinery Appreciation (end less beginning after changes)
${ }^{2}$ Exclude buildings and cattle from ACRS depreciation.
Note: This form has 4 kinds of spaces in the boxed-in "Screen" areas: $\qquad$ are required input, $\qquad$ are calculated values, x x are for optional input, and . . . . . . are workspace. Worksheets $1,2,4$ \& 5 are optional.

${ }^{1}$ All inventory changes are calculated: end year minus beginning year. Carry grown feed and supplies over to Screen 12; and purchased feed and supplies over to Screen 13.
WORKSHEET 4. LAND \& BUILDING PURCHASES \& SALES


[^8]Name $\qquad$ [Proc. no. $\qquad$ _]


Explain change in livestock value per head from beginning of year to end of year at beginning of year prices:

${ }^{1}$ Use Worksheet 4, page 2. ${ }^{2}$ Calculated value is a cash inflow to the farm. If part or all of this was converted to nonfarm, include that amount in "personal withdrawals \& family expenditures" (Screen 13, page 13).

WORKSHEET 5. CORN GRAIN CONVERSION WORKSHEET

${ }^{3}$ Based on 33 percent moisture content. ${ }^{4}$ Based on 28 percent moisture content.
HMEC stored in horizontal silos will range from 40 to 42 pounds per cubic foot.
TABLE 2. CORN GRAIN CONVERSION TABLE

| Percent <br> Moisture <br> in Kernel | Tons of Shelled Corn <br> Needed to Equal One Bushel <br> of Dry Shelled | Percent <br> Moisture in <br> Whole Ear | Tons of Ear Corn Needed <br> to Equal One Bushel of Dry <br> Shelled Corn |
| :---: | :---: | :---: | :---: |
| 14.0 | 0.0275 |  |  |
| 15.5 | 0.0280 | 14.2 | 0.0335 |
| 16.0 | 0.0282 | 16.0 | 0.0342 |
| 18.0 | 0.0289 | 16.6 | 0.0345 |
| 20.0 | 0.0296 | 19.7 | 0.0357 |
| 22.0 | 0.0300 | 22.6 | 0.0370 |
| 24.0 | 0.0312 | 25.2 | 0.0384 |
| 26.0 | 0.0320 | 27.9 | 0.0399 |
| 28.0 |  | 30.0 | 0.0414 |
| 3.0 | 0.0329 | 32.6 | 0.0428 |
| 32.0 | 0.0338 | 34.6 | 0.0443 |
| 35.0 | 0.0348 | 36.4 | 0.0457 |

[^9]

[^10]$\qquad$
$\qquad$

## FARM FAMILY FINANCIAL SITUATION

SCREEN 9.

${ }^{1}$ If you participated in the Dairy Farm Business Summary project last year, there is no need to enter the January 1, 1998 values unless a change needs to be made in the values entered last year.
${ }^{2}$ The sum of machinery inventory, livestock inventory, feed and supplies, and real estate market value for both beginning and end of year. The computer program automatically calculates this entry from earlier input.
${ }^{3}$ Remember to include the January milk check as an account receivable. The amount of accounts receivable at beginning and end of year must agree with the total accounts receivable calculated in Worksheet 6, page 7.
${ }^{4}$ Include any expenses that have been paid for in advance of their use. For example, 1999 rent paid in 1998. The total change in prepaid expenses (end year minus beginning year) must be distributed among the proper expense categories in the "Change in Inventory or Prepaid Expense" column in Screen 13, page 13.
${ }^{5}$ Nonfarm assets for partnerships and corporations should include nonfarm assets of all families in the business or none at all.

Name
[Proc. no. $\qquad$ ]

## FINANCIAL LEASES

Fill in the following table if you are leasing cattle, equipment, or structures from outside your family or business. Include only formal financial lease agreements; i.e., where there is a scheduled payment commitment. Do not include rent paid here but record it under the appropriate expense category on Screen 13, page 13.

${ }^{1}$ Enter under "Cattle leases" on Screen 13, page 13.
${ }^{2}$ Enter under "Machine hire, rent \& lease" on Screen 13, page 13.
${ }^{3}$ Enter under "Real Estate rent/lease" on Screen 13, page 13.

| Account Number or Description | $\begin{gathered} \text { Balance } \\ \text { Dec. 31, } 1998 \\ \hline \end{gathered}$ | - | $\begin{gathered} \text { Balance } \\ \text { Jan. 1, } 1998 \\ \hline \end{gathered}$ | $=$ | Change in Accounts Receivable | Allocation |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  | Receipt Category | Change in Acct. Rec. |
| Milk Receipts: | \$ |  |  | $=$ | \$ | Milk | \$ |
|  |  |  |  |  |  | Dairy cattle |  |
|  |  |  |  | $=$ | \$ | Dairy calves | -- |
|  |  |  |  |  |  | Other livestock | ----- |
| : | \$ |  |  | $=$ |  | Crops | ---- |
|  |  |  |  | $=$ |  | Custom mach. work | ---- |
|  |  |  |  |  |  | Gas tax refunds |  |
| TOTAL <br> Must agree with: | $\begin{aligned} & \$-\overline{\text { Screen } 9)} \end{aligned}$ |  | ${ }_{(\text {Screen } 9)}^{\$}--$ |  | $\begin{aligned} & \$ \text { Screen } 12 \text { ) } \end{aligned}$ | Other:.................... $====$ equals $===$ |  |

Guidelines for Recording Accounts Receivable

1. Identify changes in operating accounts receivable by subtracting beginning from end of year balance (e.g. changes in milk receipts = January 1999 check minus January 1998 check).
2. Assign and allocate changes in accounts receivable to appropriate farm receipts category.
3. All accounts receivable should appear as assets on the balance sheet, Screen 9, page 6.
FARM FAMILY FINANCIAL SITUATION
「erm Debt is entered in Screen 9, page 6.
Enter amount of "old" loan refinanced as a negative number; "new" loan or refinanced amount as a positive number. Do not include these amounts in new borrowing vith principal payments.
Jame:
Accounts not paid (no money borrowed) for noncapital items/services. Accounts payable at beginning and end of year must agree with the totals in Worksheet 7 , pag
Include government payments received in 1998 that are for participation in the 1999 program, as the end year balance. Enter government payments received in 1997 sarticipation in the 1998 program as the beginning year balance.
Include debt incurred for all nonfarm assets purchased.

SUMMARY OF 1998 RECEIPTS AND CHANGES IN INVENTORY AND ACCOUNTS RECEIVABLE

${ }^{1}$ End of year (at beginning prices for cattle) minus beginning of year. ${ }^{2}$ Use Worksheet 6 on page 7 to calculate. ${ }^{3}$ Change in advanced government receipts (beginning year minus end year) calculated from values entered in Screen 11, page 9.

## Guidelines for Recording This Year's Receipts

1. Include gross value for pounds of milk sold.
2. Dairy cattle sales include receipts from cull cows and breeding stock. Include bob calf receipts under dairy calves sold.
3. Crop sales include sales of standing and harvested crops and any crop insurance proceeds.
4. Machinery and real estate sales are netted out in the inventory-depreciation calculations and must not be added in with other farm receipts.
5. Itemize and identify miscellaneous receipts of more than $\$ 500$. Include income from maple product sales and positions such as director of cooperative.
6. Nonfarm cash income from nonfarm work for self and spouse, tax refunds, principal and interest received from prior sale of farm assets, timber sales, gas and oil royalties, gravel sales, income from elected office, and other nonfarm income that is available for debt payments and family living. In some instances, receipts such as timber sales should be classified as farm income; i.e., if the farm operator has actively managed the enterprise and the corresponding expenses are included in Screen 13, page 13. All nonfarm income must be entered for the Annual Cash Flow Statement to balance.
7. Cash used in the business from nonfarm capital is all the rest of the cash flowing into the farm business from outside. Include cash from personal savings accounts, stocks or bonds converted to cash, cash gifts and inheritances.
8. Noncash capital transferred to farm business includes gifts and inheritances of farm assets (excluding machinery \& real estate) and the conversion of nonfarm assets to farm assets.

## Guidelines for Recording This Year's Expenses on Page 13

1. Enter hired labor expenses separately including wages, social security paid on labor, worker's compensation insurance (net of refunds), unemployment insurance, and privileges purchased for hired labor. Wages paid must be consistent with months of hired labor. Check to see that monthly wages range between $\$ 975$ and $\$ 2,500$ per employee. Make sure that wages do not include "draws" to partners or wages of corporate owner-operators for individuals entered as operators in Screen 7, page 5.
2. Dairy grain and concentrate bought should include the concentrate, minerals, protein, and grain purchased during the year for the dairy herd including heifers, calves, and bulls. Dairy roughage includes hay and silage for the dairy herd as well as anhydrous ammonia purchased for silage additive. All feed purchased for livestock such as horses, beef cattle, sheep, etc. should be included in nondairy livestock feed.
3. Include all machinery rent paid and any lease payments on machinery. Include machinery parts and repair expenses as well as insurance and registration for trucks used solely for farm purposes under machinery repairs and farm vehicle expense. Also include expenses for farm share of other vehicles.
4. Milk marketing expenses include government assessments, milk hauling, milk promotion, and coop dues. Do not include capital assessments. Cattle lease expense includes cattle lease payments and cattle rent. Other livestock expenses include DHIC dues and cattle registration.
5. Enter all the town, county, and school taxes paid on farm real estate. Exclude income and self-employment taxes. (Itemize corporate taxes under miscellaneous.) Sales taxes should be capitalized along with cost of improvement.
6. Enter all the fire and farm liability insurance paid on farm property. Exclude life insurance and personal health insurance. Enter employee health insurance under hired labor expense, truck/auto insurance as machinery expense, and crop insurance as other crop expense.
7. Enter the farm share of utility expenses (e.g. electricity, telephone, heating fuel).
8. Include all real estate rent paid and any lease payments on structures. Identify taxes and insurance paid by the rentee as rent. Enter machinery lease payments under machine hire, rent or lease, cattle lease payments under cattle lease expense.
9. Include all interest paid on farm liabilities including finance charges. Make sure interest paid equals total farm interest, column 7, Screen 11, page 8.
10. Miscellaneous expenses should not be large. Include only those items which cannot be identified within another category. Maple product expenses should be entered as miscellaneous.
11. Cattle and other livestock purchased must be divided into those purchased as replacements and those that increase the size of the herd (expansion). Start by assigning the increase in herd size corresponding to changes recorded on Screen 4, page 3 .


## Guidelines for Recording Accounts Payable

1. Identify changes in open operating accounts payable from beginning to end of year. These are accounts established when farm inputs, such as feed, fertilizer, farm supplies, machinery, repairs, and veterinarian services were bought on credit.
2. If there is more than one account per dealer or farm supplier (e.g., feed is purchased from the same supplier as fertilizer), list them separately on the left-hand portion of the worksheet to facilitate easier allocation to farm expense categories.
3. Assign and allocate changes in open operating accounts payable to appropriate farm expenses using the codes 1-28. Totals will be carried over to Screen 13, page 13.
4. When more than one type of farm input is included in a particular open account, allocate to the expense categories using the estimated ratio of farm input actually purchased from the account during the year.
5. If scheduled debt payments were not made, there is likely an increase in accounts payable for "interest". However, if the loan was refinanced and the unpaid amount added to the principal, the interest is considered paid and is reported in Screen 11, pages 8 and 9 .
6. All accounts payable should appear as liabilities on the balance sheet, Screen 11B, page 9.

Name
[Proc. no. $\qquad$ ]

SUMMARY OF 1998 EXPENSES \& CHANGES IN INVENTORY \& ACCOUNTS PAYABLE

${ }^{1}$ Changes in prepaid expense can be entered in $x$
x spaces. Total change in prepaid expense must $=$ the difference between prepaid expense totals in Screen 9, page 6 (end year minus beg. year).
${ }^{2}$ Use Worksheet 7 on page 12 to calculate.
${ }^{3}$ Must calculate for completion of Screen 14, page 14.
${ }^{4}$ Include all cash withdrawals plus all additional nonfarm expenses paid with farm cash or from farm accounts, e.g., income tax, selfemployment tax, life insurance and wages of corporate owner-operators. Include withdrawals used for nonfarm loan payments, savings and investments as well as family living expenses. Include borrowed capital used for nonfarm purchases, providing it has been entered as a new nonfarm liability in Screen 11B, page 9. If any or all "Nonfarm Cash Income" has been excluded from the value entered in Screen 12 , page 10 , you must also exclude any family expenses paid from that income.

