

Quick Start Tutorial for the database driven version of RDFinancial for Montana.

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This tutorial is a quick start guide for the database version of the RDFinancial program. Some version of RDFinancial contain a fixed crop mix (crop rotation) used as the example. While these versions allow the user to enter a different crop mix that more closely matches their own operation, there is no database of crop budgets to help with that process. This version has a database of crop budgets to the user get started using RDFinancial.

You may have gotten a copy of the RDFinancial program on a CD or downloaded it from the web. In either instance, the process of starting and running the program is the same. Make sure you have copied the program onto your hard disk in a location where it is likely to stay. Once you have saved the program in the desired location, navigate to that location with Windows Explorer, not Internet Explorer (IE). The RDFinancial program will have a name something like "RDFinancial...swf." The swf extension on the file means it is a Flash file. These files will run in Internet Explorer. To open and run an RDFinancial...swf file, you can double click on the file name and it may open automatically (if your computer is set up to open Flash files in IE). If your computer is not set up to run Flash files in your web browser, it may ask you what program you want to use to run the Flash file. See the steps outlined below. The latest version of RDFinancial can be downloaded from the web at:

<http://www.montana.edu/softwaredownloads/financialmgtdownloads.html>

Outline of steps to run RDFinancial:

Step 1: Save an RDFinancial file to a location of your choice on your hard drive.

Step 2: Use Windows Explorer to navigate to the location where RDFinancial was saved and double click on the file name. The file will most likely be a Flash file with an swf file extension. Your computer may be set to hide the file extensions, so you may not see the swf. For educators, there are also PowerPoint versions of this file available which can be built in to a PowerPoint presentation. Figure 1 shows the first screen you should get after double clicking on the file name.

Figure 1. Initial Screen when opening RDFinancial in Internet Explorer (IE).

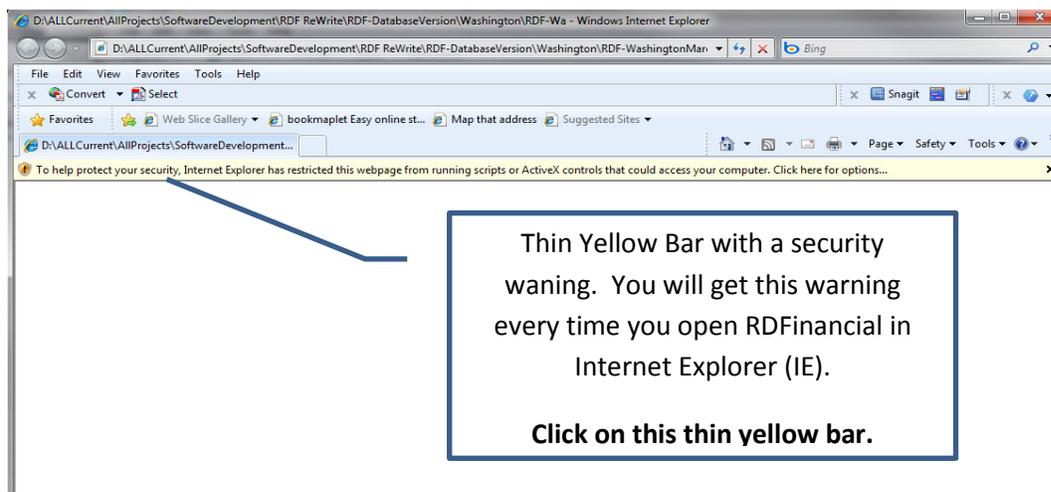


Figure 2 shows the second screen which asks the user to click Yes or No to allow ActiveX controls. **You must click Yes** to allow IE to use the ActiveX controls built in to the RDFinancial Flash file.

Figure 2. Opening RDFinancial in IE, second screen security warning.

