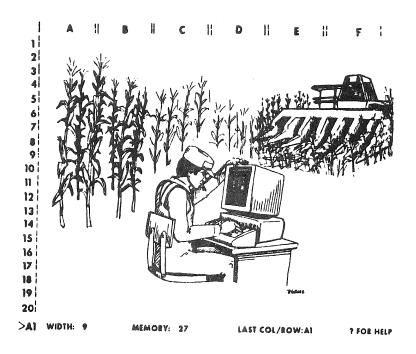
DAIRY FARM ANNUAL CASH FLOW PROJECTION TEMPLATE

User's Manual



For
Lotus 1-2-3 Electronic Spreadsheet
and
IBM PC, XT and IBM - Compatible Microcomputers

by Dale Johnson William F. Lazarus

Department of Agricultural Economics

New York State College of Agriculture and Life Sciences

A Statutory College of the State University

Cornell University, Ithaca, New York 14853

It is the policy of Cornell University actively to support equality of educational and employment opportunity. No person shall be denied admission to any educational program or activity or be denied employment on the basis of any legally prohibited discrimination involving, but not limited to, such factors as race, color, creed, religion, national or ethnic origin, sex, age or handicap. The University is committed to the maintenance of affirmative action programs which will assure the continuation of such equality of opportunity.

53.

TABLE OF CONTENTS

	Page
PURPOSE	. 1
ANNUAL CASH FLOW PROJECTION TEMPLATES: OVERVIEW	. 1
GETTING STARTED	. 1
GENERAL USE: USING THE PROJECT TEMPLATE	. 2
INPUT	. 4
CHANGE	. 5
BORROW	. 5
PRINT	. 6
ERASE	. 7
LEAVEMENU	. 7
QUIT	. 7
MICRO DFBS USE	. 7
EXPLANATION OF SELECTED CELL ENTRIES AND FORMULAS	. 11
PROJECTION FORMULAS	. 12
FORMULAS	. 13

DAIRY FARM ANNUAL CASH FLOW PROJECTION TEMPLATE

USER'S MANUAL

Cash flow projections are useful to help farmers understand the implications of price changes, increases or decreases in production, changes in enterprises, and other changes on their farms. The tedious and time-consuming calculations can be done quickly using electronic spreadsheet templates.

PURPOSE

The purpose of the templates described here is to make an annual cash flow projection for a dairy farm for the coming year, based on the past year's cash flows. The projection is made both on a per cow and a per farm basis. The format is very similar to the "Yearly Cash Flow Planning and Analysis" page included in most regional dairy farm business summary publications for a number of years (for example, see page 16 of 1983 Northern New York Dairy Farm Business Summary, A.E. Ext. 84-8).

The past year's cash receipts and expenses are entered into the templates along with the projected changes for the coming year. The total farm cash flows are then automatically calculated and the borrowed or equity funds needed for the coming year are determined.

This procedure requires the use of the Lotus 1-2-3 electronic spreadsheet software package and an IBM PC, XT, or IBM compatible microcomputer with 256K bytes of random-access (RAM) memory.

ANNUAL CASH FLOW PROJECTION TEMPLATES: OVERVIEW

There are two Lotus 1-2-3 templates that can be used in projecting cash flows for the coming year. The first template, PROJECT.WKS, is intended for general use. The past year's data is entered into the template manually.

The step of inserting the past year's data can be avoided in county Extension offices using the Micro Dairy Farm Business Summary microcomputer program to process dairy farm business summaries. The other template, PROJDFBS.WKS, can be used by those who are inputting data from a farm on the Micro DFBS. This template avoids the time consuming step of inputting data manually by allowing the user to transfer data on a farm directly from the Micro DFBS farm file.

There are also two accessory programs, CONVERT.BAT and BSTOA.EXE that are required to change the data from a Micro DFBS file into a form that can be used with Lotus 1-2-3.

GETTING STARTED

The first time user should be familiar with the IBM PC, XT, or IBM compatible microcomputer being used. A basic knowledge of saving and

retrieving files on floppy diskettes or hard disk drives is required as well as transferring files from one diskette to another. The user can refer to the DOS manual for the particular disk operating system and microcomputer being used.

The user should also be familiar with some basic skills of Lotus 1-2-3 such as using 1-2-3 commands, moving around the worksheet, and typing cell entries. The Lotus tutorial program can provide some background. The user will also want to refer to the Lotus manual.

A familiarity of Micro DFBS is also required of those wanting to transfer data from a farm on the Dairy Farm Business Summary.

Be sure to make a backup copy of the templates before using them in case the original is damaged or destroyed.