OPTIONAL INPUT
BREAKDOWN OF 1998 ACCRUAL CROP EXPENSES BY CROP
SCREEN 14A.
Accrual Seeds
lizer \& Lime \& Plants
Accrual Spray, Other Crop Expenses

Hay crop (silage \& dry)
Corn (silage \& grain)
Pasture
All other crops
Total

\$ $\qquad$
\$ $\qquad$


Totals above must equal accrual expenses in Screen 13B, page 13.

## OPTIONAL INPUT FOR DEFERRED TAX CALCULATIONS

It will be assumed that: (1) farm assets not listed below will not significantly influence deferred tax liability, and (2) all gain on machinery and purchased livestock is ordinary gain.

Tax Basis (undepreciated balance) of: (as of December 31, 1998)

Purchased livestock (included in livestock inventory, Screen 4)
Machinery \& equipment (included in machinery inventory, Screen 2)
Building \& improvements (included in real estate inventory, Screen 5)
Part that is single purpose livestock structure, silos, \& grain bins ( $\%$ or $\$$ )
Land (included in land and building inventory, Screen 5)
Operator residences ${ }^{1}$ (included in land \& building inventory, Screen 5)
Nonfarm assets (included in Screen 9)

Market Value of:
Operator residences (included in land \& building inventory, Screen 5)
Single purpose livestock structure, silos \& grain bins (\% or \$ of real estate inventory)
Purchased Livestock (\% or \$ of livestock inventory)
Proprietorship:
Tax filing status ${ }^{2}$
Nonfarm income of operator on which self-employment tax was paid
Partnership Information
Tax Filing Status ${ }^{2}$
Percent Share of Farm
Adjusted Gross Income
Percent Ownership of:
Current Assets
Livestock
Machinery
Real Estate
Nonfarm Assets Listed
Nonfarm Income of operator on which self-employment tax was paid

Residences included in farm real estate lived in by the operators of the business.
${ }^{2} 1=$ single, $2=$ married filing jointly, $3=$ married filing separately, $4=$ head of household.

## APPENDIX C

## PROCEDURE FOR CALCULATING:

COST OF PRODUCING MILK
CURRENT RATIO
WORKING CAPITAL
WORKING CAPITAL AS A \% OF TOTAL EXPENSES
ASSET TURNOVER RATIO
OPERATING EXPENSE RATIO
INTEREST EXPENSE RATIO
DEPRECIATION EXPENSE RATIO
NET MILK RECEIPTS

# PROCEDURE FOR CALCULATING COSTS OF PRODUCING MILK <br> 1998 DAIRY FARM BUSINESS SUMMARY <br> HENRY HOLSTEIN EXAMPLE 

|  |  | Example ${ }^{1}$ |
| :---: | :---: | :---: |
| Total Accrual Operating Expenses | \$442,975 |  |
| + Expansion Livestock Expense | + 0 |  |
| = Accrual Operating Expenses Including |  |  |
| Expansion Livestock |  | \$ 442,975 |
| Total Accrual Receipts | \$493,075 |  |
| - Accrual Milk Sales | -435,349 |  |
| = Accrual Receipts Less Milk Sales |  | - 57,726 |
| $=$ Operating Cost of Producing Milk ${ }^{2}$ |  | \$ 385,249 |
| Total Accrual Expenses |  | \$ 486,975 |
| - Accrual Receipts Less Milk Sales |  | $\begin{array}{r}\text { - } 57,726 \\ \hline\end{array}$ |
| $=$ Purchased Inputs Cost of Producing Milk ${ }^{3}$ |  | \$ 429,249 |
| Total Accrual Expenses |  | \$ 486,975 |
| + Family Labor Unpaid |  | + 19,200 |
| + Value of Operator's Labor \& Management |  | + 55,000 |
| + Real Interest on Equity Capital |  | + 19,883 |
| - Accrual Receipts Less Milk Sales |  | $\begin{array}{r}\text { - } 57,726 \\ \hline\end{array}$ |
| $=$ Total Cost of Producing Milk ${ }^{4}$ |  | \$ 523,332 |

1 Same example as in "Calculate and Print Farm Summary" section of this publication.
2 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.

3 Considering all costs except unpaid family labor and 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.

4 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 more 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.

PROCEDURE FOR CALCULATING FINANCIAL RATIOS
1998 DAIRY FARM BUSINESS SUMMARY
HENRY HOLSTEIN EXAMPLE

| Current Ratio | Example |
| :---: | :---: |
| Current Assets, end year | \$ 141,675 |
| $\div$ Current Liabilities, end year | 130,814 |
| $=$ Current Ratio | 1.08 |
| Working Capital |  |
| Current Assets, end year | \$ 141,675 |
| - Current Liabilities, end year | 130,814 |
| $=$ Working Capital | \$ 10,861 |
| Working Capital as a \% of Total Expenses |  |
| Working Capital (from above) | \$ 10,861 |
| $\div$ Total Accrual Expenses | \$ 486,975 |
| * 100 = Working Capital as \% of Total Exp. | 2\% |
| Asset Turnover Ratio |  |
| Total Accrual Receipts Including Appreciation | \$ 511,225 |
| $\div$ Farm Capital (average for year) | 978,681 |
| = Asset Turnover Ratio | 0.52 |
| Operating Expense Ratio |  |
| Total Accrual Expenses | \$ 486,975 |
| - Machinery Depreciation | 34,000 |
| - Real Estate Depreciation | 10,000 |
| - Accrual Interest Expense | 38,130 |
| $\div$ Total Accrual Receipts | 493,075 |
| $=$ Operating Expense Ratio | 0.82 |
| Interest Expense Ratio |  |
| Accrual Interest Expense | \$ 38,130 |
| $\div$ Total Accrual Receipts | 493,075 |
| $=$ Interest Expense Ratio | 0.08 |
| Depreciation Expense Ratio |  |
| Machinery Depreciation | \$ 34,000 |
| + Real Estate Depreciation | 10,000 |
| $\div$ Total Accrual Receipts | 493,075 |
| = Depreciation Expense Ratio | 0.09 |

1998 DAIRY FARM BUSINESS SUMMARY
HENRY HOLSTEIN EXAMPLE
Net Milk Receipts ExampleAccrual Milk Receipts\$ 435,349

| - Accrual Milk Marketing Expense $^{1}$ | 8,400 |
| :---: | ---: |
| $=$ Net Milk Receipts | $\$ 426,949$ |

Net Milk Receipts Per Cow
Net Milk Receipts ..... \$ 426,949
$\div$ Average Number of Cows
$=$ Net Milk Receipts Per Cow ..... 157 ..... \$ 2,719
Net Milk Receipts Per Cwt.
Net Milk Receipts
$\div$ Pounds of Milk Sold ( $\div 100$ )
35,000
= Net Milk Receipts Per Cwt.

$$
\overline{12.20}
$$

1 Milk marketing expenses include government assessments, milk hauling, milk promotion, and cooperative dues. It does not include capital assessments.

## APPENDIX D

## A LISTING OF DFBS FIELD NAMES

## A Listing of DFBS Field Names

The field names below are listed by order of column positions as they appear within each DFBS screen file, from left to right. For each field there is a listing of the DFBS field name and a short description of the variable.

SCREEN 1 DATA: FARM INFORMATION

| Field Name | $\frac{\text { Description }}{\text { Data Year }}$ |
| :--- | :--- |
| YEAR | Farm Number |
| FARM_NO | Operator's Name |
| OP_NAME | Farm Name |
| FARM_NAME | Farm Address |
| ADDRESS | City |
| CITY | State |
| STATE | Zip Code |
| ZIP | County |
| COUNTY | Phone Number |
| PHONE_NO | Regular Data, "" = No, X $=$ Yes |
| REG_FARM | Irregular or Incomplete Data ""= No, X = Yes |
| IRREG_FARM | Dairy Diversion Program, "" = No, X = Yes (1984 \& 1985 only) |
| DDP_MEMBR | Verified Using Verify Procedure, "" = No, X = Yes (obsolete) |
| VERIFIED | Certified Milk Producer |
| CERT_PROD | Year first became certified |
| CERT_YEAR |  |

## SCREEN 2 DATA: MACHINERY \& EQUIPMENT INVENTORY

| Field Name | Description |
| :--- | :--- |
| YEAR | Data Year |
| FARM_NO | Farm Number |
| MACH_BEG | Beginning Machinery Inventory |
| MACH_END | Ending Machinery Inventory |
| MACH_PURCH | Purchased Machinery |
| MACH_TRANS | Noncash Machinery Transfer to Farm |
| MACH_SOLD | Machinery Sold |
| MACH_DEPR | Machinery Depreciation |
| MACH_ADJ | Total Beginning Machinery Inventory After Changes |
| MACH_APPRE | Machinery Appreciation |

SCREEN 3 DATA. FEED \& SUPPLY INVENTORY

| Field Name | Description <br> YEAR |
| :--- | :--- |
| FARM_NO | Fata Year |
| GROWN_BEG | Total Grown Feeds Beginning Inventory |
| GROWN_END | Total Grown Feeds Ending Inventory |
| GROWN_CHNG | Total Grown Feeds Inventory Change |
| GRAIN_BEG | Dairy Grain and Concentrate Beginning Inventory |
| GRAIN_END | Dairy Grain and Concentrate Ending Inventory |
| GRAIN_CHNG | Dairy Grain and Concentrate Inventory Change |
| RUFAGE_BEG | Roughage Beginning Inventory |
| RUFAGE_END | Roughage Ending Inventory |
| RUFAGE_CHNG | Roughage Inventory Change |
| NONDARYBEG | Nondairy Feed Beginning Inventory |
| NONDARYEND | Nondairy Feed Ending Inventory |
| NODARYCHNG | Nondairy Inventory Change |
| PARTS_BEG | Machine Parts Beginning Inventory |
| PARTS_END | Machine Parts Ending Inventory |
| PARTS_CHNG | Machine Parts Inventory Change |


| FUEL_BEG | Fuel, Oil \& Grease Beginning Inventory |
| :--- | :--- |
| FUEL_END | Fuel, Oil \& Grease Ending Inventory |
| FUEL_CHNG | Fuel, Oil \& Grease Inventory Change |
| SEMEN_BEG | Livestock Semen Beginning Inventory |
| SEMEN_END | Livestock Semen Ending Inventory |
| SEMEN_CHNG | Livestock Semen Inventory Change |
| VET_BEG | Veterinary Supplies Beginning Inventory |
| VET_END | Veterinary Supplies Ending Inventory |
| VET_CHNG | Veterinary Supplies Inventory Change |
| BEDING_BEG | Bedding Beginning Inventory |
| BEDING_END | Bedding Ending Inventory |
| BEDNG_CHNG | Bedding Inventory Change |
| MLKSUP_BEG | Milking Supplies Beginning Inventory |
| MLKSUP_END | Milking Supplies Ending Invetory |
| MLKSP_CHNG | Milking Supplies Inventory Change |
| BST_BEG | bST Supplements Beginning Inventory |
| BST_END | bST Supplements End Inventory |
| BST_CHNG | bST Supplements Inventory Change |
| OTHLI__BEG | Other Livestock Supplies Beginning Inventory |
| OTHLIV_END | Other Livestock Supplies Ending Inventory |
| OTHLV_CHNG | Other Livestock Supplies Inventory Change |
| FERT_BEG | Fertilizer \& Lime Beginning Inventory |
| FERT_END | Fertilizer \& Lime Ending Inventory |
| FERT_CHNG | Fertilizer \& Lime Inventory Change |
| SEEDS_BEG | Seeds \& Plants Beginning Inventory |
| SEEDS_END | Seeds \& Plants Ending Inventory |
| SEEDS_CHNG | Seeds \& Plants Inventory Change |
| SPRAY_BEG | Spray and Other Crop Beginning Inventory |
| SPRAY_END | Spray and Other Crop Ending Inventory |
| SPRAY_CHNG | Spray and Other Crop Inventory Chnage |
| LNDBLD_BEG | Land, Building \& Fence Beginning Inventory |
| LNDBLD_END | Land, Building \& Fence Ending Inventory |
| LNDBD_CHNG | Land, Building \& Fence Inventory Change |
| OTHSUP_BEG | Other Supplies Beginning Inventory |
| OTHSUP_END | Other Supplies Ending Inventory |
| OTHSP_CHNG | Other Supplies Inventory Change |
| FEEDSUPBEG | Total Feed and Supplies Beginning Inventory |
| FEEDSUPEND | Total Feed and Supplies Ending Inventory |
|  |  |