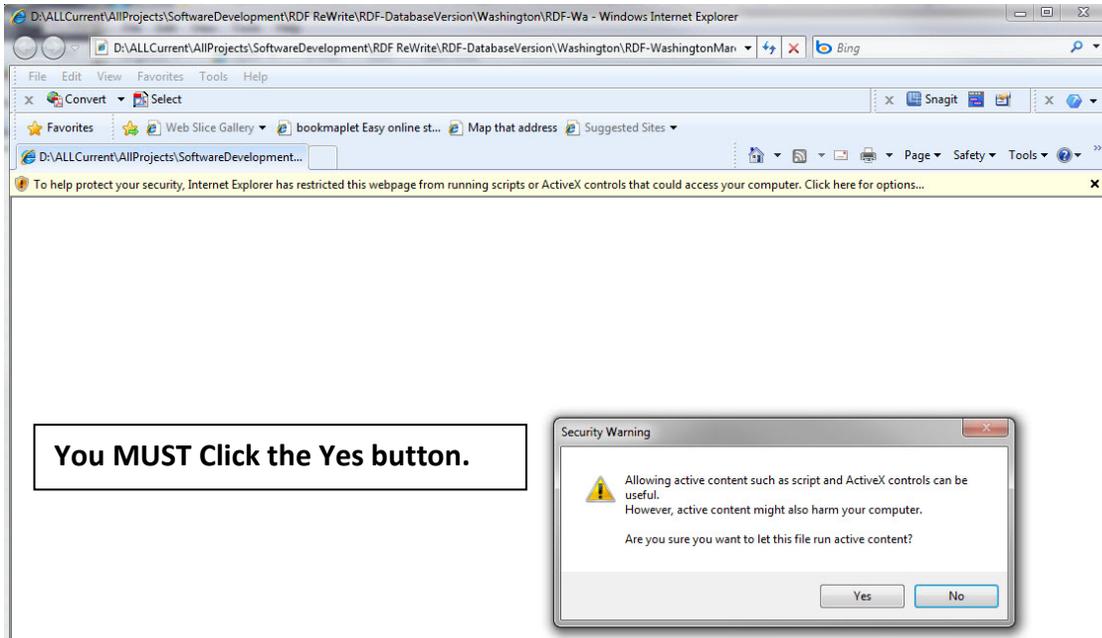


Figure 3. Initial Screen of RDFinancial running in Internet Explorer.

Step 3: Take some time to read the information on this screen and how you interact with this software.

After you have read the information on this screen, click on the Enter Data tab at the top of the screen.

Figure 4 is displayed.

This tab allows the user to enter or change most of the information used by RDFinancial.

