

Quick Start Tutorial for the database driven version of RDFinancial for Eastern Washington.

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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).

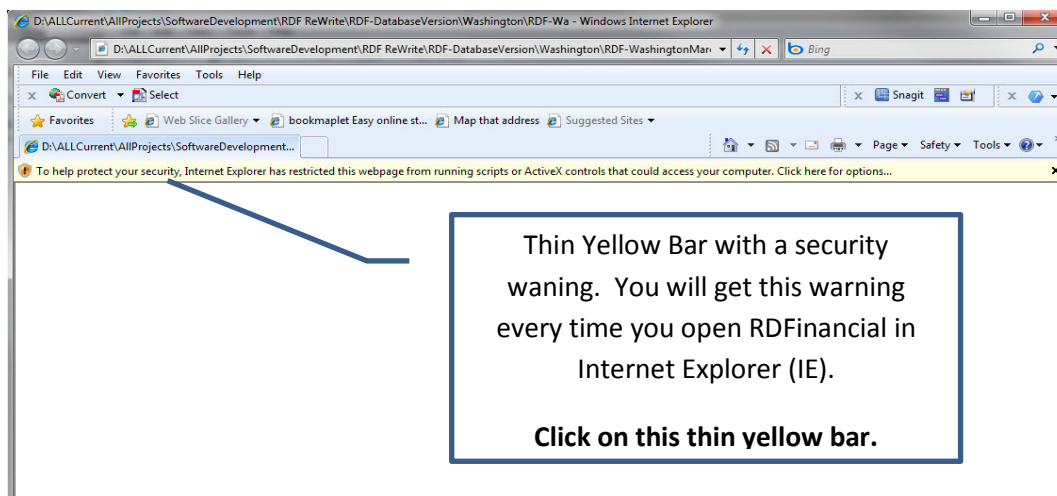


Figure 2 shows the second screen which asks the user to click Yes or No to allow ActiveX controls. **You must click Yes** to allow IE to use the ActiveX controls built in to the RDFinancial Flash file.

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

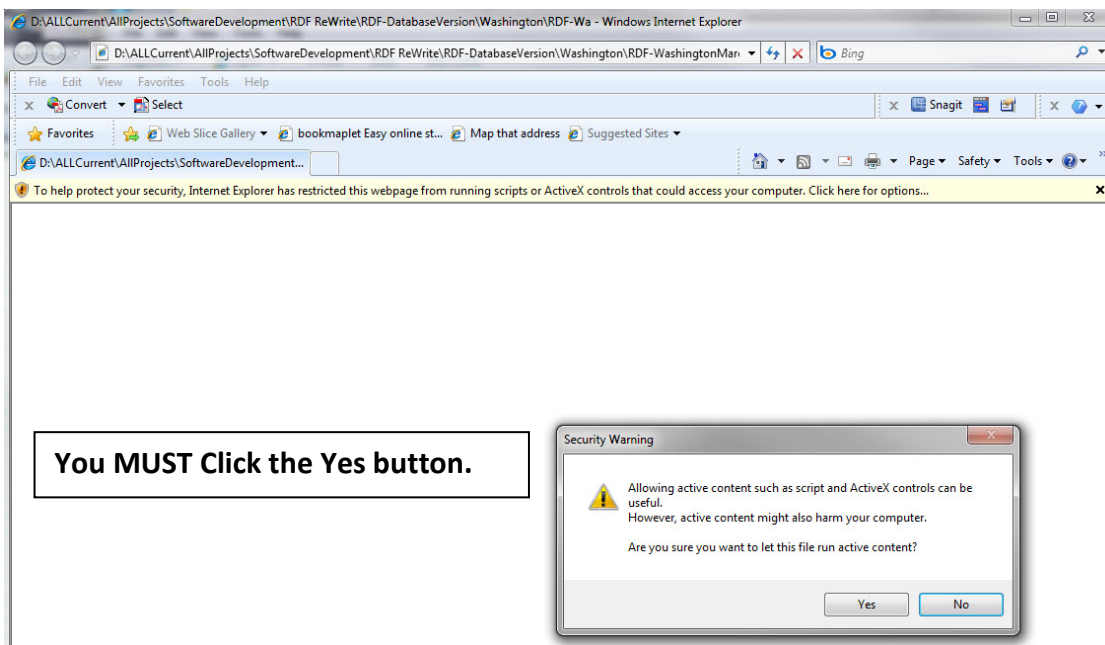
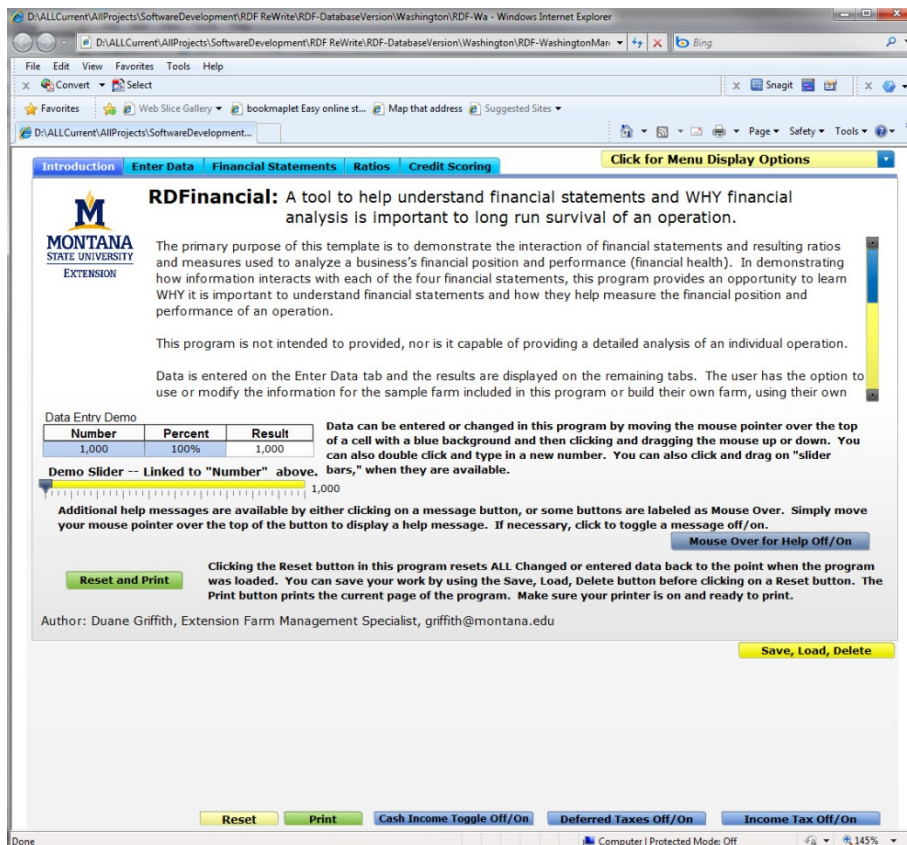