## SCREEN 4 DATA: LIVESTOCK INVENTORY

Field Name
YEAR
FARM_NO
COWS_LEASE
COWS_BEG1
COWS_BEG2
COWBEGINV1
COWBEGINV2
CWBG1VALHD
CWBG2VALHD
COWS_END1
COWS_END2
COW_BPVAL1
COW_BPVAL2
CWBP1VALHD
CWBP2VALHD
COWENDINV1
COWENDINV2
CWEN1VALHD
CWEN2VALHD

Description
Data Year
Farm Number
Number of Leased/Rented Dairy Cows at End of Year
Number of Cows on January 1, line 1
Number of Cows on January 1, line 2
Cow Inventory Value on January 1, line 1
Cow Inventory Value on January 1, line 2
Cow Value Per Head on January 1, line 1
Cow Value Per Head on January 1, line 2
Number of Cows as of December 31, line 1
Number of Cows as of December 31, line 2
Cow Inventory Value on December 31 at January 1 Prices, line 1
Cow Inventory Value on December 31 at January 1 Prices, line 2
Cow Value Per Head on December 31 at January 1 Prices, line 1
Cow Value Per Head on December 31 at January 1 Prices, line 2
Cow Inventory Value on December 31, line 1
Cow Inventory Value on December 31, line 2
Cow Value Per Head on December 31, line 1
Cow Value Per Head on December 31, line 2

COWS_BEG_T
COWBEGINVT
COWS_END_T
COW BPVALTT
COWENDINVT
HEF_BEG1
HEF_BEG2
HEF_BEG3
HEFBEGINV1
HEFBEGINV2
HEFBEGINV3
HFBG1VALHD
HFBG2VALHD
HFBG3VALHD
HEF END1
HEF_END2
HEF_END3
HEF_BPVAL1
HEF_BPVAL2
HEF_BPVAL3
HFBP1VALHD
HFBP2VALHD
HFBP3VALHD
HEFENDINV1
HEFENDINV2
HEFENDINV3
HFEN1VALHD
HFEN2VALHD
HFEN3VALHD
HEF_BEG_TL
HEFBEGINVT
HEF_END_T
HEF ${ }^{-}$BPVA $\bar{A}$ TT
HEFENDINVT
BULL_BEG1
BULL_BEG2
BULBEGGINV1
BULBEGINV2
BLBG1VALHD
BLBG2VALHD
BULL_END1
BULL_END2
BUL_BPVAL1
BUL-BPVAL2
BLBP1VALHD
BLBP2VALHD
BULENDINV1
BULENDINV2
BLEN1VALHD
BLEN2VALHD
BULL_BEG_T
BULBEGINVTT
BULL_END_T
BUL_BPVALTT
BULENDINVT
LVST_BEG_T
LVSTBEGIN̄V
LVST_END_T
LVSTBPVALT
LVSTENDINV

Total Number of Dairy Cows on January 1
Total Inventory Value of Dairy Cows on January 1
Total Number of Dairy Cows on December 31
Cow Inventory Value on December 31 at January 1 Prices
Cow Inventory Value on December 31
Number of Bred Heifers on January 1
Number of Open Heifers on January 1
Number of Calves on January 1
Bred Heifer Inventory Value on January 1
Open Heifer Inventory Value on January 1
Calf Inventory Value on January 1
Bred Heifer Value Per Head on January 1
Open Heifer Value Per Head on January 1
Calf Value Per Head on January 1
Number of Bred Heifers on December 31
Number of Open Heifers on December 31
Number of Calves on December 31
Bred Heifer Inventory Value on December 31 at January 1 Prices
Open Heifer Inventory Value on December 31 at January 1 Prices
Calf Inventory Value on December 31 at January 1 Prices
Bred Heifer Value Per Head on December 31 at January 1 Prices
Open Heifer Value Per Head on December 31 at January 1 Prices
Calf Value Per Head on December 31 at January 1 Prices
Bred Heifer Inventory Value on December 31
Open Heifer Inventory Value on December 31
Calf Inventory Value on December 31
Bred Heifer Value Per Head on December 31
Open Heifer Value Per Head on December 31
Calf Value Per Head on December 31
Total Number of Heifers on January 1
Total Inventory Value of Heifers on January 1
Total Number of Heifers on December 31
Total Inventory Value of Heifers on December 31 at January 1 Prices
Total Inventory Value of Heifers on December 31
Number of Bulls or Other Livestock, January 1, line 1
Number of Bulls or Other Livestock, January 1, line 2
Bulls or Other Livestock Inventory Value, January 1, line 1
Bulls or Other Livestock Inventory Value, January 1, line 2
Bulls or Other Livestock Value Per Head, January 1, line 1
Bulls or Other Livestock Value Per Head, January 1, line 2
Number of Bulls or Other Livestock, December 31, line 1
Number of Bulls or Other Livestock, December 31, line 2
Bulls or Other Livestock Inventory Value, Dec. 31@ Jan. 1 Prices, line 1
Bulls or Other Livestock Inventory Value, Dec. 31@ Jan. 1 Prices, line 2
Bulls or Other Livestock Value Per Head, Dec. 31@ Jan. 1 Prices, line 1
Bulls or Other Livestock Value Per Head, Dec. 31@ Jan. 1 Prices, line 2
Bulls or Other Livestock Inventory Value, December 31, line 1
Bulls or Other Livestock Inventory Value, December 31, line 2
Bulls or Other Livestock Value Per Head, December 31, line 1
Bulls or Other Livestock Value Per Head, December 31, line 2
Total Number of Bulls or Other Livestock, January 1
Total Inventory Value of Bulls or Other Livestock, January 1
Total Number of Bulls or Other Livestock, December 31
Total Inventory Value of Bulls /Other Livestock, Dec. 31 @ Jan. 1 Prices
Total Inventory Value of Bulls or Other Livestock, December 31
Total Number of Livestock, January 1
Total Inventory Value of Livestock, January 1
Total Number of Livestock, December 31
Total Inventory Value of Livestock, December 31 at January 1 Prices
Total Inventory Value of Livestock, December 31

SCREEN 5 DATA: REAL ESTATE INVENTORY BALANCE

| Field Name | Description |
| :--- | :--- |
| YEAR | Data Year |
| FARM_NO | Farm Number |
| RE_BEGINV | Land and Buildings Beginning Market Value |
| RE_ENDINV | Land and Buildings Ending Market Value |
| NEW_LAND | New Land Purchased |
| NEW_BLDG | New Buildings Purchased |
| LOST_CAP | Lost Capital |
| VALUE_ADD | Value added (NEW_LAND + NEW_BLDG - LOST_CAP) |
| RE_TRANS | Noncash Real Estate Transfer to Farm |
| RE_DEPR | Real Estate Depreciation |
| RE_NETSALE | Net Sale Price (RE_TOTSALE - RE_SALEXP) |
| RE_TOTSALE | Total Sale Price of Real Estate Sold |
| RE_SALEXP | Real Estate Sale Expenses |
| RE_NOTE | Note or Mortgage Held by Seller |
| RE_NETCASH | Net Cash Received by Seller (RE_NETSALE - RE_NOTE) |
| RE_ADJ | Total Beginning Real Estate Value After Changes |
| RE_APPRE | Real Estate Appreciation (RE_ENDINV - RE_ADJ) |
| RESOLD_APP | Appreciation on Real Estate Sold (obsolete) |

SCREEN 6 DATA: LIVESTOCK \& BUSINESS DESCRIPTION

| Field Name | Description |
| :--- | :--- |
| YEAR | Data Year |
| FARM_NO | Farm Number |
| COW_AVGNO | Average Number of Cows |
| HEIF_AVGNO | Average Number of Heifers |
| BULL_AVGNO | Average Number of Bulls |
| OTHLVST_WU | Average Number of Other Livestock in Work Units |
| MILK_LBS | Pounds of Milk Sold |
| BF_PCT | Average Butterfat Percentage (Milk Plant Test) |
| PROD_REC | Production Record System; $1=$ DHI, $2=$ O.S., $3=$ Other, $4=$ None |
| DHI_NUM | DHI Number if DHI member |
| MILK_SYS | Milking System; $1=$ Bucket and Carry, $2=$ Dumping station, $3=$ Pipeline, |
|  | = Herringbone Parlor, $5=$ Other |
| BUS_TYPE | Primary Business type $1=$ Single Prop, $2=$ Partnership $3=$ Corporation |
| BUSREC_SYS | Primary Financial Recordkeeping System; $1=$ ELFAC II, $2=$ Account Book, |
|  | $3=$ Agrifax Mail-in, $4=$ On-Farm Computer, $5=$ Other |
| BARN_TYPE | Dairy Housing; $1=$ Stanchion/Tie-Stall, $2=$ Freestall, $3=$ Combination |
| MILK_FREQ | Milking Frequency; $1=2 x /$ day, $2=3 x /$ day, $3=$ Other |
| BST_USE | BST use; $1=<25 \%, 2=25-75 \%, 3=>75 \%, 4=$ Stopped using in analysis year, |
|  | $5=$ Not Used |

## SCREEN 7 DATA: LABOR AND LAND INVENTORY

YEAR
FARM_NO
OPER_MO_1
OPER_MO_2
OPER_MO_3
OPER_MO_-4
OPER_MO_5
OPER_MO_6
OPER_AGE_1
OPER_AGE_2
OPER_AGE_3
OPER_AGE_4
OPER_AGE_5

Data Year
Farm Number
Full-Time Months Worked by Operator 1
Full-Time Months Worked by Operator 2
Full-Time Months Worked by Operator 3
Full-Time Months Worked by Operator 4
Full-Time Months Worked by Operator 5
Full-Time Months Worked by Operator 6
Age of Operator 1
Age of Operator 2
Age of Operator 3
Age of Operator 4
Age of Operator 5
OPER_AGE_6
OPER_ED_1
OPER_ED_2
OPER_ED_3
OPER_ED_4
OPER_ED_5
OPER_ED_6
OP_LABVAL1
OP_LABVAL2
OP_LABVAL3
OP_LABVAL4
OP_LABVAL5
OP_LABVAL6
FAM_PD_MO
FAMUNPD_MO
HIRED_MO
TOT_MONLBR
WKR_EQUIV
CRPACR_OWN
CRPACR_RNT
CRPACR_TOT
PASTAC_OWN
PASTAC_RNT
PASTAC_TOT
WOODAC_OWN
WOODAC_RNT
WOODAC_TOT
ACRES_OWN
ACRES_RNT
ACRES_TOT

Age of Operator 6
Years of Education of Operator 1
Years of Education of Operator 2
Years of Education of Operator 3
Years of Education of Operator 4
Years of Education of Operator 5
Years of Education of Operator 6
Value of Labor and Management of Operator 1
Value of Labor and Management of Operator 2
Value of Labor and Management of Operator 3
Value of Labor and Management of Operator 4
Value of Labor and Management of Operator 5
Value of Labor and Management of Operator 6
Full-Time Number of Month Worked by Family (Paid)
Full-Time Number of Month Worked by Family (UnPaid)
Full-Time Number of Month Worked by Hired Labor
Total Number of Full-Time Months Worked
Total Worker Equivalent Units
Tillable Acres Owned
Tillable Acres Rented
Total Tillable Acres
Pasture (Nontillable) Acres Owned
Pasture (Nontillable) Acres Rented
Total Pasture (NonTillable) Acres
Woods and other nontillable Acres Owned
Woods and other nontillable Acres Rented
Total Woods and other nontillable Acres
Total Acres Owned
Total Acres Rented
Total Acres