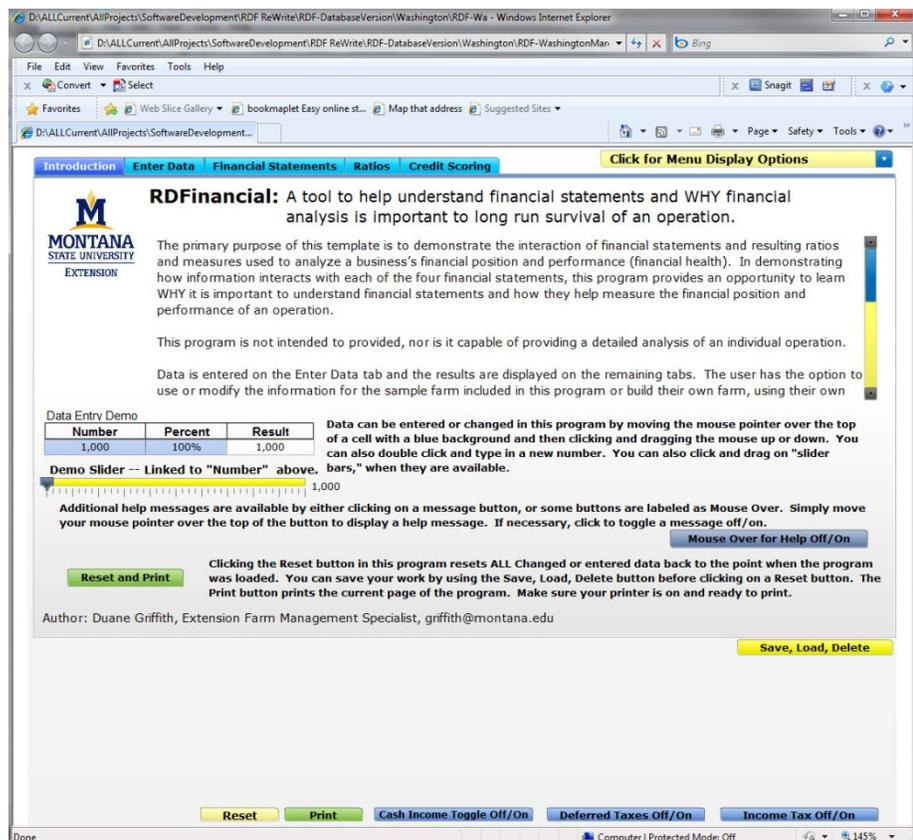
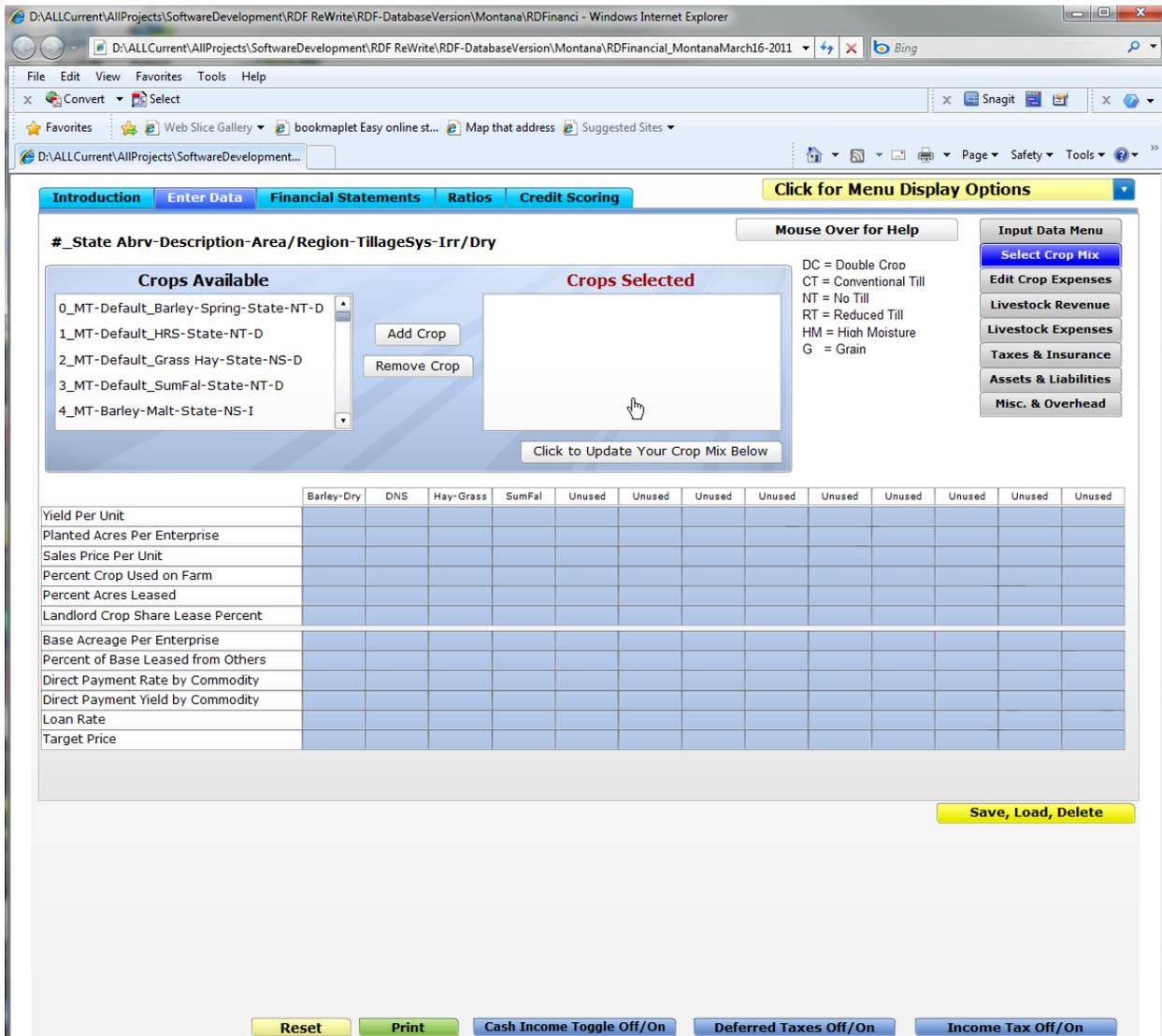


Figure 4. Initial data entry screen for RDFinancial.



