

Cowprofit\$



Alberta  Agriculture
and Forestry

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Part



1 Getting Started

1.1 Configuring CowProfit\$

To use CowProfit\$ effectively, configure it for your particular farm. This is done by selecting "New" under the "File" menu. This menu selection will display a tabbed screen that looks as follows:

The first tab of the configuration allows you to describe your farm. Be sure to fill in at least your name since this is used on all of the reports that CowProfit\$ produces. Also be sure to enter your Fiscal (or Business) Year End. For unincorporated businesses, it will be the calendar year.

CowProfit\$ allows you to use your own names for each enterprise you wish to track. Click on the appropriate tab and then fill in the names in the displayed page. The crop-based enterprises (Forage, Grain and Straw) require not only an enterprise name, but a list of crops for each enterprise.

See [configuring crop-based enterprises](#) for help on this topic.

CowProfit\$ allows you to rename enterprises and to add enterprises after you have completed configuration, it does not permit the removal of enterprises, so do not add any more enterprises than are necessary. If you need to add more you can do so later.

Once the farm and its enterprises are described click on the "Save Configuration" button to save your descriptions to a file.

1.2 Configuring the Crop-based Enterprises

Forage Grain and Straw enterprises require additional information to be configured. Each enterprise must have at least one crop and can have up to 9 crops per enterprise. See the forage illustration below for an example of this.

Cowprofits Configuration

Info | Cow Calf | Feeders | **Forage** | Pasture | Grain | Straw | Other

Describe the Forage Enterprises (maximum 5)

Enter the names of up to five forage enterprises under the "Enterprise" column.
 If you have less than 5 forage enterprises leave the remaining rows blank.

 You must add at least one crop for each of the entered forage enterprises.
 You may add a maximum of 9 crops per forage enterprise.

	Enterprise	Crop1	Crop2	Crop3	Crop4	Crop5	Crop6	Crop7	Crop8	Crop9
1										
2										
3										
4										
5										

Under the "Enterprise" column enter the name(s) of your enterprises
 For each enterprise you must add at least one crop, but you may use up to nine per enterprise.

You do not need to click on the "Save Configuration" button until you have completed all of the appropriate tabs.

This illustration shows the "Forage" tab, but the presentation is identical for the Grain and Straw enterprises.

1.3 Customizing CowProfit\$

CowProfit\$ allows some customization for each copy of the program. This feature is accessed by selecting the "Set Program Defaults" menu selection in the File menu list. In the screen displayed below, make the appropriate changes, then save.

Program Defaults

Program Default Settings

Auto-Save Timer
5
Set a time in minutes to autosave your data.
(if set to 0, autosave is OFF)

Default File Folder
C:\Users\Public\farm\$...
Choose a file folder to use for Cowprofit\$ files.

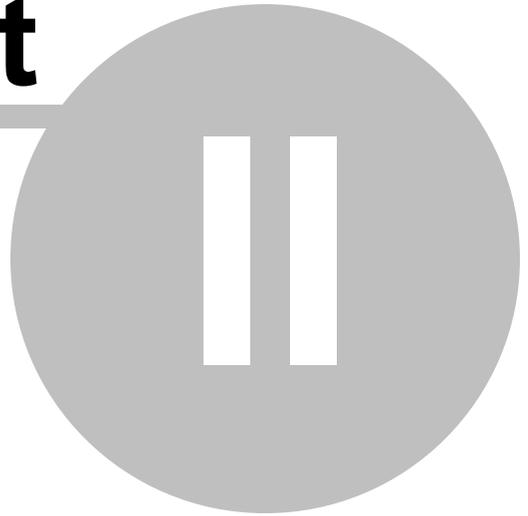
Choose / Change Startup File
C:\Users\Public\farm\$\mystartup.cxd Select

Reset Default Settings to Cowprofits Initial Settings
RESET

NOTE:
Use the "Save Defaults" button to keep the settings above.
If you click on "CANCEL" all changes to the defaults will be discarded.