SCREEN 8 DATA: TILLABLE LAND USE

YEAR
FARM NO
HAY_A ACRES
HAY_PROD
HAY_DM
HAY_TDM
HCS_PROD
HCS_DM
HCS_TDM
SILAGE_ACR
CS_PROD
CS_DM
CS_TDM
OTHFOR_ACR
OTHFR PROD
OTHFR_DM
OTHFR_TDM
GRAIN_ACRE
CG PRŌD
TOTFORG_DM
OATS_ACRE
OATS_PROD
WHEAT_ACRE
WHEAT_PROD
OTHER_ACRE
OTHCRP_WU
TILPAS_ACR
ROT_GRAZE
IDLE_ACRE
TILACR_TOT

Data Year
Farm Number
1st cut Hay Crop Acres
Total Production Hay
Dry Matter Coefficient Hay
Total Tons Hay Dry Matter
Total Hay Crop Silage Production
Dry Matter Coefficient of Hay Crop Silage
Total Tons Dry Matter of Hay Crop Silage
Corn Silage Acres
Total Production of Corn Silage
Dry Matter Coefficient of Corn Silage
Total Tons Dry Matter of Corn Silage
Other Forage Harvested Acres
Total Other Forage Production
Dry Matter Coefficient of Other Forage
Total Tons Dry Matter of Other Forage
Acres of Corn for Grain
Total Production of Corn for Grain
Total Tons of Forage DM Produced
Total Acres of Oats
Total Oats Production (dry bu.)
Total Acres of Wheat
Total Wheat Production (dry bu.)
Total Other Acres
Total Production Other Crops Work Units
Total Tillable Pasture Acres
Rotational Grazing
Total Idle Acres
Total Tillable Acres

SCREEN 9 DATA: FARM FAMILY FINANCIAL SITUATION - ASSETS

| YEAR | Data Year |
| :--- | :--- |
| FARM_NO | Farm Number |
| TOTIN__BEG | Total Farm Inventory Beginning (Jan 1 |
| TOTIN__END | Total Farm Inventory Ending (Dec 31) |
| FMCASH_BEG | Farm cash, checking \& savings (Jan 1) |
| FMCASH_END | Farm cash, checking \& savings (Dec 31) |
| ACTREC_BEG | Accounts Receivable (Jan 1) |
| ACTREC_END | Accounts Receivable (Dec 31) |
| FCSTK_BEG | Farm Credit Stock (Jan 1) |
| FCSTK_END | Farm Credit Stock (Dec 31) |
| OTHSTK_BEG | Other Stock and Certificates (Jan 1) |
| OTHSTK_END | Other Stock and Certificates (Dec 31) |
| PPEXP_BEG | Prepaid Expenses (Jan 1) |
| PPEXP_END | Prepaid Expenses (Dec 31) |
| FRMAST_BEG | Total Farm Assets (Jan 1) |
| FRMAST_END | Total Farm Assets (Dec 31) |
| NFMCASHBEG | Personal cash, checking \& savings (Jan 1) |
| NFMCASHEND | Personal cash, checking \& savings (Dec 31) |
| LIFEINSBEG | Cash Value Life Insurance (Jan 1) |
| LIFEINSEND | Cash Value Life Insurance (Dec 31) |
| NFM_RE_BEG | Nonfarm Real Estate (Jan 1) |
| NFM_RE_END | Nonfarm Real Estate (Dec 31) |
| AUTO_BEG | Personal Share Auto (Jan 1) |
| AUTO_END | Personal Share Auto (Dec 31) |
| NFMSTK_BEG | Nonfarm Stock \& Bonds (Jan 1) |
| NFMSTK_END | Nonfarm Stock \& Bonds (Dec 31) |
| HSEHLD_BEG | Household Furnishings (Jan 1) |
| HSEHLD_END | Household Furnishings (Dec 31) |
| OTHNFM_BEG | Other (including mortgages \& notes) (Jan 1) |
| OTHNFM_END | Other (including mortgages \& notes) (Dec 31) |
| TOTNFM_BEG | Total Nonfarm Assets (Jan 1) |
| TOTNFM_END | Total Nonfarm Assets (Dec 31) |
| TOTAST_BEG | Total Assets (not including leases) (Jan 1) |
| TOTAST_END | Total Assets (not including leases) (Dec 31) |
|  |  |

SCREEN 10 DATA: FINANCIAL LEASES

| YEAR | Data Year |
| :--- | :--- |
| FARM_NO | Farm Number |

## CATTLE LEASES

CATLS_AMT1
CATLS AMT2
CATLS_AMT3
CATNOPMTS1
CATNOPMTS2
CATNOPMTS3
CATLS EXP1
CATLS_EXP2
CATLS_EXP3
CAT_PAYYR1
CAT-PAYYR2
CAT_PAYYR3
CAT PAYRM1
CAT_PAYRM2
CAT PAYRM3
CATLS_EXPT
Amount of each payment for Cattle Lease \#1
Amount of each payment for Cattle Lease \#2
Amount of each payment for Cattle Lease \#3
Number of Payments for Cattle Lease \#1 in Current year
Number of Payments for Cattle Lease \#2 in Current year
Number of Payments for Cattle Lease \#3 in Current year
Total Expenses for Cattle Lease \# 1
Total Expenses for Cattle Lease \# 2
Total Expenses for Cattle Lease \# 3
Number of Payments per year for Cattle Lease \#1
Number of Payments per year for Cattle Lease \#2
Number of Payments per year for Cattle Lease \#3
Number of payments remaining for Cattle Lease \#1
Number of payments remaining for Cattle Lease \#2
Number of payments remaining for Cattle Lease \#3
Total Cattle Lease Expenses for Current Year

EQUIPMENT LEASES
EQPLS_AMT1
Amount of each payment for Equipment Lease \#1
EQPLS_AMT2
EQPLS_AMT3
EQ_NOPMTS1
EQ_NOPMTS2
EQ_NOPMTS3
EQPLS_EXP1
EQPLS_EXP2
EQPLS EXP3
EQP_PAYYYR1
EQP_PAYYR2
EQP_PAYYR3
EQP_PAYRM1
EQP_PAYRM2
EQP_PAYRM3
EQPLS_EXPT
Amount of each payment for Equipment Lease \#2
Amount of each payment for Equipment Lease \#3
Number of Payments for Equipment Lease \#1 in Current year
Number of Payments for Equipment Lease \#2 in Current year
Number of Payments for Equipment Lease \#3 in Current year
Total Expenses for Equipment Lease \# 1
Total Expenses for Equipment Lease \# 2
Total Expenses for Equipment Lease \# 3
Number of Payments per year for Equipment Lease \#1
Number of Payments per year for Equipment Lease \#2
Number of Payments per year for Equipment Lease \#3
Number of payments remaining for Equipment Lease \#1
Number of payments remaining for Equipment Lease \#2
Number of payments remaining for Equipment Lease \#3
Total Equipment Lease Expenses for Current Year
STRUCTURAL LEASES
STRLS_AMT1
STRLS_AMT2
Amount of each payment for Structure Lease \#1
STRLS_AMT3
STRNOPMTS 1
STRNOPMTS2
STRNOPMTS3
STRLS_EXP1
STRLS_EXP2
STRLS EXP3
STR_PĀYYR1
STR_PAYYR2
STR_PAYYR3
STR_PAYRM1
STR_PAYRM2
STR_PAYRM3
STRL̄S_EXPT
Amount of each payment for Structure Lease \#2
Amount of each payment for Structure Lease \#3
Number of Payments for Structure Lease \#1 in Current year
Number of Payments for Structure Lease \#2 in Current year
Number of Payments for Structure Lease \#3 in Current year
Total Expenses for Structure Lease \# 1
Total Expenses for Structure Lease \# 2
Total Expenses for Structure Lease \# 3
Number of Payments per year for Structure Lease \#1
Number of Payments per year for Structure Lease \#2
Number of Payments per year for Structure Lease \#3
Number of payments remaining for Structure Lease \#1
Number of payments remaining for Structure Lease \#2
Number of payments remaining for Structure Lease \#3
Total Structure Lease Expenses for Current Year

SCREEN 11A DATA: FARM FAMILY FINANCIAL SITUATION: LIABILITIES AND DEBT PAYMENTS

| YEAR | Data Year |
| :--- | :--- |
| FARM_NO | Farm Number |

Long term Debt ( $>10$ years). This category allows up to 5 Loans
LTRM_DEBT1 Creditors Name
LTRM_DEBT2 Creditors Name
LTRM_DEBT3 Creditors Name
LTRM_DEBT4 Creditors Name
LTRM_DEBT5 Creditors Name
LT BEG1
LT_BEG2
LT_BEG3
LT-BEG4
Amount of Loan (Jan 1)
Amount of Loan (Jan 1)
Amount of Loan (Jan 1)
Amount of Loan (Jan 1)
Amount of Loan (Jan 1)
Amount of Loan (Dec 31)
Amount of Loan (Dec 31)
Amount of Loan (Dec 31)
Amount of Loan (Dec 31)
Amount of Loan (Dec 31)
Amount of New Borrowings with this Creditor
Amount of New Borrowings with this Creditor

LT_BORROW3
LT BORROW4
LT_BORROW5
LT_PRIN1
LT_PRIN2
LT_PRIN3
LT_PRIN4
LT_PRIN5
LT_INT1
LT_INT2
LT-INT3
LT INT4
LT_INT5
LT_INTRAT1
LT ${ }^{-}$INTRAT2
LT_INTRAT3
LT_INTRAT4
LT_INTRAT5
LT_PYMT1
LT_PYMT2
LT_PYMT3
LT_PYMT4
LT PYMT5
LT_PMTYR1
LT_PMTYR2
LT_PMTYR3
LT_PMTYR4
LT_PMTYR5

Amount of New Borrowings with this Creditor Amount of New Borrowings with this Creditor
Amount of New Borrowings with this Creditor
Actual Principal Payments
Actual Principal Payments
Actual Principal Payments
Actual Principal Payments
Actual Principal Payments
Actual Interest Payments
Actual Interest Payments
Actual Interest Payments
Actual Interest Payments
Actual Interest Payments
Interest Rate
Interest Rate
Interest Rate
Interest Rate
Interest Rate
Planned Amount of Payments
Planned Amount of Payments
Planned Amount of Payments
Planned Amount of Payments
Planned Amount of Payments
Payments per Year
Payments per Year
Payments per Year
Payments per Year
Payments per Year

Intermediate Term $\operatorname{Debt}(>1 \mathrm{yr} .,<10 \mathrm{yrs}$.$) . This category allows up to 9$ loans.
ITRM_DEBT1 Creditors Name
ITRM_DEBT2 Creditors Name
ITRM_DEBT3 Creditors Name
ITRM_DEBT4 Creditors Name
ITRM_DEBT5
ITRM ${ }^{-}$DEBT6
ITRM_DEBT7
ITRM_DEBT8
ITRM_DEBT9
Creditors Name
Creditors Name
Creditors Name
Creditors Name
Creditors Name
IT_BEG1
IT_BEG2
IT_BEG3
Amount of Loan (Jan 1)
Amount of Loan (Jan 1)
Amount of Loan (Jan 1)
IT_BEG4 Amount of Loan (Jan 1)
IT_BEG5
IT_BEG6
IT_BEG7
IT_BEG8
IT_BEG9
IT END1
IT_END2
IT_END3
IT_END4
IT END5
IT_END6
IT_END7
Amount of Loan (Jan 1)
Amount of Loan (Jan 1)
Amount of Loan (Jan 1)
Amount of Loan (Jan 1)
Amount of Loan (Jan 1)
Amount of Loan (Dec 31)
Amount of Loan (Dec 31)
Amount of Loan (Dec 31)
Amount of Loan (Dec 31)
Amount of Loan (Dec 31)
Amount of Loan (Dec 31)
Amount of Loan (Dec 31)
Amount of Loan (Dec 31)
Amount of Loan (Dec 31)
Amount of New Borrowings with this Creditor
Amount of New Borrowings with this Creditor
Amount of New Borrowings with this Creditor
Amount of New Borrowings with this Creditor