Step 4: The initial data entry screen shows the information necessary to select a crop mix. The user must add the crops they wish to select for their example farm/ranch operation. This version of the program provides a database of crops to select from and each crop in the database contains information about income and expenses for that particular crop. ***Make sure you change both the income and expense values to suite your particular situation.*** The program also has a “default” case farm example built in.

Step 5: The only thing needed to make this case farm example active is to select the crop budgets assigned to this case farm. The crops selected for the built in case farm are listed first in the “Crops Available” window as #_MT_Default..., Figure 4. To “load these crops,” click on a file name to highlight the crop name and then click on the “Add Crop” button. The crop name in the Crops Available window will move to the “Crops Selected” window. See Figures 5 and 6.

Continue this process until all crops that are labeled ...MT-Default... have been added to the Crops Selected window. You can add crops one at a time or highlight several crops in the Crops Available window by holding down the CTRL Key to select random crops from the list (not next to each other), or holding down the Shift key to select several crops that are listed next to each other. Once all the default case farm crops have been added, click the button labeled “Click to Update Your Crop Mix Below” button. Information in the crop budget database for the selected crops are displayed below the crop selection window. This screen displays only the revenue and government payment information built in to the budgets. Review this information carefully and change all the number you wish to change. You will note that the “default” budgets have some information that other budgets in the database do not have. This information includes the Acres Per Enterprise and information about government programs for the default crops used in the built in case farm. See Figure 7. If you select other crop budgets, you must complete each row of a budget to assure RDFinancial has enough information to calculate the financial statements.

Figure 7. Completed screen showing the default information for the default crop mix used.

The screenshot shows the RDFinancial software interface. At the top, there are navigation tabs: Introduction, Enter Data, Financial Statements, Ratios, and Credit Scoring. A yellow button labeled "Click for Menu Display Options" is visible. Below this, there are two main sections: "Crops Available" and "Crops Selected".

Crops Available:

- 4_MT-Barley-Malt-State-NS-I
- 5_MT-Barley-Spring-State-NT-D
- 6_MT-Barley-Spring-State-MT-D
- 7_MT-Barley-Spring-State-CT-D
- 8_MT-Camalina-State-NT-D

Crops Selected:

- 0_MT-Default_Barley-Spring-State-NT-D
- 1_MT-Default_HRS-State-NT-D
- 2_MT-Default_Grass Hay-State-NS-D
- 3_MT-Default_SumFal-State-NT-D

Buttons for "Add Crop" and "Remove Crop" are located between the two sections. A "Click to Update Your Crop Mix Below" button is at the bottom of the "Crops Selected" section.

On the right side, there is a legend for crop types: DC = Double Crop, CT = Conventional Till, NT = No Till, RT = Reduced Till, HM = High Moisture, G = Grain. Below the legend is an "Input Data Menu" with several options: Select Crop Mix (highlighted), Edit Crop Expenses, Livestock Revenue, Livestock Expenses, Taxes & Insurance, Assets & Liabilities, and Misc. & Overhead.

At the bottom of the screen, there is a table with the following data:

	Barley-Dry	DNS	Hay-Grass	SumFal	Unused								
Yield Per Unit	60.0	28.0	2.0	0.0									
Planted Acres Per Enterprise	400.0	900.0	250.0	800.0									
Sales Price Per Unit	\$9.00	\$10.00	\$0.00	\$0.00									
Percent Crop Used on Farm	0.0%	0.0%	0.0%	0.0%									
Percent Acres Leased	0.0%	0.0%	0.0%	0.0%									
Landlord Crop Share Lease Percent	0.0%	0.0%	0.0%	0.0%									
Base Acreage Per Enterprise	400.0	900.0	0.0	0.0									
Percent of Base Leased from Others	0.0%	0.0%	0.0%	0.0%									
Direct Payment Rate by Commodity	\$0.24	\$0.52	\$0.00	\$0.00									
Direct Payment Yield by Commodity	60.0	28.0	0.0	0.0									
Loan Rate	\$1.85	\$3.70	\$0.00	\$0.00									
Target Price	\$2.63	\$4.17	\$0.00	\$0.00									

A yellow button labeled "Save, Load, Delete" is located at the bottom right of the screen.

Figure 7 shows the “Select Crop Mix” menu item (upper right corner of the screen) is selected. To complete the data entry process for all required information, click on each menu item and change all information about each crop or livestock enterprise selected. This menu also allows/requires the user to enter information about taxes, insurance, assets and liabilities and miscellaneous and overhead expenses. This default case farm also includes include livestock enterprises, not shown in this tutorial.

unit FSA numbers, etc. Once a scenario is saved, it can be loaded using this button at any time in the future. **Caution:** These scenario data files are lost if you move the RDFinancial software to any other location by copying it to another director on your computer or to a thumb drive, etc.