Figure 3. Initial Screen of RDFinancial running in Internet Explorer.



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.

The screenshot shows a web browser window titled "D:\ALLCurrent\AllProjects\SoftwareDevelopment\RDF ReWrite\RDF-DatabaseVersion\Washington\RDF-Wa - Windows Internet Explorer". The browser address bar shows "D:\ALLCurrent\AllProjects\SoftwareDevelopment\RDF ReWrite\RDF-DatabaseVersion\Washington\RDF-WashingtonMan...". The browser has several tabs open, including "Convert", "Select", "Snagit", and "Bing".

The main content area of the browser displays the "RDFinancial" application 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 located to the right of these tabs.

Below the navigation tabs, there is a section titled "#_State Abrv-Description-Area/Region-TillageSys-Irr/Dry". This section contains two main panels: "Crops Available" and "Crops Selected".

The "Crops Available" panel has a list box containing the following items:

- 0_WA-Default_HRS-E-18-NT-D
- 1_WA-Default_WintrWheat-E<15-NT-D
- 2_WA-Default_SpringCanola-E-18-NT-D
- 3_WA-Default_SpringLentils-E-18-NT-D
- 4_WA-Default_SpringPeas-E-18-NT-D

Below the list box are two buttons: "Add Crop" and "Remove Crop". To the right of the "Crops Selected" panel is a legend:

- DC = Double Crop
- CT = Conventional Till
- NT = No Till
- MT = Minimum Till
- HM = High Moisture
- G = Grain

Below the legend is a button labeled "Click to Update Your Crop Mix Below".

Below the "Crops Available" and "Crops Selected" panels is a large table with 14 columns. The columns are labeled: "Yield Per Unit", "Acres Per Enterprise", "Sales Price Per Unit", "Percent Crop Used on Farm", "Percent Acres Leased", "Landlord Crop Share Lease Percent", "Base Acreage Per Enterprise", "Percent of Base Leased from Others", "Direct Payment Rate by Commodity", "Direct Payment Yield by Commodity", "Loan Rate", "Target Price", and three "Unused" columns. The table is currently empty.