IT_BORROW5
IT_BORROW6
IT_BORROW7
IT_BORROW8
IT_BORROW9
IT PRIN1
IT PRIN2
IT PRIN3
IT_PRIN4
IT_PRIN5
IT_PRIN6
IT_PRIN7
IT_PRIN8
IT_PRIN9
IT_INT1
IT_INT2
IT_INT3
IT_INT4
IT_INT5
IT_INT6
IT_INT7
IT_INT8
IT_INT9
IT_INTRAT1
IT-INTRAT2
IT_INTRAT3
IT-INTRAT4
IT_INTRAT5
IT_INTRAT6
IT_INTRAT7
IT_INTRAT8
IT_INTRAT9
IT_PYMT1
IT_PYMT2
IT_PYMT3
IT_PYMT4
IT_PYMT5
IT_PYMT6
IT_PYMT7
IT_PYMT8
IT_PYMT9
IT_PMTYR1
IT_PMTYR2
IT_PMTYR3
IT_PMTYR4
IT_PMTYR5
IT_PMTYR6
IT_PMTYR7
IT_PMTYR8
IT_PMTYR9

Amount of New Borrowings with this Creditor Amount of New Borrowings with this Creditor Amount of New Borrowings with this Creditor Amount of New Borrowings with this Creditor Amount of New Borrowings with this Creditor Actual Principal Payments
Actual Principal Payments
Actual Principal Payments
Actual Principal Payments
Actual Principal Payments
Actual Principal Payments
Actual Principal Payments
Actual Principal Payments
Actual Principal Payments
Actual Interest Payments
Actual Interest Payments
Actual Interest Payments
Actual Interest Payments
Actual Interest Payments
Actual Interest Payments
Actual Interest Payments
Actual Interest Payments
Actual Interest Payments
Interest Rate
Interest Rate
Interest Rate
Interest Rate
Interest Rate
Interest Rate
Interest Rate
Interest Rate
Interest Rate
Planned Amount of Payments
Planned Amount of Payments
Planned Amount of Payments
Planned Amount of Payments
Planned Amount of Payments
Planned Amount of Payments
Planned Amount of Payments
Planned Amount of Payments
Planned Amount of Payments
Payments per Year
Payments per Year
Payments per Year
Payments per Year
Payments per Year
Payments per Year
Payments per Year
Payments per Year
Payments per Year

SCREEN 11B DATA: FARM FAMILY FINANCIAL SITUATION: LIABILITIES AND DEBT PAYMENTS (Continued)

Short Term Debt (1 year or less). This category allows for 3 loans.
STRM_DEBT1
STRM_DEBT2
STRM_DEBT3
ST_BEG1
ST_BEG2
ST_BEG3

Creditors Name
Creditors Name
Creditors Name
Amount of Loan (Jan 1)
Amount of Loan (Jan 1)
Amount of Loan (Jan 1)

| ST_END1 | Amount of Loan (Dec 31) |
| :--- | :--- |
| ST_END2 | Amount of Loan (Dec 31) |
| ST_END3 | Amount of Loan (Dec 31) |
| ST_BORROW1 | Amount of New Borrowings with this Creditor |
| ST_BORROW2 | Amount of New Borrowings with this Creditor |
| ST_BORROW3 | Amount of New Borrowings with this Creditor |
| ST_PRIN1 | Actual Principal Payments |
| ST_PRIN2 | Actual Principal Payments |
| ST_PRIN3 | Actual Principal Payments |
| ST_INT1 | Actual Interest Payments |
| ST_INT2 | Actual Interest Payments |
| ST_INT3 | Actual Interest Payments |
| ST_INTRAT1 | Interest Rate |
| ST_INTRAT2 | Interest Rate |
| ST_INTRAT3 | Interest Rate |
| ST_PYMT1 | Planned Amount of Payments |
| ST_PYMT2 | Planned Amount of Payments |
| ST_PYMT3 | Planned Amount of Payments |
| ST_PMTYR1 | Payments per Year |
| ST_PMTYR2 | Payments per Year |
| ST_PMTYR3 | Payments per Year |

Operating Debt (borrowed to buy items entered as expenses)
OPER_DEBT1 Creditors Name
OPER_DEBT2 Creditors Name
OP_BEG1 Amount of Loan (Jan 1)
OP_BEG2 Amount of Loan (Jan 1)
OP ${ }^{-}$END1 Amount of Loan (Dec 31)
OP_END2 Amount of Loan (Dec 31)
OP_INT1 Actual Interest Payments
OP INT2
OP ${ }^{-}$NETRED1
OP_NETRED2
Actual Interest Payments
Planned Net Reduction in Operating Debt
Planned Net Reduction in Operating Debt
Other Liabilities
ACTPAY BEG
ACTPAY_END
ACTPAY_INT
AP NETRED
GOVREC BEG
GOVREC ${ }^{-}$END
FRMLIB_BEG
FRMLIB_END
FRMTOTPRIN
FRMTOTINT
NFRMDETBEG
NFRMDETEND
NF BORROW
NF PRIN
NF_INT
NF_PYMTS
TOTLLIB BEG
TOTLIB END
TOT PRIN
Accounts Payable (Jan 1)
Accounts Payable (Dec 31)
Actual Interest Payments on Accounts Payable
Planned Net Reduction in Accounts Payable
Advanced Government Receipts (Jan 1)
Advanced Government Receipts (Dec 31)
Total Farm Liabilities (Jan 1)
Total Farm Liabilites (Dec 31)
Total Farm Principal Payments
Total Farm Interest Payments
Nonfarm Liabilities (Jan 1) without leases
Nonfarm Liabilities (Dec 31) without leases
Amount of New Nonfarm Borrowings
Actual Nonfarm Principal Payments
Actual Nonfarm Interest Payments
Total Nonfarm Planned Payments
Total Liabilities (Jan 1) without leases
Total Liabilities (Dec 31) without leases
Total Actual Principal Payments
Total Actual Interest Payments

## SCREEN 12 DATA: SUMMARY OF RECEIPTS AND CHANGES IN INVENTORY AND ACCOUNTS

RECEIVABLE

YEAR
FARM_NO

Data Year
Farm Number

MILK_CASH
MILK CHAR
MILK_ACCRL
CATT_CASH
CATT_CHINV
CATT-CHAR
CATT_ACCRL
HEIF_CASH
HEIF_CHAR
HEIF ACCRL
OTHL̄V CASH
OTHLVC $H I N V$
OTHLV_CHAR
OTHLV_ACCL
CROPS_CASH
GROWN_CHNG
CROPS_C̄HAR
CROPS_ACCL
GOVRC CASH
GOVR_C $H I N V$
GOVRC_CHAR
GOVRC_ACCL
CUSTM CASH
CUSTM_CHAR
CUSTM_ACCL
GASTX_CASH
GASTX_CHAR
GASTX_ACCL
OTHER CASH
OTHER_CHAR
OTHER_ACCL
TOTCAS S REC
TOT_CHINV
TOTĀL_CHAR
TOTACCRECT
SALE STOCK
NONFARMINC
CASH_TRANS
NOCASASHTRAN

Cash Milk Receipts
Change in Milk Accounts Receivable
Accrual Milk Receipts
Cash Cattle Receipts
Change in Dairy Cattle Inventory
Change in Dairy Cattle Accounts Receivable
Accrual Dairy Cattle Receipts
Cash Heifer Receipts
Change in Dairy Calves Accounts Receivable
Accrual Dairy Calves Receipts
Cash Other Livestock Receipts
Change in Other Livestock Inventory
Change in Other Livestock Accounts Receivable
Accrual Other Livestock Receipts
Cash Crops Receipts
Change in Grown Feed Inventory
Change in Crops Accounts Receivable
Accrual Crop Receipts
Cash Government Receipts
Change in Government Receipts Inventory
Change in Government Receipts Accounts Receivable
Accrual Goverment Receipts
Cash Custom Machine Work Receipts
Change in Custom Machine Work Accounts Receivable
Accrual Custom Machine Work Receipts
Cash Gas Tax Refunds
Change in Gas Tax Refunds Accounts Receivable
Accrual Gas Tax Refunds
Cash Other Receipts
Change in Other Receipts Accounts Receivable
Accrual Other Receipts
Total Cash Receipts
Total Change in Inventory
Total Change in Accounts Receivable
Total Accrual Receipts
Sale of Other Stock \& Certificates (exclude Farm Credit stock)
Nonfarm Cash Income
Cash used in the business from nonfarm capital
Noncash capital transfeered to farm business for cattle, crops, etc. (e.g.
gifts/inheritances)
Col

SCREEN 13 DATA: SUMMARY OF EXPENSES AND CHANGES IN INVENTORY AND ACCOUNTS PAYABLE
YEAR
FARM_NO
LABOR_EXP
LABOR_PP
LABOR_AP
LABOR_ACRL
GRAIN_EXP
GRAIN_AP
GRAIN_ACRL
RUFAG_EXP
RUFAG_AP
RUFAG_ACRL
NODARY_EXP
NODARY_AP
NODRY_ACRL
MACHRNTEXP
MACHRNT_PP
MACHRNT_AP

Data Year
Farm Number
Hired Labor Cash Expense
Hired Labor Change in Inventory or PrePaid Expenses
Hired Labor Change in Accounts Payable
Accrual Hired Labor Expenses
Dairy Grain \& Concentrate Cash Expense Paid
Change in Dairy Grain \& Concentrate Accounts Payable
Accrual Dairy Grain and Concentrate Expenses
Cash Dairy Roughage Expenses
Change in Dairy Roughage Accounts Payable
Accrual Dairy Roughage Expenses
Cash Nondairy Feed Expenses
Change in Nondairy Feed Accounts Payable
Accrual Nondairy Feed Expenses
Cash Machine Hire, Rent \& Lease Expense
Change in Prepaid Machine Hire, Rent \& Lease Expenses
Change in Machine Hire, Rent \& Lease Accounts Payable

MCHRNTACRL
MACHREPEXP
MACHREP_AP
MCHREPACRL
AUTO_PP
AUTO_CASH
AUTO_AP
AUTO_ACRL
FUEL_EXP
FUEL_AP
FUEL ${ }^{-}$ACRL
REPLVSTEXP
REPLVST_PP
REPLVST_AP
REPLVKACRL
BREED EXP
BREED_AP
BREED_ACRL
VET EXXP
VET_AP
VET_ACRL
MILKMKTEXP
MILKMKT_PP
MILKMKT_AP
MLKMKTĀCRL
BEDDINGEXP
BEDDING_AP
BED_ACRL
MILK $\bar{K}$ SUPEXP
MILKSUP_AP
MLKSUPĀCRL
CATTLS_EXP
CATTLES_PP
CATTLS_AP
CATLS_ĀCRL
CUSTB $\bar{R} D E X P$
CUSTBRD_PP
CUSTBRD_AP
CSTBRDACRL
BST EXP
BST_AP
BST_ACRL
OTHLVSKEXP
OTHLVSK_AP
OTHLV_ACRL
FERT_EXP
FERT_AP
FERT-ACRL
SEED $\bar{S}$ EXP
SEEDS_AP
SEEDS_ACRL
SPRAY_EXP
SPRAY_AP
SPRAY_ACRL
BLDG_EXP
BLDG_AP
BLDG_ACRL
TAXES_EXP
TAXES_PP
TAXES_AP
TAXES_ACRL