Another button you will need to use is the **Click for Menu Display Options** button in the upper right corner of the screen. This button contains a menu of items that can be used to enter or change specific data in order to demonstrate a particular concept. Figure 9 shows an example of the “You Can Not Buy Equity” data entered at the bottom of the statements. The menu display, upper right corner, shows the You Can Not Buy Equity menu listing. This example shows that depreciation (\$10,000) and interest (\$6,000) expenses incurred when an assets is purchased actually decrease net farm income and the positive equity change show on the balance sheet when the case farm is initially loaded.

Figure 9. RDFinancial Statements with example numbers for the You Can Not Buy Equity menu displayed.

Introduction Enter Data **Financial Statements** Ratios Credit Scoring
You Can Not Buy Equity

Balance Sheet		Assets		Liabilities		Income Statement - Accrual Adj.		Income	
		Beginning	Ending	Beginning	Ending				
Cash on Hand	25,000	70,691		Accounts Payable (Exo)	0	0			\$583,692
Crops Held for Feed (Exo)	20,000	20,000		Accrued Interest (Exo)	33,233	37,700			0
Crops Held for Sale (Inc)	50,000	50,000		Current Principal	26,071	36,708			24,000
Market Livestock (Inc)	5,000	5,000		Other Current Liability (Exo)	10,000	10,000			6,600
Other Current Assets (Inc)	25,000	25,000		Short Term Notes (Exo)	0	0			
Invest Growing Crops (Exo)	0	0		Def. Tax on Current Assets	0	0			
Supp. & Prepaid Exo. (Exo)	10,000	10,000		Operating Loan Carryover	0	0			
Total Current Assets	135,000	180,691		Total Current Liab.	69,304	84,408			
Non-Current Assets				Non-Current Liabilities					
Mach. & Equipment	450,000	495,000		Prin. on T.D. & C.L.	618,039	661,330			
Breeding Livestock	196,000	187,000		Def. Tax on Long Term Assets	0	0			
Real Estate-Land, Bldgs, Impr	2,610,000	2,565,000		Total Business Liab.	687,343	745,738			
Total Business Assets	3,391,000	3,427,691		Business Net Worth	2,703,657	2,681,952			
				Change in Equity From Beginning to End of Year					
Cash Flow Statement		Inflows		OutFlows					
Crop Sales & Net Insurance Payments	468,000	Cash Expenses	No Interest >	419,499					
Mkrt & Cull Livestock Sales	131,201	Other Cash Business Outflows/Expense		0					
Lvstk Secondary Product Sales	0	Cash Int. Exo. - T.D. & C.L.*		33,233					
Government Payments	15,091	Cash Int. Exo. - Operating	7.50%	11,798					
Other Cash business Inflows/Income	0	Loan Prin. Payments - T.D. & C.L.		26,071					
Operating Loan Proceeds	75%	314,624	Breeding Livestock Asset Purchases	8,000					
Loan Proceeds Capital Assets	80,000	Mach & Equio & Real Estate Purchase		100,000					
Non-Business Inflows/Revenue		Owner withdrawals		50,000					
Other Nonfarm Inflows	0	Cash Taxes Paid (Income & SS)		0					
Other Nonfarm Inflows	0	Other Cash Outflows (Not Expenses)		0					
Total Cash Inflows	\$1,008,916	Operating Loan Prin. Payments		314,624					
		Total Cash Outflows		\$963,225					
		Annual Net Cash Flow (never < zero)		70,691					

Save, Load, Delete									
	Purchase Price or Value of Asset	Depreciation on Assets Purchased This Year	Year End Asset Value Adjustment + Contribution - for Distribution	Percent Purchased Asset that is Financed	Loan Proceeds Received	Additional Ending Principal	Additional Ending Interest	Added Principal End Next Yr	Added Interest End Next Yr
Machinery & Equipment	\$100,000	\$10,000	\$0	80%	\$80,000	(\$9,104)	(\$6,000)	(\$9,787)	(\$5,317)
Real Estate (Land & Buildings)	\$0	\$0	\$0	0%	\$0	\$0	\$0	\$0	\$0
Breeding Livestock	\$0	\$0	\$0	0%	\$0	\$0	\$0	\$0	\$0