At the bottom right of the table area is a yellow button labeled "Save, Load, Delete".

At the bottom of the browser window, there are several buttons: "Reset", "Print", "Cash Income Toggle Off/On", "Deferred Taxes Off/On", and "Income Tax Off/On".

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 #_WA_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.

Figure 5. Highlighted crop budget in the Crops Available window.

The screenshot shows a web application interface for crop budgeting. The top navigation bar includes tabs for 'Introduction', 'Enter Data', 'Financial Statements', 'Ratios', and 'Credit Scoring'. A yellow button 'Click for Menu Display Options' is on the right. The main content area is titled '#_State Abrrv-Description-Area/Region-TillageSys-Irr/Dry'. It features a 'Crops Available' list on the left with four items, each with a dropdown arrow. The 'Add Crop' button is highlighted. To the right is a 'Crops Selected' area with a mouse cursor. Below these is a 'Click to Update Your Crop Mix Below' button. On the far right is an 'Input Data Menu' with buttons for 'Select Crop Mix', 'Edit Crop Expenses', 'Livestock Revenue', 'Livestock Expense', 'Taxes & Insurance', 'Assets & Liabilities', and 'Misc. & Overhead'. A legend defines abbreviations: DC = Double Crop, CT = Conventional Till, NT = No Till, MT = Minimum Till, HM = High Moisture, G = Grain. The bottom section is a table with 13 columns: HRS MT, WW NT, Canola-NT, Lentils-NT, Peas-NT, SumFal-NT, and five 'Unused' columns. The rows include 'Yield Per Unit', 'Acres Per Enterprise', 'Sales Price Per Unit', 'Percent Crop Used on Farm', 'Percent Acres Leased', 'Landlord Crop Share Lease Percent', 'Base Acreage Per Enterprise', 'Percent of Base Leased from Others', 'Direct Payment Rate by Commodity', 'Direct Payment Yield by Commodity', 'Loan Rate', and 'Target Price'. A yellow 'Save, Load, Delete' button is at the bottom right.

Figure 6. Crop mix selection screen after clicking on the Add Crop button.

This screenshot shows the same web application interface as Figure 5, but after clicking the 'Add Crop' button. The 'Crops Available' list now contains five items, including '0_WA-Default_HRS-E-18-NT-D'. This item has been moved to the 'Crops Selected' area. The 'Add Crop' button is no longer highlighted. The rest of the interface, including the table and the 'Save, Load, Delete' button, remains the same.

Continue this process until all crops that are labeled ...WA-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 tabs for 'Introduction', 'Enter Data', 'Financial Statements', 'Ratios', and 'Credit Scoring'. The 'Financial Statements' tab is active. On the right, there is a 'Click for Menu Display Options' button. Below this, there is a 'Mouse Over for Help Off/On' button and an 'Input Data Menu' with several options: 'Select Crop Mix' (highlighted), 'Edit Crop Expenses', 'Livestock Revenue', 'Livestock Expense', 'Taxes & Insurance', 'Assets & Liabilities', and 'Misc. & Overhead'.

The main area is divided into two sections: 'Crops Available' and 'Crops Selected'. The 'Crops Available' section lists several crops with their abbreviations and descriptions. The 'Crops Selected' section lists the same crops with their abbreviations and descriptions. Below these sections is a table of financial data.

	HRS MT	WW NT	Canola-NT	Lentils-NT	Peas-NT	SumFal-NT	Unused	Unused	Unused	Unused	Unused	Unused
Yield Per Unit	48.0	52.0	1400.0	1200.0	1850.0	0.0						
Acres Per Enterprise	1000.0	500.0	100.0	100.0	100.0	1200.0						
Sales Price Per Unit	\$8.50	\$8.25	\$0.16	\$0.30	\$0.17	\$0.00						
Percent Crop Used on Farm	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%						
Percent Acres Leased	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%						
Landlord Crop Share Lease Percent	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%						
Base Acreage Per Enterprise	1,000.0	500.0	100.0	0.0	0	0						
Percent of Base Leased from Others	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%						
Direct Payment Rate by Commodity	\$0.52	\$0.52	\$0.01	\$0.00	\$0.00	\$0.00						
Direct Payment Yield by Commodity	45.0	50.0	1,200.0	0.0	0	0						
Loan Rate	\$4.17	\$4.17	\$0.08	\$0.13	\$0.06	\$0.00						
Target Price	\$4.17	\$4.17	\$0.13	\$0.13	\$0.08	\$0.00						

At the bottom right, there is a 'Save, Load, Delete' button.