Accrual Machine Hire, Rent \& Lease Expenses
Cash Machine repairs \& farm vehicle expenses
Change in Machine Repairs \& Farm Vehicle Expenses Accounts Payable
Accrual Machine Repairs \& Farm Vehicle Expenses
Only $<1995$ Change in PrePaid Auto Expenses
Only < 1995 Cash Auto Expenses
Only <1995 Change in Auto Accounts Payable
Only < 1995 Accrual Auto Expenses
Cash Fuel, Oil \& Grease Expenses
Change in Fuel, Oil \& Grease Accounts Payable
Accrual Fuel, Oil \& Grease Expenses
Cash Replacement Livestock Expenses
Change in Prepaid Replacement Livestock Expenses
Change in Replacement Livestock Accounts Payable
Accrual Replacement Livestock Expenses
Cash Breeding Expenses
Change in Breeding Accounts Payable
Accrual Breeding Expense
Cash Veterinary \& Medicine Expenses
Change in Veterinary \& Medicine Accounts Payable
Accrual Veterinary \& Medicine Expenses
Cash Milk Marketing Expenses
Change in PrePaid Milk Marketing Expenses
Change in Milk Marketing Accounts Payable
Accrual Milk Marketing Expenses
Cash Bedding Expenses
Change in Bedding Accounts Payable
Accrual Bedding Expenses
Cash Milking Supplies Expenses
Change in Milking Supplies Accounts Payable
Accrual Milking Supplies Expenses
Cash Cattle Lease Expenses
Change in Prepaid Cattle Lease Expenses
Change in Cattle Lease Accounts Payable
Accrual Cattle Lease Expenses
Cash Custom Boarding Expenses
Change in PrePaid Custom Boarding Expenses
Change in Custom Boarding Accounts Payable
Accrual Custom Boarding Expenses
Cash bST Expenses
Change in bST Accounts Payable
Accrual bST Expenses
Cash Other Livestock Expenses
Change in Other Livestock Accounts Payable
Accrual Other Livestock Expenses
Cash Fertilizer \& Lime Expenses
Change in Fertilizer \& Lime Accounts Payable
Accrual Fertilizer \& Lime Accounts Payable
Cash Seeds \& Plants Expenses
Change in Seeds \& Plants Accounts Payable
Accrual Seeds \& Plants Expenses
Cash Spray Expenses
Change in Spray Accounts Payable
Accrual Spray Expenses
Cash Land, Building \& Fence Repair Expenses
Change in Land, Building \& Fence Repair Accounts Payable
Accrual Land, Building \& Fence Repair Expenses
Cash Taxes Expenses
Change in Prepaid Taxes
Change in Taxes Accounts Payable
Accrual Taxes Expenses

| INSUR_EXP | Cash Insurance Expenses |
| :--- | :--- |
| INSUR_PP | Change in Prepaid Insurance Expenses |
| INSUR_AP | Change in Insurance Account Payable |
| INSUR_ACRL | Accrual Insurance Expenses |
| RENT_EXP | Cash Rent \& Lease Expense |
| RENT_PP | Change in Prepaid Rent \& Lease Expenses |
| RENT_AP | Change in Rent \& Lease Accounts Payable |
| RENT_ACRL | Accrual Rent \& Lease Expenses |
| TELE_EXP | Only <1995 Cash Telephone Expenses |
| TELE_PP | Only <1995 Change in Prepaid Telephone Expenses |
| TELE_AP | Only <1995 Change in Telephone Account Payable |
| TELE_ACRL | Only <1995 Accrual Telephone Expenses |
| UTIL_EXP | Cash Utilities Expenses |
| UTIL_PP | Change in Prepaid Utilities Expenses |
| UTIL_AP | Change in Utilities Accounts Payable |
| UTIL_ACRL | Accrual Utilities Expenses |
| INTRST_EXP | Cash Interest Expenses |
| INTRST_PP | Change in Prepaid Interest Expenses |
| INTRST_AP | Change in Interest Accounts Payable |
| INTRSTACRL | Accrual Interest Expenses |
| MISC_EXP | Cash Miscellaneous Expenses |
| MISC_AP | Change in Miscellaneous Accounts Payable |
| MISC_ACRL | Accrual Miscellaneous Expenses |
| TOTCASHEXP | Total Cash Expenses |
| TOTEXPCHNG | Total Change in Inventory or Prepaid Expenses |
| TOTCHNG_AP | Total Change in Accounts Payable |
| TOTEXPACRL | Total Accrual Expenses |
| EXPAN_EXP | Cash Expansion Expenses |
| EXPAN_PP | Change in PrePaid Expansion Expenses |
| EXPAN_AP | Change in Expansion Accounts Payable |
| EXPAN_ACRL | Accrual Expansion Expenses |
| BUY_STOCK | Purchase of other stock \& certificates (exclude Farm Credit stock) |
| PERS_WITH | Personal Withdrawals \& Family Expenditures |
|  |  |

SCREEN 14 DATA: OPTIONAL INPUT

| YEAR | Data Year |
| :--- | :--- |
| FARM_NO | Farm Number |

BREAKDOWN OF ACCRUAL CROP EXPENSES BY CROP
HAY_FERT Accrual Hay Crop Fertilizer and Lime
HAY_SEEDS Accrual Hay Crop Seeds \& Plants
HAY_SPRAY Accrual Hay Crop Spray and Other Crop Expenses
CORN_FERT Accrual Corn Fertilizer \& Lime
CORN_SEEDS Accrual Corn Seeds \& Plants
CORN_SPRAY Accrual Corn Spray and Other Crop Expenses
PAST FERT
Accrual Pasture Fertilizer \& Lime
Accrual Pasture Seeds \& Plants
PAST SEEDS
Accrual Pasture Spray and Other Crop Expenses
PAST_SPRAY
OTH FERT
OTH_SEEDS
Accrual All Other Crops Fertilizer \& Lime
Accrual All Other Crops Seeds \& Plants
OTH_SPRAY Accrual All Other Crops Spray and Other Crop Expenses
FERT_ACRL
Accrual Fertilizer \& Lime Expenses
SEEDS_ACRL
Accrual Seeds \& Plants Expenses
SPRAY_ACRL Accrual Spray and Other Crop Expenses
OPTIONAL INPUT FOR DEFERRED TAX CALCULATIONS
LVSTK_TAXB Purchased Livestock Tax Basis
MACH_TAXB Machinery \& Equipment Tax Basis
BLDG_TAXB Building \& Improvements Tax Basis
SINGPURP1 Single Purpose structures etc. \%

SINGPURP2
LAND TAXB
OPRES_TAXB
NONFM_TAXB
OPRES_MKVL
SINGPURP3
SINGPURP4
LVSK_MKVL1
LVSK_MKVL2
TAXFĪLSTAT
NFINC OPER
TAXFIL̄PRT1
TAXFILPRT2
TAXFILPRT3
TAXFILPRT4
TAXFILPRT5
ADJGROSS1
ADJGROSS2
ADJGROSS3
ADJGROSS4
ADJGROSS5
CURRASS1
CURRASS2
CURRASS3
CURRASS4
CURRASS5
LVSTKOWN1
LVSTKOWN2
LVSTKOWN3
LVSTKOWN4
LVSTKOWN5
MACHOWN1
MACHOWN2
MACHOWN3
MACHOWN4
MACHOWN5
RE_OWN_1
RE_OWN_2
RE_OWN_3
RE_OWN_4
RE_OWN_5
NF_OWN_1
NF_OWN_2
NF_OWN_3
NF_OWN-4
NF-OWN-5
NFINCPART1
NFINCPART2
NFINCPART3
NFINCPART4
NFINCPART5

Single Purpose structures etc. \$
Land Tax Basis
Operator Residences Tax Basis
Nonfarm Assets Tax Basis
Operator Residences Market Value
Single Purpose structures etc. \%
Single Purpose structures etc. \$
Purchased Livestock Market Value \%
Purchased Livestock Market Value \$
Tax Filling Status of Proprietorship
Nonfarm income of operator on which self-employment tax w/paid
Tax filing status of partner 1
Tax filing status of partner 2
Tax filing status of partner 3
Tax filing status of partner 4
Tax filing status of partner 5
Percent Share of Farm Adjusted Gross Income Partner 1
Percent Share of Farm Adjusted Gross Income Partner 2
Percent Share of Farm Adjusted Gross Income Partner 3
Percent Share of Farm Adjusted Gross Income Partner 4
Percent Share of Farm Adjusted Gross Income Partner 5
Percent Ownership of Current Assets Partner 1
Percent Ownership of Current Assets Partner 2
Percent Ownership of Current Assets Partner 3
Percent Ownership of Current Assets Partner 4
Percent Ownership of Current Assets Partner 5
Percent Ownership of Livestock Partner 1
Percent Ownership of Livestock Partner 2
Percent Ownership of Livestock Partner 3
Percent Ownership of Livestock Partner 4
Percent Ownership of Livestock Partner 5
Percent Ownership of Machinery Partner 1
Percent Ownership of Machinery Partner 2
Percent Ownership of Machinery Partner 3
Percent Ownership of Machinery Partner 4
Percent Ownership of Machinery Partner 5
Percent Ownership of Real Estate Partner 1
Percent Ownership of Real Estate Partner 2
Percent Ownership of Real Estate Partner 3
Percent Ownership of Real Estate Partner 4
Percent Ownership of Real Estate Partner 5
Percent Ownership of Nonfarm Assets Listed Partner 1
Percent Ownership of Nonfarm Assets Listed Partner 2
Percent Ownership of Nonfarm Assets Listed Partner 3
Percent Ownership of Nonfarm Assets Listed Partner 4
Percent Ownership of Nonfarm Assets Listed Partner 5
Percent Ownership of Nonfarm Income of operator on which self-employment tax was paid, Partner 1
Percent Ownership of Nonfarm Income of operator on which self-employment tax was paid, Partner 2
Percent Ownership of Nonfarm Income of operator on which self-employment tax was paid, Partner 3
Percent Ownership of Nonfarm Income of operator on which self-employment tax was paid, Partner 4
Percent Ownership of Nonfarm Income of operator on which self-employment tax was paid, Partner 5

YEAR
FARM_NO

Data Year
Farm Number

| REC_CHINV | Total Accrual Receipts Change in Inventory |
| :---: | :---: |
| TOTACCEXP | Total Accrual Expenses |
| TOTACRLREC | Total Accrual Receipts |
| LVSTKAPP | Livestock Appreciation |
| STOCK_APPR | Other Stock or Certificates Appreciation |
| NFI_WITH | Net Farm Income With Appreciation |
| PERSWITHEX | Personal And Family Withdrawals |
| RECWITHAPP | Total Receipts with Appreciation |
| NFI_NOAPP | Net Farm Income Without Appreciation |
| UNPDLABOR | Unpaid Family Labor |
| AVE_NW | Average Net Worth |
| EQ_CAP | Equity Capital |
| LAB_MGTINC | Labor and Management Income |
| LMI_OPER | Labor and Management Income per Worker |
| OP_LABVAL | Operators Value of Labor |
| RETEQ_NO | Return on Equity Capital without appreciation |
| RATEQ_NO | Rate of Return on Equity Capital without appreciation |
| RETEQ_WITH | Return on Equity Capital with appreciation |
| RATEQ WITH | Rate of return on Equity Capital with appreciation |
| RETALL_NO | Return to All Capital without appreciation |
| AVGASSET | Average Assets |
| RATALL_NO | Rate of Return to All Capital without appreciation |
| RETALL_WITH | Return to All Capital with appreciation |
| RATALL_WITH | Rate of Return to All Capital with appreciation |
| CURRASSBEEG | Current Assets Beginning of Year |
| CURRASSEND | Current Assets End of Year |
| CURRLIBBEG | Current Liabilities Beginning of Year |
| CURRLIBEND | Current Liabilities End of Year |
| CATLS_BEG | Cattle Lease Beginning of Year |
| CATLS_END | Cattle Lease End of Year |
| EQPLS_BEG | Equipment Lease Beginning of Year |
| EQPLS_END | Equipment Lease End of Year |
| RE_LES_BEG | Structure Lease Beginning of Year |
| RE_LES_END | Structure Lease End of Year |
| INTASSBEG | Intermediate Assets Beginning of Year |
| INTASSEND | Intermediate Assets End of Year |
| CATEQLS_BG | Cattle \& Equipment Lease Beginning of Year |
| CATEQLS_EN | Cattle \& Equipment Lease End of Year |
| INTLIABBEG | Intermediate Liabilities Beginning of Year |
| INTLIABEND | Intermediate Liabilities End of Year |
| LTASST_BEG | Long Term Assets Beginning of Year |
| LTASST_END | Long Term Assets End of Year |
| ASSET_BEG | Total Assets Beginning of Year |
| ASSET_END | Total Assets End of Year |
| LTLIABBEG | Long Term Liabilities Beginning of Year |
| LTLIABEND | Long Term Liabilities End of Year |
| FARM_NWBEG | Farm Net Worth Beginning of Year |
| FARM_NWEND | Farm Net Worth End of Year |
| LIAB_BEG | Total Farm Liabilities Beginning of Year |
| LIAB_END | Total Farm Liabilities End of Year |
| NFM_NW_BEG | Nonfarm Net Worth Beginning of Year |
| NFM_NW_END | Nonfarm Net Worth End of Year |
| TOT_ASSBEG | Farm \& Nonfarm Assets Beginning of Year |
| TOTL̄IBBEG | Farm \& Nonfarm Liabilities Beginning of Year |
| TOT_NWBEG | Farm \& Nonfarm Net Worth Beginning of Year |
| TOT_ASSEND | Farm \& Nonfarm Assets End of Year |
| TOTL̄IBEND | Farm \& Nonfarm Liabilities End of Year |
| TOT_NWEND | Farm \& Nonfarm Net Worth End of Year |
| PCTEQ_FARM | Farm Percent Equity |
| PCTEQNONFM | Farm \& Nonfarm Percent Equity |
| DETASTTOTL | Total Debt to Asset Ratio |
| LTDETAST | Long-term Debt to Asset Ratio |