GENERAL USE: USING THE PROJECT TEMPLATE

The template called PROJECT is used by those who are manually entering farm data from the past year. The past year figures are entered by the user from an individual dairy farm business summary printout or other source. Changes are entered as either percentages (in decimal form) or dollar amounts. The changes can be made either on a per cow or whole farm basis. Enter only one change for each item (a percentage or dollar amount, but not both). The templates contain Lotus 1-2-3 "@ if statements" set up so that if you enter a dollar amount and a percentage for the same item, the dollar amount is used and the percentage is ignored. Also, if changes are entered in the whole farm columns, the per cow changes are ignored in the calculation of the whole farm figures for the coming year. The whole farm changes should be interpreted as changes from the whole farm figures for the past year (second column from the left).

Changes from last year's per cow or whole farm figures to the coming year may result from changes in cow numbers, milk or input price changes, changes in feeding or other production practices, and many other factors. One change which should be accounted for is any large change in accounts payable or receivable which is not expected to be repeated next year. A change in accounts payable should be entered in the line corresponding to the items purchased. (An increase in the outstanding feed bill would be entered in the line "dairy grain & concentrate", for example).

Load the "PROJECT" template by starting the Lotus 1-2-3 program and inserting the diskette containing the template. Use the

/File Directory

command to select the drive containing template, and

/File Retrieve PROJECT

The template is divided into two worksheet areas. The first, Projected Receipts and Expenses, is where the per cow or whole farm changes are made. The second area projects Total Farm Cash Flow and Borrowing Needs.

The template is menu driven through a command bar menu that appears at the top of the screen. It is based on Lotus 1-2-3 macros. Macros take effect when you hold down the [Alt] key located in the lower left area of the keyboard, and press the proper letter key. To get the command bar menu, hold down [Alt] and press M, abbreviated as

Alt-M

If you lose your place in the template at anytime, you can always go to the command bar menu by typing Alt-M.

There are seven options in the command bar menu. A selection is made by placing the command bar cursor over the desired option using the arrow keys on the numeric key pad and then pressing the return key. As the cursor is placed over each option, a brief description of that selection is displayed on the second line of the command bar menu. Following is a description of each of the command bar menu options. Figure I shows the screen after the PROJECT program has been loaded and Alt-M has been pressed. The command bar cursor is located over the input option. The input option is briefly described on the second line of the menu.

Figure I

A101: Input	Chanoe	Borrow	Print Era	se LeaveM	enu Qui	t		CMD MENU
			nses from		С	D	E	F
101 102 103 104 105 106 107		п		5	·	.		
109 110 111 112 113 114 115			FOR COMM	IAND BAR ME	NU PRESS	G Alt M		
117 118 119 120								

INPUT

Selecting the first option, "Input" takes the user to the receipt area of the worksheet. The user can then enter the receipts from the past year on a per cow and/or per farm basis. Regardless of which way the information is entered, the user must enter the number of cows milked in the receipt area of the worksheet. To enter the corresponding expenses for the past year, press the [PgDn] key on the numeric key pad. This will take the user to the expenses area of the worksheet. The [PgDn] key will have to be pressed twice for the user to enter all the expenses. Figures II and III show the screens after the input option has been invoked. Figure II shows the receipt area of the worksheet ready for data input. Figure III shows the screen after the [PgDn] key has been used to scroll down to the expense area.

Figure II
C9: (F0) U 0.01

READY

1 2 3 4 5	A PROJECTED	Last Year	Last Year	D ES Forecast I change	E Amount Change	F This Year
6					PER COM	
7						*****
8	RECEIPTS					
9	number of cows	KKKKK	0	XXXXX	XXXXX	XXXXX
10	eilk sales in pounds	0	0			0
11	price received-\$/cut.	0.00	0.00			0.00
12	crop salas	0.00	0			0.00
13	dairy cattle sales	0.00	0			0.00
14	calves & other livestock	0.00	0			0.00
15	gas tax refund	0.00	0			0.00
16	government payments	0.00	0			0.00
17	eachine work	0.00	0			0.00
18 19	aiscellaneous	0.00	0			0.00
20	Total cash receipts	80	90			60

Figure III

C221

READY

1 2	A PROJECTED R			D E9	E	F
3		Last Year	Last Year	Forecast	Amount	This
4		Per Cow	Per Fare	% change	Change	Year
5	*************************************					
6					PER COH	
7				******	********	
21						
22 23						
24	EXPENSES					
25	·					
26	Hired labor	0.00	0			0.00
27	Feed					
20	dairy grain & concentrate	0.00	0			0.00
29	hay and other	0.00	0			0.00
30	Machinery					
31	machine hire, rent & lease	0.00	0			0.00
32	machine repair	0.00	0			0.00
22	auto expense (fara share)	0.00	0			0.00

CHANGE

The second option, "Change" allows the user to enter the projected changes for the coming year and observe the effects on the farm receipts and expenses. Selection of this option takes the user to the receipts area of the worksheet where the projected changes for the coming year can be made on a per cow basis. The per cow changes are presented on the screen first. If you want to project changes on a per farm basis, use the [->] key on the numeric key pad to scroll over to the "per farm change" area of the worksheet. Figure IV shows the screen after the [->] has been used to scroll over to the "per farm change" area of the worksheet. To project changes for expenses, use the [PgDn] key to go to the expense area of the worksheet. Changes can be made on a per cow or per farm basis just as with the receipts.