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. The default case farm does not include livestock enterprises. Once you have all the necessary information entered/changed, click on the Financial Statements tab at the top of the screen, Figure 8.

Figure 8. Financial Statements for the Eastern Washington default case farm as distributed with the RDFinancial software.

Introduction				Enter Data		Financial Statements		Ratios		Credit Scoring		Click for Menu Display Options			
		Assets				Liabilities									
Balance Sheet		Beginning	Ending			Beginning	Ending					Income Statement - Accrual Adj.		Income	
Cash on Hand		25,000	131,227	Accounts Payable (Exo)		0	0					Cash Income (Net of cull lvsstk sales)		\$742,238	
Crops Held for Feed (Exo)		0	0	Accrued Interest (Exo)		51,440	48,748					Non-Cash Income Adjustments		0	
Crops Held for Sale (Inc)		150,000	150,000	Current Principal		44,303	46,995					Non-Cash Income (Raised Brdo Lvsstk)		0	
Market Livestock (Inc)		0	0	Other Current Liability (Exo)		10,000	10,000					Capital Gain/Loss on Breeding Lvsstk (Net)		0	
Other Current Assets (Inc)		25,000	25,000	Short Term Notes (Exo)		0	0					Gross Revenue		\$742,238	
Invest Growing Crops (Exo)		0	0	Def. Tax on Current Assets		0	0					Expense			
Supp. & Prepaid Exo. (Exo)		20,000	20,000	Operating Loan Carroyver		0	0					Cash Expense (Excluding Interest)		476,856	
Total Current Assets		220,000	326,227	Total Current Liab.		105,744	105,744					Non-Cash Feed Inventory Adjustment		0	
Non-Current Assets				Non-Current Liabilities								Other Non-Cash Non-Interest Expense		0	
Mach. & Equipment		550,000	495,000	Prin. on T.D. & C.L.		941,822	894,826					Depreciation (Land, Bldgs, Equip.)		116,000	
Breeding Livestock		0	0	Def. Tax on Long Term Assets		0	0					Total Operating Expense		592,856	
Real Estate (Land, Bldgs, Impr)		3,850,000	3,789,000	Total Business Liab		1,047,565	1,000,570					Cash Int. Exo. - T.D. & C.L.		51,440	
Total Business Assets		4,620,000	4,610,227	Business Net Worth		3,572,435	3,609,657					Cash Int. Exo. - Operating		13,412	
		Change in Equity From Beginning to End of Year				37,222						Non-Cash Interest Expense		(2,692)	
												Total Expense		\$655,016	
												Net Business Income From Operations		87,222	
												Net Business Income		87,222	
												Income+SS+Def. Tax-Cash & Non-Cash		0	
												Net Income		\$87,222	
												Accrual			
Cash Flow Statement		Inflows				OutFlows									
Crop Sales & Net Insurance Payments		712,350		Cash Expenses		No Interest >		476,856				Beginning Net Worth (Cost/Mrkt)		3,572,435	
Mkrt & Cull Livestock Sales		0		Other Cash Business Outflows/Expense				0				Net Income		+ 87,222	
Lvsstk Secondary Product Sales		0		Cash Int. Exo. - T.D. & C.L.*				51,440				Non-Business Cash Inflows		+ 0	
Government Payments		29,888		Cash Int. Exo. - Operating		7.50%		13,412				Owner Withdrawals (Cash)		- 50,000	
Other Cash business Inflows/Income		0		Loan Prin. Payments - T.D. & C.L.				44,303				Asset Valuation Change/Cont./Distrib.		+/- 0	
Operating Loan Proceeds		75%		Breeding Livestock Asset Purchases				0				Calculated Ending Net Worth		= 3,609,657	
Loan Proceeds Capital Assets		0		Mach & Equip & Real Estate Purchase				0				Reported Ending Net Worth (Cost/Mrkt)		= 3,609,657	
Non-Business Inflows/Revenue		0		Owner withdrawals				50,000				Discrepancy		\$0	
Other Nonfarm Inflows		0		Cash Taxes Paid (Income & SS)				0							
Other Nonfarm Inflows		0		Other Cash Outflows (Not Expenses)				0							
Total Cash Inflows		\$1,099,880		Subtotal				\$636,011							
				Operating Loan Prin. Payments				\$357,642							
				Total Cash Outflows				\$993,654							
				Annual Net Cash Flow (never < zero)				131,227							

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.