CANCEL Save Defaults

Part



2 Tips & Hints

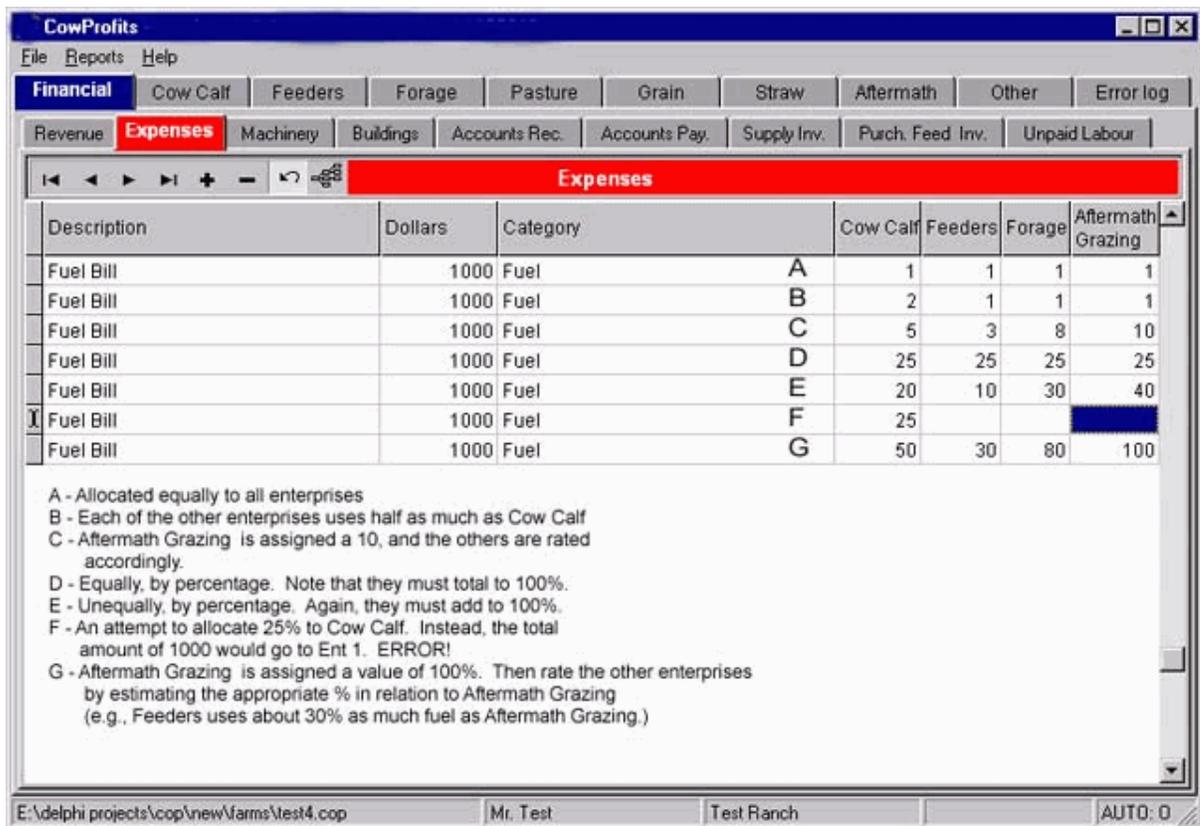
2.1 Proportional Allocation System

The simple proportional allocation system in CowProfit\$ lets you assign appropriate revenues, expenses and transfers among the various enterprises. This means that total amounts are allocated in proportion to a series of numbers entered by you. For an example, see the table below. If the total fuel cost is \$1000 and there are four enterprises, you could allocate this expense equally by entering the numbers 1, 1, 1 and 1. Entering 2, 2, 2 and 2 would get the same result. If the first enterprise uses approximately twice as much fuel as the others, the sequence might be 2, 1, 1 and 1. Another way of thinking about this is that the \$1000 fuel expense is distributed to the enterprises in the ratio of 2:1:1:1. The underlying arithmetic for the first enterprise is $2/(2+1+1+1) \times 1000 = 400$.

Another strategy you may wish to use is the "rating" system (we call it the David Letterman system because of his top-ten lists). Assign the enterprise with the highest use or the largest expense a "10." Using the \$1000 fuel bill example, if the fourth enterprise (grain) is the largest user of fuel, grain would be assigned a 10. Then, ask yourself if grain is a 10, what would cow-calf be? Perhaps a 5 (half as much)? Just a bit less? The other enterprises can be completed in a similar fashion. This approach works very well when there are many enterprises.

Since the proportional allocation system can use any set of proportional numbers, you may wish to design your own strategies. For example, if you have two cow-calf enterprises, you could decide to allocate certain costs on a per cow basis. To do this, you would enter the number of cows in each enterprise directly into the allocation grid. Another example is the allocation of property taxes by the acre. Simply enter the number of acres dedicated to each enterprise and CowProfit\$ will allocate the total tax bill to each enterprise according to that ratio. Remember, it's the ratio or proportion that's important, not the size of the numbers themselves.