Reset
Print
Cash Income Toggle Off/On
Deferred Taxes Off/On
Income Tax Off/On

The buttons discussed below are meant to illustrate the differences in the financial picture you get for an operation when the statements are prepared differently. These buttons are toggle buttons that turn a display feature on or off. The display controlled by each of these buttons is initially set to the Off position for all of these buttons. When a button is clicked, it changes color and the display or activity it

controls is either activated or deactivated. Just a reminder that RDFinancial is meant to quickly show financial management concepts while avoiding much of the nitty-gritty detail. As such, it is not capable of detailed calculations of tax attributes for any individual operation.

The **Cash Income Toggle Off/On** button can be used to show results of switching between an Accrual Income Statement (the default) and a Cash based Income Statement. A cash based income statement excludes the accrual adjustments, made from balance sheet entries, on the Accrual Adjusted Income Statement. This button is set to the Off position, i.e. the default is an Accrual Adjusted Income Statement.

The **Deferred Taxes Off/On** button is initially set to Off, which excludes deferred tax estimates on assets listed on the balance sheet. Clicking this button includes a calculation for deferred taxes on the balance sheet and all relevant information on the other financial statements is changed. It also changes the Ratios and Credit Scores for the case farm operation. The user is encouraged to explore the implications of changes in the financial statements and the impact on the Ratios and Credit Scores.

The **Income Tax Off/On** button is used primarily to allow tracking the dollar amounts entered for sample transactions through the various financial statements affected. The default is the Off position, which excludes income tax calculations, so no income, social security, employment, etc. taxes are calculated on the Accrual Adjusted Income Statement. Again, this is just to simplify tracking the effects of numbers entered for examples through all of the financial statements affected. If this is clicked to turn it on, any income or expense number that is changed is run through the marginal tax bracket which makes the impact of the numbers on other statements difficult to follow. Tax parameters can be changed using the menu display button in the upper right corner.

The **Reset** button resets all values to those loaded when the software is initially opened.

The **Print** button prints the current screen of the program. Make sure your printer is on and ready to print.

Figures 10 through 15 on the following pages are screen captures of the other data entry screens in RDFinancial for the Montana example farm/ranch.

Figure 10. Crop expense data entry screen.

Introduction Enter Data Financial Statements Ratios Credit Scoring Click for Menu Display Options

Crop Codes are: Code

Small Grains (ALL Types) G

Summer Fallow SF

Hay & Other Forage Crops H

Pasture and Range PR

Roads, Farmstead, Waste RFW

Other O

Enter Crop Enterprise Name	Barley-Dry	DNS	Summer Fa	Hay-Grass	Unused								
Enter Crop Enterprise Code	G	G	SF	G									
Operating Expenses	Barley-Dry	DNS	Hay-Grass	SumFal	Unused								
Seed & Treatment	\$14.00	\$14.00	\$0.00	\$0.00									
Fertilizer & Application	\$48.00	\$100.55	\$40.00	\$0.00									
Chemical & Application	\$31.89	\$63.39	\$0.00	\$18.00									
Hired Labor, Farming & Irrigation	\$14.72	\$16.88	\$16.00	\$0.00									
Machinery Fuel, Oil	\$7.92	\$11.42	\$10.00	\$3.00									
Repairs and Maintenance	\$6.49	\$6.80	\$14.00	\$1.75									
Insurance	\$4.83	\$10.34	\$0.00	\$0.00									
Custom Work	\$0.00	\$0.00	\$0.00	\$0.00									
Other Misc. Expenses	\$0.00	\$0.00	\$3.00	\$0.00									
Irrigation Operating Cost	\$0.00	\$0.00	\$0.00	\$0.00									
Irrigation Water	\$0.00	\$0.00	\$0.00	\$0.00									
Drying	\$0.00	\$0.00	\$0.00	\$0.00									
Other	\$0.00	\$0.00	\$0.00	\$0.00									
Other	\$0.00	\$0.00	\$0.00	\$0.00									
Other	\$0.00	\$0.00	\$0.00	\$0.00									

Save, Load, Delete

Figure 11. Livestock revenue data entry screen.