You Can Not Buy Equity

Introduction		Enter Data		Financial Statements		Ratios		Credit Scoring	
Balance Sheet									
	Assets			Liabilities					
	Beginning	Ending		Beginning	Ending				
Cash on Hand	25,000	111,227	Accounts Payable (Exp)	0	0				
Crops Held for Feed (Exp)	0	0	Accrued Interest (Exp)	51,440	54,748				
Crops Held for Sale (Inc)	150,000	150,000	Current Principal	44,303	56,099				
Market Livestock (Inc)	0	0	Other Current Liability (Exp)	10,000	10,000				
Other Current Assets (Inc)	25,000	25,000	Short Term Notes (Exp)	0	0				
Invest Growing Crops (Exp)	0	0	Def. Tax on Current Assets	0	0				
Supp. & Prepaid Exp. (Exp)	20,000	20,000	Operating Loan Carryover	0	0				
Total Current Assets	220,000	306,227	Total Current Liab.	105,744	120,848				
Non-Current Assets			Non-Current Liabilities						
Mach. & Equipment	550,000	585,000	Prin. on T.D. & C.L.	941,822	965,722				
Breeding Livestock	0	0	Def. Tax on Long Term Assets	0	0				
Real Estate (Land, Bldgs, Impr)	3,850,000	3,789,000	Total Business Liab.	1,047,565	1,086,570				
Total Business Assets	4,620,000	4,680,227	Business Net Worth	3,572,435	3,593,657				
			Change in Equity From Beginning to End of Year		21,222				
Cash Flow Statement									
	Inflows			Outflows					
Crop Sales & Net Insurance Payments	712,350		Cash Expenses	No Interest >	476,856				
Mkt & Cull Livestock Sales	0		Other Cash Business Outflows/Expense		0				
Lvstk Secondary Product Sales	0		Cash Int. Exp. - T.D. & C.L.*		51,440				
Government Payments	29,888		Cash Int. Exp. - Operating	7.50%	13,412				
Other Cash business Inflows/Income	0		Loan Prin. Payments - T.D. & C.L.		44,303				
Operating Loan Proceeds	75%	357,642	Breeding Livestock Asset Purchases		0				
Loan Proceeds Capital Assets		80,000	Mach & Equip & Real Estate Purchase		100,000				
Non-Business Inflows/Revenue		0	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		\$1,179,880	Subtotal		\$736,011				
			Operating Loan Prin. Payments		\$357,642				
			Total Cash Outflows		\$1,093,654				
			Annual Net Cash Flow (never < zero)		111,227				
* T.D. = Term Debt. C.L. = Capital Lease									
Income Statement - Accrual Adj.									
Cash Income (Net of cull lvstk sales)									\$742,238
Non-Cash Income Adjustments									0
Non-Cash Income (Raised Brdo Lvstk)									0
Capital Gain/Loss on Breeding Lvstk (Net)									0
Gross Revenue									\$742,238
									Expense
Cash Expense (Excluding Interest)									476,856
Non-Cash Feed Inventory Adjustment									0
Other Non-Cash Non-Interest Expense									0
Depreciation (Land, Bldgs, Equip.)									126,000
Total Operating Expense									602,856
Cash Int. Exp. - T.D. & C.L.									51,440
Cash Int. Exp. - Operating									13,412
Non-Cash Interest Expense									3,308
Total Expense									\$671,016
Net Business Income From Operations									71,222
Net Business Income									71,222
Income+SS+Def. Tax-Cash & Non-Cash									0
Net Income									\$71,222
Statement of Owner Equity									
Beginning Net Worth (Cost/Mkt)									3,572,435
Net Income									71,222
Non-Business Cash Inflows									0
Owner Withdrawals (Cash)									50,000
Asset Valuation Change/Cont./Distrib.									0
Calculated Ending Net Worth									3,593,657
Reported Ending Net Worth (Cost/Mkt)									3,593,657
Discrepancy									\$0


Save, Load, Delete

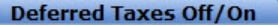
	Purchase Price or Value of Asset	Depreciation on Assets Purchased This Year	Year End Asset Value Adjustment + Contribution - for Distribution	Percent Purchased Asset that is Financed	Loan Proceeds Received	Additional Ending Principal	Additional Ending Interest	Added End Next Yr	Added End Next Yr Interest
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

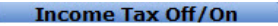
Reset
Print
Cash Income Toggle Off/On
Deferred Taxes Off/On
Income Tax Off/On

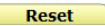
The buttons discussed below are meant to illustrate the differences in the financial picture you get for an operation when the statements are prepared differently. These buttons are toggle buttons that turn a display feature on or off. The display controlled by each of these buttons is initially set 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  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  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  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  button resets all values to those loaded when the software is initially opened.

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