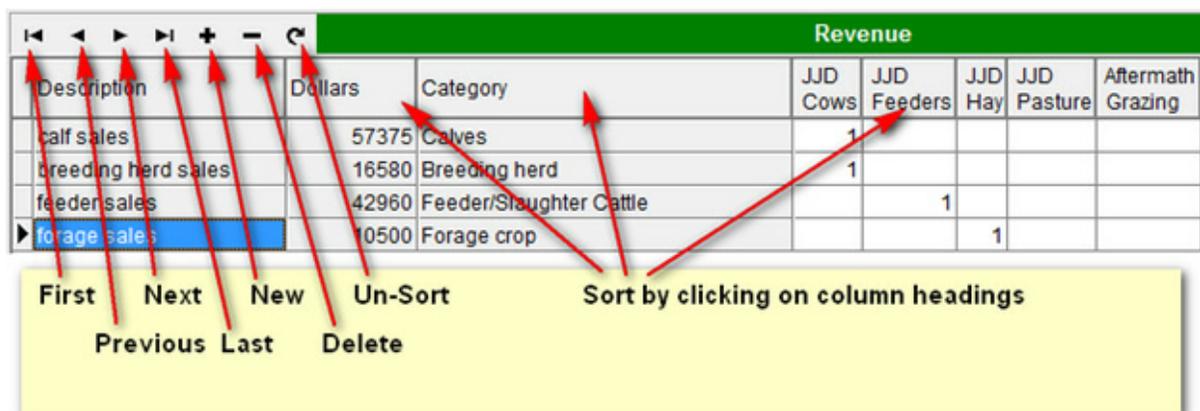
If you wish, you can use simple percentages but if you do, remember that they must add up to 100%. The proportional allocation system always allocates the total amount completely with nothing left over. If you wanted to allocate 25% to the first enterprise and entered only 25, the system would instead allocate everything to the first enterprise. For this reason, allocating by simple percentages is not recommended.



The recommended method is to use the rating system, assigning the highest enterprise a 10 (or 100) and rating the other enterprises accordingly. While the proportional allocation system may seem confusing at first, it is one of the features that makes a CowProfits analysis quick, easy and accurate.

2.2 Navigator icons

The data in CowProfits is primarily accessed and modified in grids. Associated with each grid is a navigator bar at the top. The buttons on the navigator facilitate movement and modification. The buttons provide the following functions:



NOTE: Sorting is only available in the Revenue and Expense grids. Sorts are can be done on the Revenue or Expense category, as well as on the other column headings.

2.3 Unpaid Labour

On this screen, you enter the number of hours and dollar value of labour that was an unpaid cash expense. This is used to compare hired labour for other farms as well as determine return to unpaid labour in the standardized reports.

Description

Enter a description of the type of activity that involved unpaid labour. These may be done annually or by major job function such as seeding or calving.

Hours

Enter the number of hours of unpaid labour.

\$/hour

Enter the value of that labour. This is what you would pay someone else to do that activity.

Total Dollars

CowProfit\$ calculates the dollar value based on hours and dollars per hour.

Enterprise Labels

The next columns are the enterprises that you have selected or entered in the Configuration section. In each enterprise column, assign an appropriate portion of the total amount. This process is called *allocation*. Use percentages or *proportional allocation*.

See the additional Tips & Hints section for Unpaid Labour

2.4 Feeder Association Cattle

The Alberta Feeder Association provides financing for a significant percentage of cattle backgrounded and finished in small feedlots. In order to maintain security on their investment, the Feeder Association keeps legal ownership of the cattle, while you earn the profit (or suffer the loss).

However, in a CowProfit\$ analysis, the best strategy is to consider these cattle as being owned by you with the financing provided by the Feeder Association. If cattle are purchased using Feeder Association funds, the total amount of the purchase would be entered on CowProfit\$ Expense and Feeder screens in the usual way. When the cattle are eventually sold, record the total amount of the sale on the Revenue screen.

If you get Feeder Association financing in order to feed your own calves, record the calves as being transferred to a Feeder enterprise and price them at market value. Do not enter the Feeder Association cheque onto CowProfit\$ Revenue screen since it must be considered a loan. This is an important point to remember in order to avoid double counting. When the cattle are sold, record the total amount of the sale on the Revenue screen.

In summary, payments to and from the Feeder Association are considered lending activity and should not be part of the CowProfit\$ analysis.

2.5 Number of Enterprises and Crops

In the CowProfit\$ program, you can enter up to five enterprises of each type and up to nine crops in each of the forage, grain and straw enterprises. However, these numbers are maximums and very few analyses will use more than one or two of each type of enterprise. You might decide to create separate enterprises for your commercial herd and a purebred one, or a spring calving herd and a fall calving herd. With grain, forage or straw enterprises, you might want to separate your rented grain land from the land you own, or your export timothy enterprise from your other forage.