Introduction Enter Data Financial Statements Ratios Credit Scoring Click for Menu Display Options

Breeding Livestock Enterprises

	Cow-Calf	Sheep	OtherBrdgLvstk	OtherBrdgLvstk	OtherBrdgLvstk
Livestock Production/Sales Estimates:					
No. Animal Exposed/Fed/Finished	200	0	0	0	0
Number of Offspring Weaned	175	0	0	0	0
Cull Rate for Enterprise	15.0%	0.0%	0.0%	0.0%	0.0%
Death Loss Percent	1.0%	1.0%	0.0%	0.0%	0.0%
Average Sale Weight (males) Lbs per Hd	575	0	0	0	0
Average Price (males) Dollars per Lb	\$1.30	\$0.00	\$0.00	\$0.00	\$0.00
Average Sale Weight (females) Lbs per Hd	525	0	0	0	0
Average Price (females) Dollars per Lb	\$1.25	\$0.00	\$0.00	\$0.00	\$0.00
Cull Female Animal Weight in Lbs	1,200	0	0	0	0
Cull Female Price Per Unit, Dollars per Lb	\$0.75	\$0.00	\$0.00	\$0.00	\$0.00
Cull Male Animal Weight, Lbs per Hd	1,800	0	0	0	0
Cull Male Price Per Unit, Dollars per Lb	\$0.75	\$0.00	\$0.00	\$0.00	\$0.00
Breeding Ratio, Number Females/Male	25	0	0	0	0
Bull/Ram/??? Purchase Cost, Dollars per Hd	\$3,000	\$0	\$0	\$0	\$0
Base Value per Breeding Animal	\$800	\$0	\$0	\$0	\$0
Second Product Units Produced by Enterprise/Animal	0	0	0	0	0
Price Per Unit by Enterprise-Second Product	\$0.0000	\$0.0000	\$0.0000	\$0.0000	\$0.0000
Percent Ownership/Income From Primary Product	100.0%	100.0%	100.0%	100.0%	100.0%
Percent Ownership/Income From Secondary Product	100.0%	100.0%	100.0%	100.0%	100.0%
Number of Replacements Needed	32	0	0	0	0
Number Males for Sale	87	0	0	0	0
Number of Females for Sale	55	0	0	0	0
Weighted Ava. Lbs Sold- Breeding/NonBreeding	392	0	0	0	0
Weighted Ava Price Per Offspring/Market animal	\$1.28	\$0.00	\$0.00	\$0.00	\$0.00
Enterprise Revenue from offspring and culls	\$131,200	\$1	\$0	\$0	\$0
Enterprise Revenue from secondary product(s)	\$0	\$0	\$0	\$0	\$0
Total Enterprise Revenue	\$131,200	\$1	\$0	\$0	\$0
Total Livestock Revenue	\$131,201				

Input Data Menu
 Select Crop Mix
 Edit Crop Expenses
Livestock Revenue
 Livestock Expenses
 Taxes & Insurance
 Assets & Liabilities
 Misc. & Overhead

 Breeding & Dairy
 Non-Breeding Lvstk

Figure 12. Livestock expense data entry screen.

Introduction Enter Data Financial Statements Ratios Credit Scoring						Click for Menu Display Options					
Livestock Enterprise Operating Costs (Variable Costs)						Breeding Livestock Enterprises					
Cash Operating/Variable Expenses	Cow-Calf	Sheep	OtherBrdgLvstk	OtherBrdgLvstk	OtherBrdgLvstk						
Feed: All Purchased Roughages	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00						
Feed: All Purchased Concentrates/supplements	\$50.00	\$0.00	\$0.00	\$0.00	\$0.00						
Repairs and Maintenance	\$45.00	\$0.00	\$0.00	\$0.00	\$0.00						
Supplies	\$28.00	\$0.00	\$0.00	\$0.00	\$0.00						
Chemicals, Fertilizer	\$14.00	\$0.00	\$0.00	\$0.00	\$0.00						
Vet. Med. Breeding	\$28.00	\$0.00	\$0.00	\$0.00	\$0.00						
Freight	\$22.00	\$0.00	\$0.00	\$0.00	\$0.00						
Custom Work, Mach./Equip. Rents	\$8.00	\$0.00	\$0.00	\$0.00	\$0.00						
Lease cost for Grazing & Raised Feeds	\$65.00	\$0.00	\$0.00	\$0.00	\$0.00						
Lease/Rent Cost for Livestock	\$6.00	\$0.00	\$0.00	\$0.00	\$0.00						
Gas, Fuel, Oil	\$50.00	\$0.00	\$0.00	\$0.00	\$0.00						
Insurance	\$25.00	\$0.00	\$0.00	\$0.00	\$0.00						
Other Misc Exp. (Util., Fees, Dues, Subscriptions, etc.)	\$120.00	\$0.00	\$0.00	\$0.00	\$0.00						
Other Cash Operating	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00						
Hired Labor	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00						
Lvstk Expense	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00						
Other Cash Operating	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00						
Percent Expenses Paid by Operator	100.0%	100.0%	100.0%	100.0%	100.0%						
Total Cash Operating Costs Per Breeding/Feeder Animal	\$461	\$0	\$0	\$0	\$0						
Operators Cash Cost per LB Mrkt Offspring Produced	\$1	\$0	\$0	\$0	\$0						
Lvstk cost by enterprise	\$92,200	\$0	\$0	\$0	\$0						
Cash Cost Per Breeder/Feeder Animal	\$461	\$0	\$0	\$0	\$0						
Total Livestock Cash Cost Of Production	\$92,200										
Net Income From All Livestock Enterprises	\$39,001										