Figure IV

G8: READY

,	A	В	C	G	Н	I
1	PROJECTED			ES		
۷.		Last	Last			
5		Year	Year	Forecast	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	This
•		Per Cow	Per Fare	% change	Change	Year
5 6	. · · · · · · · · · · · · · · · · · · ·	3 w & m & a & o & .	යට දැස සහ සහ පත පත් බෝ සිට ජන අත		PER FARM	22 cm an an an an an an
7				an an an an an an an	FER FARN	
3	RECEIPTS					
7	number of cows	XXXXX	0			0
10	milk sales in pounds	0	0			0
11	price received-\$/cwt.	0.00	0.00			0.00
12	crop sales	0.00	0			0
13	dairy cattle sales	0.00	0			0
4	calves & other livestock	0.00	0			0
15	gas tax refund	0.00	0			0
16	government payments	0.00	0			0
17	machine work	0.00	0			0
18 19	miscellaneous	0.00	0			0
20	Total cash receipts	\$0	\$0			\$0

BORROW

The "Borrow" option of the menu takes the user to an area of the worksheet that aids in projecting cash flow and borrowing needs for the coming year. The first two lines in this section display the total cash receipts and expenses for the past year and those projected for the coming year. The net cash flow is then calculated from these figures. Two adjustments are made to the net cash flow. First, the interest paid for both years is added back in since this will be included in scheduled debt payment. The second adjustment requires the user to input cash family living expenses for the past year as well as the amount projected for the coming year.

The result of these adjustments is the amount available for debt service, capital investment, and retained earnings. The user then inputs the scheduled debt service for the past year and the amount projected for the coming year. This is subtracted out and the remainder is displayed as the amount available for capital investment. The user then inputs capital investments for the past year and those projected for the coming year. The final result is the borrowed or equity funds needed. A positive number here indicates that there is a deficit and borrowed funds will be required to meet cash needs. A negative number in this row indicates a surplus of funds. Figure V shows the screen after the Borrow option has been chosen.

Figure V

D71: U 0

READY

	Α .	8	C	a	E	F	
62	TOTAL FARM PROJECTED CA	ASH FLOW	AND	BORROWING	NEEDS		
63				Last Yea	r	This y	ear
64				****	a 100	Car 123 GO 615 CO	
65	Total Cash Receipts			0			0
66	Total Cash Expenses			0			0
67							
68	Net Cash Flow			0			0
69							
70	Add interest paid			0			0
71	Cash Family Living Expenses			.> 0	<	>	0
72							
73	Left For Debt Service, Capital						
74	Investment, & Retained Earnin	ngs		0			0
75	Scheduled Debt Service			.> 0	<	>	0
76							
77	Available for Capital Invest.			0			0
78	Expansion Livestock Purchases		0 0		<		0
79	Equipment Purchases			.> 0	<	>	0
80							
81	Borrowed or Equity Funds Needed			0			0

PRINT

The "Print" option allows the user to print out a copy of the worksheet. When the print option is selected from the menu, a submenu will be displayed in the command bar which will allow the user to choose the type of printer used. There are three options available: Epson (IBM), Okidata, and Default. Choose the default option if a printer other than an Epson (IBM) or Okidata is being used. When the cursor is placed over the printer used and the return key is pressed, the print job will be carried out. Figure VI shows a completed worksheet printed out on an Epson or Okidata printer. If another type of printer is being used, the projected receipt and expense statements will be printed out on two pages rather than the single page. One will be the "per cow" basis and the other will be the "per farm" basis.

ERASE

The "Erase" option allows the user to erase all the input data that has been entered into this worksheet. This option calls up the PROJECT template so the user can re-enter the data. To save the present information for later use before erasing it, use the Lotus 1-2-3 /File Save command. Caution - Use a name other than PROJECT to save the completed template. Failure to do so will result in damage to the PROJECT template.

LEAVEMENU

The "LeaveMenu" allows the user to leave the command bar menu. This is equivalent to not making any menu selection. This is usually accomplished in Lotus 1-2-3 by pressing the [Esc] key. However, when using this worksheet command bar menu the [Esc] key should NEVER be pressed. Doing so will cause unexpected results. Always use the "LeaveMenu" option.