In summary, use multiple enterprises with some caution. Make sure that you are willing and able to allocate revenue, expenses, inventories and transfers to these enterprises. If you use multiple enterprises, be sure to use the "rating" strategy when you use proportional allocation. Remember that enterprises and crops can be added at any time, but once they are created, they cannot be deleted (however, they can be "zeroed out" so they will not affect your analysis).

2.6 Spreading Unusually Large Expenses Over Several Years

Although you might treat certain items as expenses for accounting and tax purposes, you might consider these large expenses as capital purchases in your CowProfit\$ analysis. Examples might be the establishment of forage stands or major machinery overhauls. If you consider these unusually large expenses all in one year, that year will appear less profitable while succeeding ones will seem better than they really are.

With the machinery example, you might treat the major machine overhaul as a capital expense by listing it on the Machinery screen. Use the "Other" option under Deprec. Type to depreciate the amount over an appropriate number of years. Do not list the cash amount of the overhaul on the Expenses screen or you will be double counting.

One strategy for the forage establishment example is to spread it over several years by treating the "carryover" value as ending inventory on the Supply Inv. screen in the Financials section. Record the total cash purchase on the Expenses screen as usual but reduce the year's total expense by showing a remaining value as ending inventory. In subsequent years this value would be reduced, effectively depreciating the original establishment cost over the appropriate number of years.

2.7 Comparing Crops Within Enterprises

CowProfit\$ is designed to calculate the cost of production for beef cow-calf operations. As part of this process, it divides the farm business into its various enterprises and provides enterprise reports and analysis. If you want to compare individual grain crops, you could define each one as a grain enterprise. However, this may not be satisfactory since you are only able to enter five grain enterprises and you would not be able to create a total grain enterprise summary report. Another problem is that CowProfit\$ does not calculate per acre costs, one of the most useful "cost of production" indicators for crops.

A better strategy might be to include all crops in one grain enterprise and then use the resulting report to do further analysis using a spreadsheet. It is fairly simple to build your own spreadsheet or to use one of the existing public domain versions.

Part

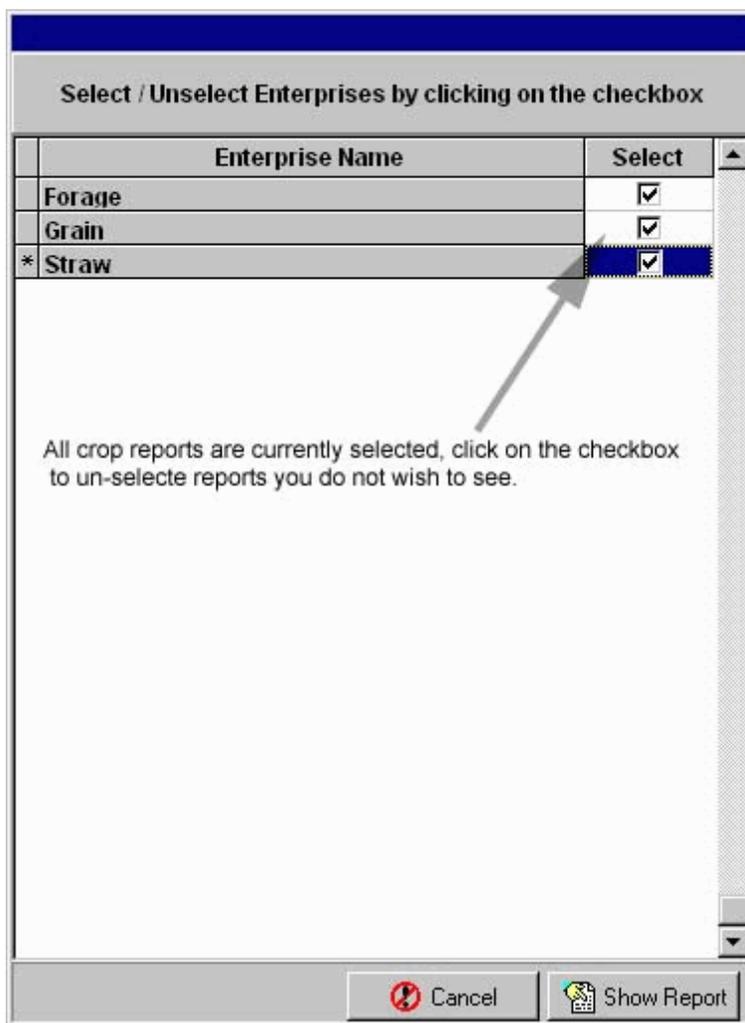


3 How do I....

3.1 Printing a CowProfit\$ Report

All of the reports in CowProfit\$ are selected from the "Reports" menu. Select the report you wish to view from the list provided. The Livestock, Crop, Pasture/Aftermath and Other enterprise report selections provide a pop-up list of the appropriate enterprises with a checkbox next to each enterprise to allow enterprise reports to be selected/un-selected (see the illustration below).