Figure 13. Taxes and Insurance data entry screen.

Introduction Enter Data Financial Statements Ratios Credit Scoring		Click for Menu Display Options
Mouse Over for Help		
Property Taxes:		
Real Estate	\$12,000	
Buildings and Improvements	\$0	
Machinery and Equipment	\$6,500	
Breeding Livestock	\$0	
Property taxes on other capital assets	\$0	
Insurance (Not Crop)	\$10,000	
Total Cash Fixed Costs for the operation	\$28,500	

Figure 14. Asset and Liabilities data entry screen.

Introduction Enter Data Financial Statements Ratios Credit Scoring Click for Menu Display Options

Input Data Menu
Select Crop Mix
Edit Crop Expenses
Livestock Revenue
Livestock Expenses
Taxes & Insurance
Assets & Liabilities
Misc. & Overhead

Mouse Over for Help

Beginning Asset Value Info.	
Crop Acres (Small Grains & Hay)	2,350
Average Value Per Acre	\$600
Total Cropland Value	\$1,410,000
Pasture and Range Acres for Grazing	4,000
Average Value Per Acre	\$250
Total Pasture/Rangeland Value	\$1,000,000
Total ALL Owned Acres	6,350
ALL Leased Acres	0
Total Acres (Owned + Leased)	6,350
Total Real Estate - Owned Acres	\$2,410,000
Mach & Equip.	\$450,000
Bldg & Improvements	\$200,000
Breeding Livestock	\$196,000
Total Asset Value	\$3,256,000
Total Depreciation	\$107,000

Liabilities	Short Term	Long Term
Avg. Interest Rate	7.5%	5.0%
Avg. Payment No.	4	10
Avg. Length Loan	7	30

Asset Type	Beginning and Ending Liability Estimates				
	% Debt	Beginning Annual Principal	Beginning Annual Interest	Ending Annual Principal	Ending Annual Interest
Total Real Estate - Owned Acres	30%	\$723,000	(\$16,882)	(\$30,150)	(\$17,726)
Mach & Equip.	10%	\$45,000	(\$6,362)	(\$2,134)	(\$6,839)
Bldg & Improvements	10%	\$20,000	(\$2,827)	(\$949)	(\$3,040)
Breeding Livestock	0%	\$0	\$0	\$0	\$0
Total Liabilities		\$788,000	\$26,071	\$33,233	\$27,604
Debt/Asset Ratio					20.39%

Figure 15. Miscellaneous and Overhead expense data entry screen.

Introduction Enter Data Financial Statements Ratios Credit Scoring Click for Menu Display Options

Input Data Menu
Select Crop Mix
Edit Crop Expenses
Livestock Revenue
Livestock Expenses
Taxes & Insurance
Assets & Liabilities
Misc. & Overhead

Mouse Over for Help

Total Tenant Crop Cost	\$291,132
Livestock--Total Cost (Owner & Crop Share Tena	\$92,200
Tenant Cost of Production (Crops & Lvstk)	\$383,332
Cost of production Overhead & Misc. Percentage	2%
	\$7,667
Total Crop, Livestock and Overhead cost of p	\$390,999