QUIT

The "Quit" option allows the user to exit Lotus 1-2-3. The user is reminded to use the /File Save command to save the worksheet information for later use before leaving Lotus 1-2-3.

MICRO DFBS USE

The step of inserting the past year's data can be avoided in county Extension offices using the Micro DFBS microcomputer program to process dairy farm business summaries. The farm record must first be processed on Micro DFBS, creating a farm record file with the farm number as the name and the last two digits of the year as the file extension, such as 12001.84. (The file extension will be .84 for the 1984 summaries, as in 12001.84).

A macro included in the template uses the Lotus 1-2-3 command /File Import to load the converted farm record file. First the file must be copied to the template diskette and converted to a form Lotus understands. Use the DOS command COPY to copy the file. You must have the DOS prompt A> or C> to start. If the farm record file is on a diskette in drive B, insert the template diskette in drive A and type

COPY B:12001.84 A:

for the sample farm. Substitute your own farm record file name for 12001.84.

The farm record file must then be converted to a form Lotus understands. Actually, the farm record file is in a form called binary format, and we'll convert it to an ASCII format, but that's not important to most users. Two accessory programs are used to make this conversion. The program, BSTOA.EXE, does the actual conversion. However, to make it easier for the user to make this conversion, a batch file named

CONVERT.BAT has been set up. The following step will complete the conversion. From A>, with the template containing 12001.83 or your file in drive A, type

CONVERT 12001.84

5,

f_a

(Again, substitute your file name)

Note: The conversion program and template are set up to do only one farm at a time--each farm record file must be converted, then loaded into Lotus 1-2-3, before the next one is converted. Converting one farm record file erases the previous converted file.

When A> returns, move the template diskette to drive B and load Lotus 1-2-3 in drive A. To load the converted farm record file into cash flow projection worksheets, load the template PROJDFBS using

/File Retrieve PROJDFBS

The template automatically enters the information from the farm data file into the worksheet. The user can then use this template to calculate the cash flow projections for the coming year by following the same instructions that were used for the PROJECT template. The command bar menu is the same except that the input option has been removed since the data is automatically entered in.

PROJECTED RECEIPTS & EXPENSES

Last Last

Year Year Forecast Amount This Forecast Amount This Per Cow Per Farm % change Change Year % change Change Year

#	03 c0 60 50 t0 t0 00 10 c		e riianas			v v v v v v v v v v v v v v v v v v v	
				PER COW	***	PER FARM	***
ECEIPTS							
number of cows	XXXXX	60	XXXXX	XXXXX	XXXXX	10	70
milk sales in pounds	13980	838800	5%		14679		102753
price received-\$/cwt.	13.94	13.94		-0.55	13.39		13.3
crop sales	10.00	600			10.00	-600	
dairy cattle sales	58.33	3500			58.33		350
calves & other livestock	22.50	1350			22.50		135
gas tax refund	1.67	100			1.67		10
government payments	5.00	300			5.00		30
machine work	2.50	150			2.50	1500	165
aiscellaneous	0.83	50			0.83		5
Total cash receipts	\$2,050	\$122,979			\$2,066		\$144,53
EXPENSES							
Hired labor	75.00	4500			75.00	3000	750
Feed							
dairy grain & concentrate			20%		542.90		3257
hay and other	1.67	100			1.67	3500	360
Machinery							
machine hire, rent & lease					13.83		83
machine repair	144.75				144.75	20%	1042
auto expense (farm share)	25.00				25.00		150
gas and oil	78.75	4725			78.75	10%	519
Livestock							
replacement livestock	82.92	4975			82.92	5000	997
breeding fees	29.17	1750			29.17		175
veterinary and medicine	50.00	3000			50.00		300
milk marketing	47.67	2860			47.67		286
cattle leased	1.50	90			1.50		9
other livestock expense	122.67	7360			122.67		736
Crops							
fertilizer and lime	102.50	6150			102.50	10%	676
seeds and plants	29.17	1750			29.17	10%	192
spray and other	18.33	1100			18.33	5%	115
Real estate							
land, build., fence repair	74.17	4450			74.17		445
taxes	101.33	6080			101.33		608
insurance	40.83	2450			40.83		245
rent/lease	11.73	704			11.73		70
Other cash expense							
telephone (farm share)	8.58	515			8.58		51
electricity (farm share)	26.85				26.85		161
interest paid	285.75				285.75		1714
miscellaneous	9.33	560			9.33		56
Total cash expenses	\$1.834	\$110,035			\$1,924		\$130,01

FIGURE VI (cont.)