Click on the Show Report button to preview the report. On the preview screen click on the printer icon (top left corner) to send the report to the printer. If you wish to print to a file, see the help on printing a CowProfit\$ report to a file.

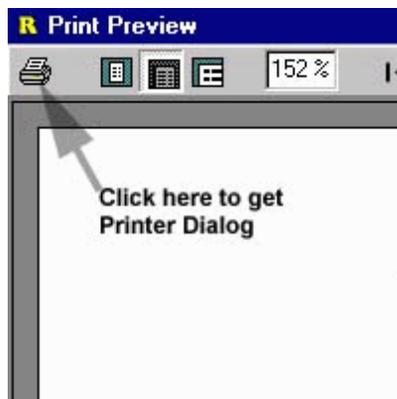


3.2 Print a report to a file

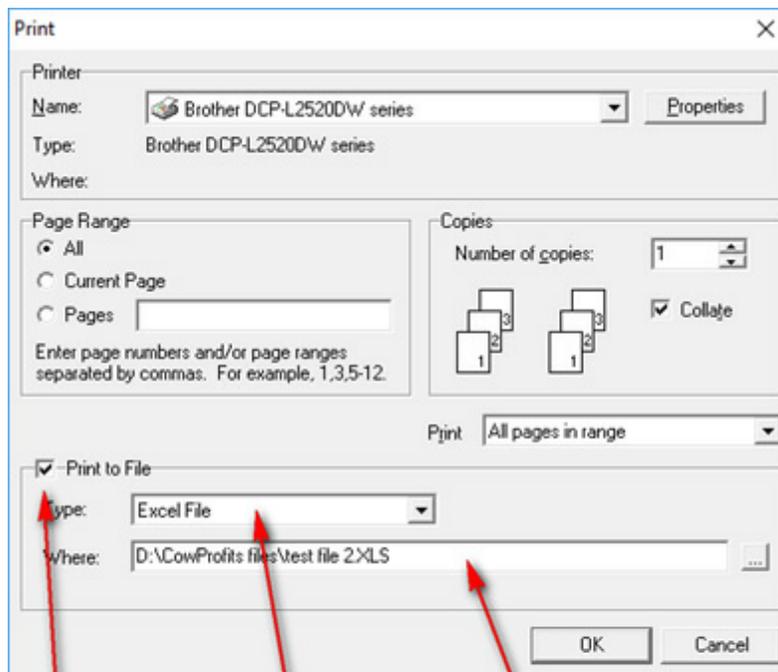
CowProfit\$ can send reports to an attached printer or can print to a variety of file formats.

To print to a file.

- 1) From the report menu select the report you wish to view.
- 2) From the report preview click on the printer icon as shown below:



- 3) From the printer pop-up dialog click the Print to File box, then proceed as illustrated below:
- 4) The Print to File process allows you to export any CowProfit\$ report to another application for analysis or planning purposes. See "How do I export data from CowProfit\$" below.



1) Click on the check box

2) Select the file type

3) Choose file name and location, and click ok.

3.3 How do I print Input Screens

How do I print input screens and other areas of CowProfit\$ that aren't available as reports?

CowProfit\$ "Print Visible" command allows you to print any part of your analysis that you choose to.

- 1) Make sure that your computer is connected to a printer and that the printer is ready to print.
- 2) From the main menu, choose Reports and then Print Visible.
- 3) The Print Setup window will appear; click OK.
- 4) The section of CowProfit\$ that is visible on the screen will be printed.

3.4 How do I retrieve backup files

Sometimes things go wrong with computers and software programs "crash".

CowProfit\$ has an "auto-save" feature that automatically makes a backup copy of your file while you are working with them. When CowProfit\$ executes an auto-save, it saves the currently loaded file to a file with the same name but with the *.cxb file extension (CowProfit\$ backup file). The original file is unchanged until you use the File Save command. Here's how to retrieve backup files:

- 1) Under the main menu, select File, Restore from Backup.
- 2) In the dialog box select the appropriate CowProfit\$ backup file (*.cxb) from the drop down box and double click to open it.
- 3) The file should be found in your default data directory that has been specified in the Set Program Defaults screen

3.5 How do I start next year's analysis using last year's information?

The CowProfit\$ Rollover Wizard makes it easy to set up next year's analysis by using your previous year as a model. By following a series of simple steps, the Wizard helps you choose which information should be transferred to the new analysis.