| DETASTNFM |
| :---: |
| ITCRDETAST |
| AP PCTDET |
| LT PCTDET |
| ITCRPCTDET |
| DEBTPERCOW |
| LT DETCOW |
| ITLTDETCOW |
| ITCRDETCOW |
| DEBTPERACR |
| LT_DEBTACR |
| ITLTDETACR |
| ITCRDETACR |
| RE_PURCH |
| RE_NETINV |
| MĀCHNETINV |
| LVSTAPPREC |
| LVSTNETINV |
| RETAINER |
| TRANSFRTOT |
| CONTRIBCAP |
| APPREC_TOT |
| CH_VAL_EQ |
| IMB_ERROR |
| CHGNW WITH |
| CHG NW NO |
| CHGNW - NOFM |
| NETCASHINC |
| NETNOFRMIC |
| NET_OPACT |
| SALEES_TOT |
| PURCH_TOT |
| NET_INVACT |
| MONBORITLT |
| MONBOR ST |
| INCROPDEEBT |
| DECROPDEBT |
| PRIN_ITLT |
| PRIN-ST |
| MONBOR_NF |
| INFLOW_FIN |
| OUTFLOWFIN |
| NETFINACT |
| NET_RESERV |
| ERROR |
| PLANPAYLT |
| PLANPAYIT |
| PLANPAYST |
| PLAN_OPRED |
| PLAN_NTRED |
| PLAN_PYMTS |
| PYMTMADELT |
| PYMTMADEIT |
| PYMTMADEST |
| PMTMADE AP |
| MADE PYMTS |
| FUTRPAYLT |
| FUTRPAYIT |
| FUTPAYST |
| FUTR_OPRED |
| FUTR ${ }^{-}$NTRED |
| FUTUREPYMT |

Farm \& Nonfarm Debt to Asset Ratio
Intermediate \& Current Debt to Asset Ratio
Accounts Payable as a \% of Total Debt
Long-term Debt as a \% of Total Debt
Current \& Intermediate Debt as a \% of Total Debt
Farm Debt Per Cow
Long-term Debt Per Cow
Intermediate \& Long-term Debt Per Cow
Intermediate \& Current Debt Per Cow
Farm Debt Per Acre
Long-term Debt Per Acre
Intermediate \& Long-term Debt Per Acre
Intermediate \& Current Debt Per Acre
Total Real Estate Purchases
Real Estate Net Investment
Machinery Net Investment
Livestock Appreciation
Livestock Net Investment
Retained Earnings
Total Nonfarm Noncash Transfers to Farm
Contributed or Withdrawn Capital
Total Appreciation
Change in Valuation Equity
Imbalance or Error
Change in Net Worth with Appreciation
Change in Net Worth without Appreciation
Farm \& Nonfarm Change in Net Worth with Appreciation
Net Cash Farm Income
Net Cash Nonfarm Income
Net Provided by Operating Activities
Total Asset Sales
Total Capital Purchases
Net Provided by Investing Activities
Intermediate and Long-term Money Borrowed
Short-term Money Borrowed
Increase in Operating Debt
Decrease in Operating Debt
Intermediate \& Long-term Principal Payments
Short-term Principal Payments
Nonfarm Money Borrowed
Cash Inflow from Financing
Cash Outflow for Financing
Net Provided by Financing Activities
Net Cash Provided from Reserves
Imbalance or Error
Long-term Planned Payments
Intermediate Planned Payments
Short-term Planned Payments
Operating Net Reduction Planned
Accounts Payable Net Reduction Planned
Total Planned Payments
Long-term Payments Made
Intermediate Payments Made
Short-term Payments Made
Accounts Payable Payments Made
Total Payments Made
Long-term Future Planned Payments
Intermediate Future Planned Payments
Short-term Future Planning Payments
Operating Net Reduction Planned for Future
Accounts Payable Net Reduction Planned for Future
Total Future Payments Planned

PYMTS_COW
PYMTS CWT PMTPCN̄TREC PYMTPCTMLK PYMTMADCOW PYMTMADCWT
PMTMADEREC
PMTMADEMLK
DEBT_PYMT
NETPERSSWTH
AMTAVAIL
PROJCFCR
MADE_PERC
HAYTŌT_TDM
TOTFOR_ACR
HAYDM_ACR
CS_ACRE
CSTDM_ACRE
OTHFRĀCRE
TOTFRACRE
CG_ACRE
OAT_ACRE
WHT_ACRE
CORNFERTAC
CORNSEEDAC
CORNSPRAC
SIL_FERT
SIL_SEEDS
SIL_SPRAY
CG_FERT
CG_SEEDS
CG_SPRAY
HAYFERTACR
HAYSEEDACR
HAYSPRAYAC
HAYFERTTDM
HAYSEEDTDM
HAYSPRYTDM
PASFERTTIL
PASSEEDTIL
PASSPRATIL
PASFERTTOT
PASSEEDTOT
PASSPRATOT
FERT_ACRE
SEEDS ACRE
SPRAY_ACRE
CRPEXP ACR
CORNEXPACR
CSEXP_TDM
CGEXP_BU
HAYEXPACR
HAYEXPTDM
PASEXPTILL
PASEXPACRE
MACH_INTST
MACH_COST
FUEL_ACRE
MCHREPACRE
MCHRENTACR
MCHINT_ACR
MCHDEP_ACR

Planned Payments Per Cow
Planned Payments Per Cwt.
Planned Payments as a \% of Receipts
Planned Payments as a \% of Milk Receipts
Payments Made Per Cow
Payments Made Per Cwt.
Payments Made as a \% of Receipts
Payments Made as a \% of Milk Receipts
Debt Payments Planned Used for Cash Flow Coverage Ratio
Net Personal Withdrawals from Farm
Amount Available for Debt Service
Cash Flow Coverage Ratio
Made Payments as \% of Planned Payments
Hay Total Tons Dry Matter
Total Forage Acres
Hay Crop Dry Matter Per Acre
Corn Silage Tons Per Acre
Corn Silage Tons Dry Matter Per Acre
Other Forage Tons Per Acre
Total Forage Tons Per Acre
Corn Grain Bushels Per Acre
Oats Bushels Per Acre
Wheat Bushels Per Acre
All Corn Fertilizer Expense Per Acre
All Corn Seed Expense Per Acre
All Corn Spray Expense Per Acre
Corn Silage Fertilizer Expense Per Tons Dry Matter
Corn Silage Seed Expense Per Tons Dry Matter
Corn Silage Spray Expense Per Tons Dry Matter
Corn Grain Fertilizer Expense Per Dry Shell Bushel
Corn Grain Seed Expense Per Dry Shell Bushel
Corn Grain Spray Expense Per Dry Shell Bushel
Hay Fertilizer Expense Per Acre
Hay Seed Expense Per Acre
Hay Spray Expense Per Acre
Hay Fertilizer Expense Per Ton Dry Matter
Hay Seed Expense Per Ton Dry Matter
Hay Spray Expense Per Ton Dry Matter
Pasture Fertilizer Expense Per Tillable Pasture Acre
Pasture Seed Expense Per Tillable Pasture Acre
Pasture Spray Expense Per Tillable Pasture Acre
Pasture Fertilizer Expense Per Total Pasture Acre
Pasture Seed Expense Per Total Pasture Acre
Pasture Spray Expense Per Total Pasture Acre
Fertilizer Expense Per Tillable Acre
Seed Expense Per Tillable Acre
Spray Expense Per Tillable Acre
Crop Expense Per Tillable Acre
Corn Crop Expense Per Corn Acre
Corn Silage Crop Expense Per Ton Dry Matter
Corn Grain Crop Expense Per Dry Shell Bushel
Hay Crop Expense Per Acre
Hay Crop Expense Per Ton Dry Matter
Pasture Crop Expense Per Tillable Pasture Acre
Pasture Crop Expense Per Total Pasture Acre
Interest on Machinery Investment
Total Machinery Cost
Fuel Expense Per Tillable Acre
Machinery Repair \& Vehicle Expense Per Tillable Acre
Machinery Hire, Rent \& Lease Expense Per Tillable Acre
Machinery Interest Per Tillable Acre
Machinery Depreciation Per Tillable Acre

| MCHCST_ACR | Machinery Cost Per Tillable Acre |
| :--- | :--- |
| TILACRCOW | Tillable Acres Per Cow |
| FORACR_COW | Forage Acres Per Cow |
| FORDM_COW | Harvested Forage Dry Matter Per Cow |
| COW_CHINV | Cow Change in Inventory without Appreciation |
| HEF1_CHINV | Bred Heifer Change in Inventory without Appreciation |
| HEF2_CHINV | Open Heifer Change in Inventory without Appreciation |
| HEF3_CHINV | Calf Change in Inventory without Appreciation |
| HEF1APPRE | Bred Heifer Appreciation |
| HEF2APPRE | Open Heifer Appreciation |
| HEF3APPRE | Calf Appreciation |
| COWTOTEND | Total End Cow Numbers, Including Leased Cows |
| COW_APPRE | Cow Appreciation |
| MILK_COW | Pounds Milk Sold Per Cow |
| DARYRECTOT | Total Dairy Receipts |
| MILKRECCOW | Milk Receipts Per Cow |
| CATTRECCOW | Cattle Sale Receipts Per Cow |
| CAFRECCOW | Calf Sale Receipts Per Cow |
| DARYRECCOW | Total Dairy Receipts Per Cow |
| MILKRECCWT | Milk Receipts Per Cwt. |
| CATTRECCWT | Cattle Sale Receipts Per Cwt. |
| CAFRECCWT | Calf Sale Receipts Per Cwt. |
| DARYRECCWT | Total Dairy Receipts Per Cwt. |
| OPCOST_TOT | Operating Cost of Producing Milk |
| INCOST_TOT | Purtle Lease Expense Per Cwt. |
| TOTCOSTPRD | Purchased Inputs Cost of Producing Milk |
| OPCOST_COW | Vetering Expense Per Cwt. |
| INCOST_COW | Milk Mary Expense Per Cwt. |
| TOTCST_COW |  |

Custom Boarding Expense Per Cwt.
Other Livestock Expense Per Cwt.
Average Number of Cows
Hundredweight of Milk Sold