TOTAL FARM PROJECTED CASH FLOW AND BORROWING NEEDS

	Last Year	This year
Total Cash Receipts Total Cash Expenses	122979 110035	144536 130019
Net Cash Flow	12943	14517
Add interest paid Cash Family Living Expenses	17145 > 12000 <	17145 > 15000
Left For Debt Service, Capital Investment, & Retained Earnings Scheduled Debt Service	18088 > 31703 <	16662 > 25000
Available for Capital Invest. Expansion Livestock Purchases Equipment Purchases	-13615 > 2000 < > 2000 <	
Borrowed or Equity Funds Needed	17615	12838

EXPLANATION OF SELECTED CELL ENTRIES AND FORMULAS

Calculation of per farm figures in the input section

If the user enters a receipt or expense in the "per cow" column in the input section of the worksheet, then a formula in the "per farm" column automatically calculates the per farm total for that receipt or expense. If the user makes the entry on a "per farm basis", then the formula is just displaced by the entry. If the user makes the entry on a "per farm" basis and then decides to change it and make it on a "per cow" basis, then the formula will be erased and there may be an error in the projections unless the formula is re-entered.

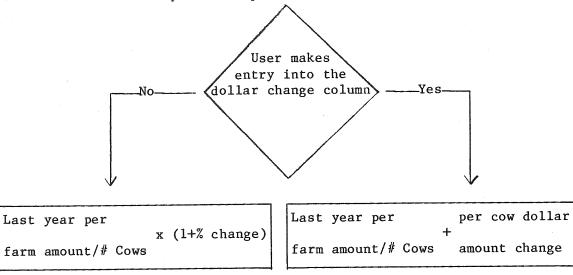
PROJECTION FORMULAS

5,

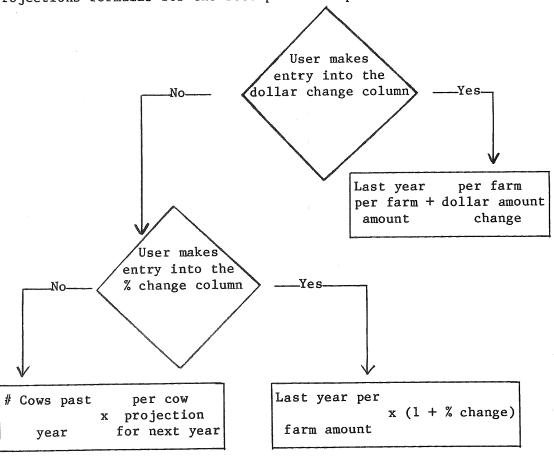
6,

6,

The following flowchart explains the logic of the $\underline{\text{per cow}}$ projection formulas for the receipts and expenses



The following flow chart explains the logic of the $\underline{\text{per farm}}$ projections formulas for the receipts and expenses.



FORMULAS

```
A1: "
                     PROJECTED RECEIPTS & EXPENSES
B2: ^Last
C2: ~Last
B3: ~Year
C3: "Year
D3: ^Forecast
E3: ^ Amount
F3: ^This
83: ^Forecast
H3: ^ Amount
I3: "This
B4: ^Per Cow
C4: ^Per Farm
D4: ^% change
E4: ^ Change
F4: ^Year
G4: ^% change
H4: ^ Change
I4: ^Year
A5: " ......
D5: '----
The last is 7 may not one and and not not one
-15:
E6: "PER COW
H6: "PER FARM
A8: ' RECEIPTS
A9: ' number of cows
B9: "XXXXX
C9: (FO) U 0.01
D9: "XXXXX
E9: "XXXXX
F9: "XXXXX
19: (FO) @IF(H9<>O,(H9+C9),C9*(1+G9))
A10: "
        milk sales in pounds
B10: U 0
C10: (FO) U + $C$9*B10
D10: (PQ) U "
E10: (F2) U "
F10: (F0) @IF(E10<>0,(E10+C10/$C$9),C10/$C$9*(1+D10))
IIO: (FO) @IF(H1O<>O,(H1O+C1O),@IF(G1O<>O,($I$9*F1O)*(1+G1O),$I$9*F1O))
A11: "
        price received-$/cwt.
B11: (F2) U O
C11: (F2) U +B11
E11: (F2) U "
I11: (F2) @IF(H11<>0,(H11+C11),@IF(G11<>0,C11*(1+G11),F11))
A12: 7
```