The Rollover Wizard is designed to automate the transfer of inventory values from one year to the next. For example, ending inventory for the current year will become beginning inventory for next year. The Rollover Wizard lets you copy those details automatically into next year's CowProfit\$ analysis.

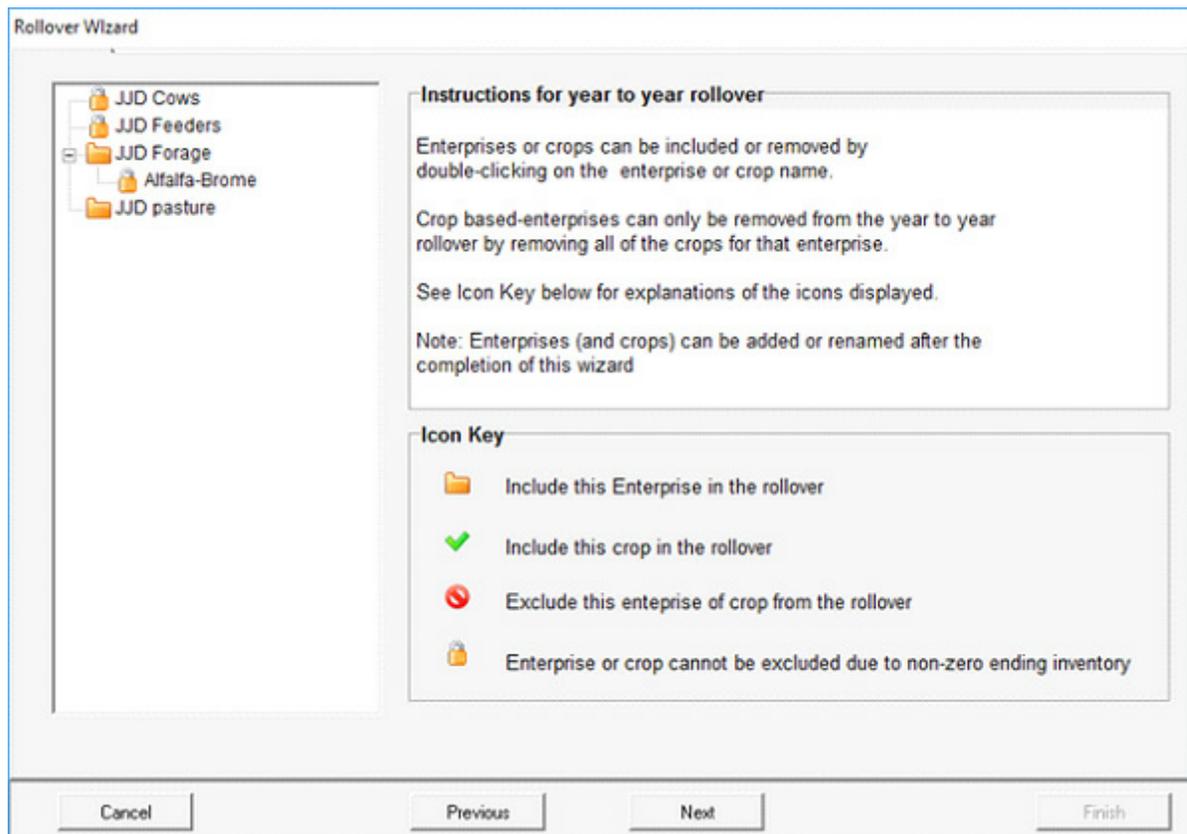
The Rollover Wizard lets you delete enterprises or crops (remember that enterprises cannot be deleted in an open CowProfit\$ analysis). You can also transfer most of your financial information including account names, enterprise allocations, and machinery and building lists. Using the Rollover Wizard consists of three steps:

- 1) The Wizard checks to see if there is any ending inventory in the existing enterprises.
- 2) Based on that check, you have the choice of deleting a particular enterprise (if an enterprise has ending inventory you will not be able to delete it).
- 3) The Wizard lets you add enterprises or crops.

To use the Rollover Wizard, start CowProfit\$ and open the last fiscal year that you have completed. From the main menu, select File, Rollover Wizard for Next Year.

The first screen asks if you want to change any of the contact information. Note that the fiscal year end should have already been advanced one year. Click the Next button to move to the next step (shown

below).