CALCULATED FIELDS PRINTED ON PAGES 11-12 OF DFBS REPORT, STORED IN OLDCALC2.DBF

| YEAR |
| :--- |
| FARM_NO |
| CAP_PERWKR |
| CAP_PERCOW |
| CAP_ACROWN |
| CAP_PERTIL |
| ASSETRATIO |
| MACH_WKR |
| MACHINVCOW |
| MACH_ACR |
| REINV_COW |
| REINV_ACR |
| OPERATORS |
| WORK_UNITS |
| COWS_WKR |
| MILK_WKR |
| ACRE_WKR |
| WU_WKR |
| OPLABVAL2 |
| LABCOST |
| LABMACHCST |
| OPLAB_COW |
| FAMLAB_COW |
| HIRLAB_COW |
| LABCOSTCOW |
| MACHCSTCOW |
| LABMACHCOW |
| OPLAB_CWT |
| FAMLAB_CWT |
| HIRLAB_CWT |
| LABCOSTCWT |
| MACHCSTCWT |
| LABMACHCWT |
| MISC_REC |
| EXPLESSINT |
| NETOPINC |
| AP_LESINT |
| NET_FLOW |
| NET_AVAIL |
| AVAIL_INV |
| OTHLV_COW |
| CROPS_COW |
| MISREC_COW |
| TOTREC_COW |
| NODARY_COW |
| MCHRNT_COW |
| MCHREP_COW |
| FUEL_COW |
| REPL_COW |
| FERT_COW |
| SEEDS_COW |
| SPRAY_COW |
| BLADG_COW |
| TAXES_COW |

Data Year
Farm Number
Farm Capital Per Worker
Farm Capital Per Cow
Farm Capital Per Tillable Acre Owned
Farm Capital Per Tillable Acre
Asset Turnover Ratio
Machinery Investment Per Worker
Machinery Investment Per Cow
Machinery Investment Per Tillable Acre
Real Estate Investment Per Cow
Real Estate Investment Per Tillable Acre
Operator/Manager Equivalent
Total Work Units
Cows Per Worker
Pounds Milk Sold Per Worker
Tillable Acres Per Worker
Work Units Per Worker
Value of Operator(s) Labor (using \$ constant value per month)
Total Labor Cost
Total Labor and Machinery Cost
Value of Operator(s) Labor Value Per Cow
Value of Family Labor Unpaid Per Cow
Hired Labor Expense Per Cow
Total Labor Cost Per Cow
Total Machinery Cost Per Cow
Labor and Machinery Cost Per Cow
Value of Operator(s) Labor Per Cwt.
Value of Family Labor Unpaid Per Cwt.
Hired Labor Expense Per Cwt.
Total Labor Cost Per Cwt.
Total Machinery Cost Per Cwt.
Labor and Machinery Cost Per Cwt.
Miscellaneous Accrual Operating Receipts
Accrual Operating Expenses Less Interest Paid
Net Accrual Operating Income
Change in Accounts Payable less Interest
Net Cash Flow
Net Cash Available for Farm
Amount Available for Farm Investment
Other Livestock Receipts Per Cow
Crop Receipts Per Cow
Miscellaneous Receipts Per Cow
Total Receipts Per Cow
Nondairy Feed Expense Per Cow
Machinery Rent and Lease Expense Per Cow
Machinery Repair Expense Per Cow
Fuel Expense Per Cow
Replacement Livestock Expense Per Cow
Fertilizer Expense Per Cow
Seed Expense Per Cow
Spray Expense Per Cow
Land, Building and Fence Repair Expense Per Cow
Tax Expense Per Cow

RENT_COW
INSUR_COW
UTIL_COW
MISC COW
LESINT_COW
NETINC_COW
REC CH COW
CHAR_COW
EXP_CH_COW
AP_C̄H_C̄OW
NETFLŌWCOW
PERWTHCOW
NET_AVLCOW
AVLINV COW
PURCH COW
OTHLV_CWT
CROPS_CWT
MISREC CWT
TOTRECCWT
NODARY_CWT
MCHRNT_CWT
MCHREP_CWT
FUEL_CW̄T
REPL ${ }^{-}$CWT
FERT_CWT
SEEDS_CWT
SPRAY_CWT
BLDG $\bar{C} W T$
TAXES $\bar{C}$ CWT
RENT_CWT
INSUR_CWT
UTIL C̄WT
MISC_CWT
LESINT_CWT
NETINC_CWT
REC_CH_CWT
CHAㄷ﹎CWT
EXP_CH_CWT
AP_C̄H_C̄WT
NETFLŌWCWT
PERWTHCWT
NET_AVLCWT
AVLINV_CWT
PURCH CWT
INFLOW̄STOT
OUTFLOWTOT
OWN_RENT
FULL PART
DAIRȲ CASH
IRREGŪLAR
CUR_DEFTAX
INT DEFTAX
LT DEFTAX
NFM_DEFTAX
BST_COW
BST_CWT
NET_MILK
NET_MILKCOW
NET_MILKCWT
DEPREC
REPAYCAPAC
DEBTCOVRAT

Real Estate Rent/Lease Expense Per Cow
Insurance Expense Per Cow
Utility Expense Per Cow
Miscellaneous Expense Per Cow
Expenses Less Interest Per Cow
Net Accrual Operating Income Per Cow
Change in Livestock \& Crop Inventory Per Cow
Change in Accounts Receivable Per Cow
Change in Feed \& Supply Inventory Per Cow
Change in Accounts Payable Less Interest Per Cow
Net Cash Flow Per Cow
Net Family Withdrawals Per Cow
Net Cash Available for Farm Per Cow
Amount Available for Investment Per Cow
Capital Purchases Per Cow
Other Livestock Receipts Per Cwt.
Crop Receipts Per Cwt.
Miscellaneous Receipts Per Cwt.
Total Receipts Per Cwt.
Nondairy Feed Expense Per Cwt.
Machinery Rent and Lease Expense Per Cwt.
Machinery Repair Expense Per Cwt.
Fuel Expense Per Cwt.
Replacement Livestock Expense Per Cwt.
Fertilizer Expense Per Cwt.
Seed Expense Per Cwt.
Spray Expense Per Cwt.
Land, Building and Fence Repair Expense Per Cwt.
Tax Expense Per Cwt.
Real Estate Rent/Lease Expense Per Cwt.
Insurance Expense Per Cwt.
Utility Expense Per Cwt.
Miscellaneous Expense Per Cwt.
Expenses Less Interest Per Cwt.
Net Accrual Operating Income Per Cwt.
Change in Livestock \& Crop Inventory Per Cwt.
Change in Accounts Receivable Per Cwt.
Change in Feed \& Supply Inventory Per Cwt.
Change in Accounts Payable Less Interest Per Cwt.
Net Cash Flow Per Cwt.
Net Family Withdrawals Per Cwt.
Net Cash Available for Farm Per Cwt.
Amount Available for Investment Per Cwt.
Capital Purchases Per Cwt.
Total Cash Inflows
Total Cash Outflows
Farm Coded Owner or Renter
Farm Coded Full-time or Part-time
Farm Coded Dairy or Cash-Crop
Farm Coded Irregular or Incomplete
Current Deferred Taxes
Intermediate Deferred Taxes
Long-term Deferred Taxes
Nonfarm Deferred Taxes
bST Expense Per Cow
bST Expense Per Cwt.
Milk Receipts Net of Milk Marketing Expense
Net Milk Receipts Per Cow
Net Milk Receipts Per Cwt.
Total Machinery and Real Estate Depreciation
Repayment Capacity
Debt Coverage Ratio

| OPEXPRATIO | Operating Expense Ratio |
| :--- | :--- |
| INTEXPRATO | Interest Expense Ratio |
| DEPEXPRATO | Depreciation Expense Ratio |
| CURASTDET | Current Ratio |
| WORKCAP | Working Capital |
| WRKCAP_PRC | Working Capital as a \% of Total Expense |
| INTRST_COW | Interest Expense Per Cow |
| INTRST_CWT | Interest Expense Per Cwt. |
| OPEXP_COW | Operating Expense Per Cow |
| OPEXP_CWT | Operating Expense Per Cwt. |
| EXPAN_COW | Expansion Livestock Expense Per Cow |
| EXPAN_CWT | Expansion Livestock Expense Per Cwt. |
| MACHDEPCOW | Machinery Depreciation Per Cow |
| MACHDEPCWT | Machinery Depreciation Per Cwt. |
| REDEP_COW | Real Estate Depreciation Per Cow |
| REDEP_CWT | Real Estate Depreciation Per Cwt. |
| TOTEXP_COW | Total Expenses Per Cow |
| TOTEXP_CWT | Total Expenses Per Cwt. |

FIELDS USED IN CALCULATION OF CURRENT PORTION FOR PAGE 4 OF DFBS REPORT, STORED IN OLDCP.DBF

| YEAR | Data Year |
| :--- | :--- |
| FARM_NO | Farm Number |
| LT_BEG1 | Long-Term Beginning Year Liability \#1 |
| LT_BEG2 | Long-Term Beginning Year Liability \#2 |
| LT_BEG3 | Long-Term Beginning Year Liability \#3 |
| LT_BEG4 | Long-Term Beginning Year Liability \#4 |
| LT_BEG5 | Long-Term Beginning Year Liability \#5 |
| LT_END1 | Long-Term End Year Liability \#1 |
| LT_END2 | Long-Term End Year Liability \#2 |
| LT_END3 | Long-Term End Year Liability \#3 |
| LT_END4 | Long-Term End Year Liability \#4 |
| LT_END5 | Long-Term End Year Liability \#5 |
| IT_BEG1 | Intermediate Beginning Year Liability \#1 |
| IT_BEG2 | Intermediate Beginning Year Liability \#2 |
| IT_BEG3 | Intermediate Beginning Year Liability \#3 |
| IT_BEG4 | Intermediate Beginning Year Liability \#4 |
| IT_BEG5 | Intermediate Beginning Year Liability \#5 |
| IT_BEG6 | Intermediate Beginning Year Liability \#6 |
| IT_BEG7 | Intermediate Beginning Year Liability \#7 |
| IT_BEG8 | Intermediate Beginning Year Liability \#8 |
| IT_BEG9 | Intermediate Beginning Year Liability \#9 |
| IT_END1 | Intermediate End Year Liability \#1 |
| IT_END2 | Intermediate End Year Liability \#2 |
| IT_END3 | Intermediate End Year Liability \#3 |
| IT_END4 | Intermediate End Year Liability \#4 |
| IT_END5 | Intermediate End Year Liability \#5 |
| IT_END6 | Intermediate End Year Liability \#6 |
| IT_END7 | Intermediate End Year Liability \#7 |
| IT_END8 | Intermediate End Year Liability \#8 |
| IT_END9 | Intermediate End Year Liability \#9 |
| CP_LT_BEG | Long-Term Current Portion at Beginning of Year |
| CP_LT_END | Long-Term Current Portion at End of Year |
| CP_IT_BEG | Intermediate Current Portion at Beginning of Year |
| CP_IT_END | Intermediate Current Portion at End of Year |
|  |  |


[^0]:    ${ }^{1}$ Windows is a trademark of Microsoft Corporation.

[^1]:    ${ }^{2}$ See Appendix A for guidelines to completing the Dairy Farm Business Summary check-in form.

[^2]:    ${ }^{3}$ Assign farm numbers for new cooperators from the list of available farm numbers provided by Cornell.

[^3]:    ${ }^{4}$ 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.

[^4]:    5 See Appendix C for the procedure used to calculate costs of producing milk, ratios, and other factors that are printed on the following output.

[^5]:    * Changes in inventory include net amounts of items used out of purchased inventory in this year (negative change is amt. inventory declined, positive change is amt. inventory increased). Changes in prepaid expenses, (noted by << above) apply to non-inventory categories (positive change is amt. pre-pymnt increased).

[^6]:    **Unpaid items or services used or added to inventory during the year.

[^7]:    * \$ 12000 Land + \$ 28000 Building
    ** See page 10, "Dairy Inventory Analysis", for dairy cow and heifer inventory detail.

[^8]:    ${ }^{2}$ e.g., new fences, tile drainage, farm ponds.

[^9]:    ${ }^{5}$ One bushel of no. 2 corn at 15.5 percent moisture content.

[^10]:    ${ }^{1}$ Work units. ${ }^{2}$ All cows were milked 2 x for entire year. ${ }^{3}$ All cows were milked 3 x for entire year. ${ }^{4}$ A portion of herd was milked 3 x or total herd was milked 3 x for part of year or milked more than $3 \mathrm{x} /$ day. ${ }^{5}$ Convert to dry shelled equivalent (see tables, opposite page). ${ }^{6}$ Enter as decimal, e.g., $40 \%$ is entered as . 4 .