crop sales

```
B12: (F2) U 0
C12: (FO) U +*C$9*B12
E12: (F2) U "
F12: (F2) OIF(E12<>0,(E12+C12/$C$9),C12/$C$9*(1+D12))
I12: (FO) @IF(H12<>O,(H12+C12),@IF(G12<>O,C12*(1+G12),#C$9*F12))
          dairy cattle sales
A13: "
B13: (F2) U 0
C13: (FO) U + $C$9 x B13
E13: (F2) U "
F13: (F2) 01F(E13<>0,(E13+C13/$C$9),C13/$C$9*(1+D13))
I13: (FO) @IF(H13<>O,(H13+C13),@IF(G13<>O,C13*(1+G13),*C$9*F13))
         calves & other livestock
A14: "
B14: (F2) U O
C14: (FO) U +*C*9*B14
F14: (F2) OIF(E14<>O,(E14+C14/$C$9),C14/$C$9*(1+D14))
I14: (FO) @IF(H14<>O,(H14+C14),@IF(G14<>O,C14*(1+G14),*C$9*F14))
A15: "
          gas tax refund
B15: (F2) U 0
C15: (FO) U + C + 9 × B15
F15: (F2) OIF(E15<>0,(E15+C15/$C$9),C15/$C$9*(1+D15))
I15: (FO) @IF(H15<>0,(H15+C15),@IF(G15<>0,C15*(1+G15),*C$9*F15))
A16: "
          government payments
B16: (F2) U 0
C16: (FO) U + $C$9*B16
F16: (F2) OIF(E16<>0,(E16+C16/$C$9),C16/$C$9*(1+D16))
I16: (FO) @IF(H16<>O,(H16+C16),@IF(G16<>O,C16*(1+G16),*C$9*F16))
A17: '
          machine work
B17: (F2) U O
C17: (FO) U +*C*9*B17
F17: (F2) OIF(E17<>O,(E17+C17/$C$9),C17/$C$9*(1+D17))
117: (FO) @IF(H17<>O,(H17+C17),@IF(G17<>O,C17*(1+G17),$C$9*F17))
          miscellaneous
A18: "
B18: (F2) U O
C18: (FO) U +$C$9*B18
E18: (F2) U "
F18: (F2) OIF(E18<>0,(E18+C18/$C$9),C18/$C$9*(1+D18))
I18: (FO) @IF(H18<>O,(H18+C18),@IF(G18<>O,C18*(1+G18),*C$9*F18))
A20: "
        Total cash receipts
B20: (CO) (B10*B11/100)+@SUM(B12..B18)
C20: (CO) ((+C10/100)*C11)+@SUM(C12..C18)
F20: (CO) (+F10/100) *F11+@SUM(F18..F12)
I20: (CO) (+I10/100) *I11+@SUM(I18..I12)
F21:
A24: "
        EXPENSES
A26: "
        Hired labor
B26: (F2) U O
C26: (FO) U +$C$9*B26
E26: U "
F26: (F2) OIF(E26<>0,(E26+C26/$C$9),C26/$C$9*(1+D26))
126: (FO) @IF(H26<>O,(H26+C26),@IF(G26<>O,C26*(1+G26),*C$9*F26))
A27: "
        Feed
          dairy grain & concentrate
A28; "
B28: (F2) U 0
C28: (FO) U +#C$9*B28
F28: (F2) alf(E28<>0,(E28+C28/$C$9),C28/$C$9*(1+D28))
I28: (FO) @IF(H28<>0,(H28+C28),@IF(G28<>0,C28*(1+G28),$C$9*F28))
```

```
A29: "
         hay and other
B29: (F2) U O
C29: (FO) U +$C$9*B29
F29: (F2) 01F(E29<>0,(E29+C29/$C$9),C29/$C$9*(1+D29))
129: (FO) @IF(H29<>0, (H29+C29),@IF(G29<>0,C29*(1+G29),#C$9*F29))
A30: '
       Machinery
A31:
         machine hire, rent & lease
B31: (F2) U O
C31: (FO) U +$C$9xB31
F31: (F2) 0IF(E31<>0,(E31+C31/$C$9),C31/$C$9*(1+D31))
I31: (FO) DIF(H31<>O,(H31+C31),DIF(G31<>O,C31*(1+G31),*C$9*F31))
A32: "
         machine repair
B32: (F2) U O
C32: (FO) U +*C*9*B32
F32: (F2) DIF(E32<>0.(E32+C32/#C#9),C32/#C#9#(1+D32))
I32: (FO) @IF(H32<>O,(H32+C32),@IF(G32<>O,C32*(1+G32),$C$9*F32))
A33: '
         auto expense (farm share)
B33: (F2) U O
C33: (FO) U +*C*9*B33
F33: (F2) @IF(E33<>0,(E33+C33/$C$9),C33/$C$9*(1+D33))
I33: (FO) @IF(H33<>O,(H33+C33),@IF(G33<>O,C33*(1+G33),#C#9*F33))
A34: "
         gas and oil
B34: (F2) U O
C34: (FO) U +*C*9*B34
F34: (F2) alf(E34<>0,(E34+C34/$C$9),C34/$C$9*(1+D34))
I34: (FO) @IF(H34<>O,(H34+C34),@IF(G34<>O,C34*(1+G34),*C$9*F34))
       Livestock
A36: "
         replacement livestock
B36: (F2) U O
C36: (FO) U +*C*9*B36
F36: (F2) @IF(E36<>0,(E36+C36/#C#9),C36/#C#9*(1+D36))
I36: (FO) DIF(H36<>O,(H36+C36),DIF(G36<>O,C36*(1+G36),$C$9*F36))
A37: "
         breeding fees
B37: (F2) U O
C37: (FO) U +*C*9*B37
D37: (PO) U "
F37;
     (F2) OIF(E37<>0,(E37+C37/$C$9),C37/$C$9*(1+D37))
137: (FO) @IF(H37<>0,(H37+C37),@IF(G37<>0,C37*(1+G37), $C$9*F37))
A38:
         veterinary and medicine
B38: (F2) U O
C38: (FO) U +*C*9*B38
I38: (FO) @IF(H38<>O,(H38+C38),@IF(G38<>O,C38*(1+G38),#C$9*F38))
A39: "
         milk marketing
B39: (F2) U O
C39: (FO) U + $C$9*B39
F39: (F2) DIF(E39<>0,(E39+C39/#C#9),C39/#C#9*(1+D39))
I39: (FO) DIF(H39<>O,(H39+C39),DIF(G39<>O,C39*(1+G39),$C$9*F39))
A40: "
         cattle leased
840: (F2) U O
C40: (FO) U +*C*9*B40
I4O: (FO) DIF(H4O<>O,(H4O+C4O),DIF(G4O<>O,C4O*(1+G4O),$C$9*F4O))
A41: "
         other livestock expense
B41: (F2) U O
```