You will see on the left-hand side of the screen a list of enterprises that are available to be rolled over. If the enterprise has a file folder icon beside it, the enterprise can be deleted from next year's analysis. However, if there is an ending inventory for that enterprise, the enterprise must be included in next year's analysis and cannot be deleted. For information on deleting enterprises or what to do with ending inventory, see the following user note.

User Note:

There are two ways to deal with ending inventory in enterprises or crops that you do not want to carry forward. The best approach is to allow the Rollover Wizard to transfer the enterprises and inventory in the normal manner. During the course of the new year, that inventory will be used, sold or disposed of, and the earned revenue will be automatically allocated to the previous year. The enterprise can be deleted during the next rollover because there will be no remaining ending inventory.

The second approach is more likely to create problems, and should be used with caution. It involves opening the previous year's analysis and deleting the ending inventory. However, this will cause an imbalance in the beginning inventory of the new analysis. You may be able to compensate for this error by increasing the beginning inventory of another enterprise.

Select or de-select enterprises and crops to roll over by double clicking on the appropriate icon or name, then click the Next button to continue.

Screen shown if enterprises have been deleted.

Rollover Wizard

Keep Allocations for the following financials

- Revenues
- Expenses
- Machinery
- Buildings

Check boxes to select / unselect

Click the Finish button to save your enterprise

Cancel Previous Next Finish

If you wish to keep the allocations that you have specified for revenue, expenses, machinery and buildings, click the appropriate boxes. Most farm operations do not change much from year to year (especially if you are not adding or deleting enterprises). By “un-checking” the boxes you will remove the allocations for those input areas (for example, if you uncheck Revenue, all allocations will be deleted from the Revenue page of CowProfit\$).

Click the Finish button. At the conclusion of the Rollover Wizard, you will be asked to save your work. Type in a new file name and click the Save button.

3.6 How do I export data from CowProfit\$

The Export command (located on CowProfit\$ top menu bar) transfers selected data to a file format that can be used by another software application. The Export command has two options.

Text File (all enterprises)

This menu option creates a file containing all of the input data contained in a specific CowProfit\$ analysis. The file is stored in a text format and contains no formatting or data analysis. This option allows you to export all “raw” input data. This feature is useful for sharing data or doing analyses with other tools. CowProfit\$ exports this data into a tab-delimited file format which is compatible with most spreadsheet applications. Follow the steps below.

- 1) Select Text File (all enterprises) under the Export menu option.

- 2) A dialogue box will prompt you for a file name and path.
- 3) Click the Save button.

When importing these files into a spreadsheet program, select the tab delimited import type. Some adjustments for column width and other parameters are necessary. Note that this CowProfit\$ option will likely be useful only to experienced spreadsheet users and programmers.

Forecaster for Cow Calf Enterprises**

Many producers and CowProfit\$ users are looking for a tool that can help them look ahead. CowProfit\$ is an analysis tool designed to examine past performance, but it is not a budgeter or forecaster. The Cow Calf Forecaster is a spreadsheet template that reads a file exported by CowProfit\$ Forecaster menu option. It helps you to use your existing cow calf enterprise reports as a basis for the forward planning process.

1. Select Cow Calf Forecaster under the Export menu option.
2. A dialogue box will ask you which cow calf enterprise you want to export. To select the enterprise, place a checkmark in the box.
3. Click the Export button.
4. The resulting Print screen should already contain defaults for creating an Excel file named inputbudg.xls in the default directory specified in File --> Set Program Defaults. You can change the file name or location if you wish. Click OK.
5. Use your spreadsheet program to open the new inputbudg.xls file in your default directory, and leave it open. Open the Cow Calf Forecaster spreadsheet. Copy and paste all of the data from the inputbudg.xls file into the Input Cow Calf Report tab of the Forecaster.
6. For more details, see the Instructions tab in Cow Calf Forecaster.

** To get a copy of the CowProfit\$ Forecaster spreadsheet template, go to www.cowprofits.ca.

Part



4 What does each section do?

4.1 Financial

4.1.1 Financial Section

The Financial section is where you record dollars and cents. The main sources of data are your financial records, general ledger, record book or tax return. The more detail that you input, the more accurate your calculation of cost of production will be. You are supplied with a list of categories that are used to create *standardized reports*. These enable you to compare your costs with other similar farm enterprises and with the information published by Alberta Agriculture Forestry. Search for "Economic, Productive & Financial Benchmarks for Alberta Cow/Calf Operations," or go to www.cowprofits.ca to find a link.

4.1.2 Revenue

Record all cash revenues on this screen. This information is used to calculate the value of production from the enterprises. The Revenue screen follows the same format as the *Expenses* screen.