C41: (FO) U +*C*9*B41

```
F41: (F2) @IF(E41<>O,(E41+C41/$C$9),C41/$C$9*(1+D41))
I41: (FO) @IF(H41<>O,(H41+C41),@IF(G41<>O,C41*(1+G41),#C$9*F41))
        Crops
A43: "
          fertilizer and lime
B43: (F2) U O
C43: (FO) U +*C*9*B43
F43: (F2) @IF(E43<>0,(E43+C43/$C$9),C43/$C$9*(1+D43))
I43: (FO) DIF(H43<>O,(H43+C43),DIF(G43<>O,C43*(1+G43),$C$9*F43))
A44: ' seeds and plants
B44: (F2) U O
C44: (FO) U +*C*9*B44
F44: (F2) @IF(E44<>0,(E44+C44/$C$9),C44/$C$9*(1+D44))
I44: (FO) @IF(H44<>O,(H44+C44),@IF(G44<>O,C44*(1+G44),#C$9*F44))
          spray and other
B45: (F2) U O
C45: (FO) U +*C*9*B45
F45: (F2) OIF(E45<>0,(E45+C45/$C$9),C45/$C$9*(1+D45))
I45: (FO) @IF(H45<>O,(H45+C45),@IF(G45<>O,C45*(1+G45),#C$9*F45))
        Real estate
A47; "
          land, build., fence repair
B47: (F2) U O
C47: (FO) U +$C$9*B47
F47: (F2) OIF(E47<>0,(E47+C47/$C$9),C47/$C$9*(1+D47))
I47: (FO) DIF(H47<>O,(H47+C47),DIF(G47<>O,C47*(1+G47),BC$9*F47))
A48; "
          taxes
B48: (F2) U O
C48: (FO) U +*C*9*B48
F48: (F2) @IF(E48<>O,(E48+C48/*C*9),C48/*C*9*(1+D48))
I48: (FO) @IF(H48<>O,(H48+C48),@IF(G48<>O,C48*(1+G48),$C$9*F48))
A49: "
         insurance
B49: (F2) U O
C49: (FO) U + $C$9*B49
F49: (F2) @IF(E49<>O,(E49+C49/$C$9),C49/$C$9*(1+D49))
149: (FO) @IF(H49<>O,(H49+C49),@IF(G49<>O,C49*(1+G49),$C$9*F49))
A50: "
         rent/lease
B50: (F2) U 0
C50: (FO) U +$C$9*B50
F50: (F2) @IF(E50<>0,(E50+C50/$C$9),C50/$C$9*(1+D50))
I50: (FO) @IF(H50<>0,(H50+C50),@IF(G50<>0,C50*(1+G50),$C*9*F50))
A51: "
       Other cash expense
A52: "
         telephone (farm share)
B52: (F2) U O
C52: (FO) U +$C$9*B52
F52: (F2) 01F(E52<>0,(E52+C52/*C$9),C52/*C$9*(1+D52))
I52: (FO) @IF(H52<>O,(H52+C52),@IF(G52<>O,C52*(1+G52),$C$9*F52))
ASS: "
       electricity (farm share)
B53: (F2) U O
C53: (FO) U +*C*9*B53
F53: (F2) @1F(E53<>0,(E53+C53/*C$9),C53/*C$9*(1+D53))
I53: (FO) @IF(H53<>0,(H53+C53),@IF(G53<>0,C53*(1+G53),#C*9*F53))
A54 "
         interest paid
B54: (F2) U O
C54: (FO) U +$C$9*B54
I54: (FO) DIF(H54<>O,(H54+C54),DIF(B54<>O,C54*(1+G54),#C$9*F54))
```

A55: "

miscellaneous

```
B55: (F2) U O
C55: (FO) U +*C*9*B55
F55: (F2) @IF(E55<>O,(E55+C55/$C$9),C55/$C$9*(1+D55))
I55: (FO) DIF(H55<>O,(H55+C55),DIF(G55<>O,C55*(1+G55),$C$9*F55))
A57: ' Total cash expenses
B57: (CO) @SUM(B26..B55)
C57: (CO) @SUM(C55..C26)
F57: (CO) aSUM(F55..F26)
157: (CO) @9UM(155..126)
                TOTAL FARM PROJECTED CASH FLOW AND BORROWING NEEDS
A62: "
D63: "Last Year
E63: "r
F63: "his year
A64:
A65: ' Total Cash Receipts
B65: (F2) "
D65: (FO) +C20
F65: (F0) +120
A66: ' Total Cash Expenses
B66: (F2) "
D66: (FO) +C57
F66: (F0) +157
A68: "
         Net Cash Flow
B68: (F2) "
D68: (FO) +D65-D66
F68: (F0) +F65-F66
A70: ' Add interest paid
D70: +C54
F70: +154
A71: 'Cash Family Living Expenses
C71: (FO) "
            . . . . >
D71: U O
E71: "<.....>
F71: U 0
A73: ' Left For Debt Service, Capital
A74: "
         Investment, & Retained Earnings
D74: (FO) +D68+D70-D71
F74: (FO) +F68+F70-F71
A75: ' Scheduled Debt Service
B75: "
C75: (FO) "
D75: U O
E75: '<.....
F75: U 0
A77: " Available for Capital Invest.
B77: "
D77: (FO) +D74-D75
F77: (FO) +F74-F75
A78: " Expansion Livestock Purchase
B78: "es
C78: (FO) "
D78: U O
E78: "<.....>
F78: U 0
```

150

```
A79: "
         Equipment Purchases
B79: "
C79: (FO) "
D79: U O
E79: '<.....>
F79: U 0
A81: " Borrowed or Equity Funds Needed
D81: (FO) DIF(-D77+D78+D79<O,O,-D77+D78+D79)
F81: (FO) 01F(-F77+F78+F79<0,0,-F77+F78+F79)
                            FOR COMMAND BAR MENU PRESS Alt M
A110: "
A200: '{goto}a101~/wgpe
A202: "/xma203~
A203: "Input
B203: "change
C203: "borrow
D203: 'print
E203: "Erase
F203: "LeaveMenu
6203: "Quit
A204: "Enter receipts and expenses from last year
B204: "Enter projected changes for coming year
C204: 'Total Farm Projected Cash Flow and Borrowing Needs
D204: 'Print the Worksheets
E204: "Erase previous input information
F204: "Exit from Menu
G204: "Leave Lotus 1-2-3
A205: "/wtc~{home}{goto}b8~/wtb~{goto}c9~
B205: "/wtc(home)(aato)D8~/wtb~(GDTO)D10~
C205: '/wtc^
D205: '/xma210~
E205: "/frproject"
G205: '/qy
C206: '(home)
C207: '{goto}
C208: 'a62^{goto}d71^
A210: "Epson(IBM)
B210: "Okidata
C210: "Default
A211: "All Epson or IBM printers
B211: "All Okidata printers
C211: "All other types of printers
A212: '(home)
B212: '(home)
C212: 'Chome'
A213: '/ppcara1..i100'
B213: '/ppcara1..i100~
C213: '/ppcara1..f57~
A214: 'poml10"
B214: 'poml10"
C214: 'poml4"
A215: "mr150"
B215: 'mr150"
C215: "mr150~
A216: 'mt0"
B216: "mto~
```

C216: "mto~

```
A217: "mb0"
B217: 'mb0~
C217: "mb0~
A218: 's\015"
B218: 's\029~
C218: '/q/gq
A219: 'q/gq
B219: 'q/gq
C219: '/ppobca1..c57'qrg1..i57'
C220: 'pom14
C221: 'mr150"
C222: "mtO"
C223: "mb0~
C224: 'q/gq
C225: "/ppcara61...f81"
C226: 'pgq~
```