Description

This column is for your reference. You may enter any label or description that helps you identify an entry. Entries might include words such as "calf sales" or numbers such as "custom work".

Dollars

Input the actual dollar amount that you received. Although CowProfit\$ can use dollars and cents, rounding to the nearest dollar is sufficient.

Category

Select the best fit from the category drop-down menu. CowProfit\$ uses these standardized categories in order to produce standardized reports and make comparisons with benchmarks.

Enterprise Labels

The next columns show the enterprises that you have selected or defined in the Configuration section. In each enterprise column, assign an appropriate portion of the total amount. This process is called *allocation*. Use percentages or *proportional allocation*.

Sorting

Clicking on any column header will sort the revenue records using that column as the sort key.

4.1.3 Expenses

Record all cash expenses on this screen. This information is used to calculate the cash and variable costs of production. The Expenses screen follows the same format as the *Revenue screen*.

Description

This column is for your reference. You may enter any label or description that helps you identify an entry. Entries might include words such as "diesel fuel" or numbers such as "utilities".

Dollars

Input the actual dollar amount that you received. Although CowProfit\$ can use dollars and cents, rounding to the nearest dollar is sufficient.

Category

Select the best fit from the category drop-down menu. CowProfit\$ uses these standardized categories in

order to produce standardized reports and make comparisons with benchmarks.

Enterprise Labels

The next columns show the enterprises that you have selected or defined in the Configuration section. In each enterprise column, assign an appropriate portion of the total amount. This process is called *allocation*. Use percentages or *proportional allocation*.

Sorting

Clicking on any column header will sort the expense records using that column as the sort key.

4.1.4 Machinery

On this screen, list your complete machinery inventory. CowProfit\$ calculates the annual depreciation that can be attributed to the various enterprises. CowProfit\$ uses standard rates of depreciation for power equipment (8%) and non-power equipment (11.5%) These rates are based on research studies and practical observations by Alberta Agriculture Forestry's Economics Unit.

Description

Use this column to describe each piece or group of machinery.

Current Value

List the current market value of each piece of equipment.

Deprec. Type

Choose a category from the drop-down menu. Use "Custom" if you want to change the rate (percentage) of depreciation.

Deprec. Rate

In this column, CowProfit\$ displays the annual depreciation rate. If you want to change the rates, type in a new percentage.

This Year's Deprec.

This column displays the calculated amount of depreciation that is allocated to farm enterprises.

Enterprise Labels

The next columns show the enterprises that you have selected or entered in the Configuration section. In each enterprise column, assign an appropriate portion of the total amount. This process is called *allocation*. Use percentages or *proportional allocation*.

4.1.5 Buildings

On this screen, list all your buildings. CowProfit\$ calculates the annual depreciation that can be used for various enterprises. A flat rate of depreciation is used for buildings (5%). This rate is based on research studies and practical observations.

Description

List each building or groups of buildings or facilities such as corrals.

Current Value

List the market value of each building.

Deprec. Type

Choose a category from the drop-down menu. Choose "Standard" for regular buildings or "Custom" if you wish to change the depreciation rate (percentage).

Deprec. Rate

CowProfit\$ displays the annual depreciation rate that is to be allocated to the enterprises. If you want to change the rates, you may type in a new percentage.

This Year's Deprec.

This column displays the calculated amount of depreciation that is allocated to farm enterprises.

Enterprise Labels

The next columns show the enterprises that you have selected or entered in the Configuration section. In each enterprise column, assign an appropriate portion of the total amount. This process is called *allocation*. Use percentages or *proportional allocation*.

4.1.6 Accounts Payable

In this section, enter the amounts that you owe at the start and at the end of the fiscal year. The change in accounts payable ensures that all expenses are accounted for in the appropriate fiscal year. An example is an outstanding bill from a supplier that has not been recorded in your cash record system.

Description

Enter a description of the item. This could refer to a vendor or outstanding invoice.

Beginning

Enter the total dollar amount that you owed at the beginning of the fiscal year.

Ending

Enter the total dollar amount that you owed at the end of the fiscal year.

Change

CowProfit\$ calculates the difference between beginning and ending values.

Enterprise Labels

The next columns show the enterprises that you have selected or entered in the Configuration section. In each enterprise column, assign an appropriate portion of the total amount. This process is called *allocation*. Use percentages or *proportional allocation*.

4.1.7 Accounts Receivable

On this screen, enter the amounts owing to you at the start and at the end of the fiscal year. The change in accounts receivable ensures that all revenues are accounted for in the appropriate fiscal year. An example is a deferred cheque from a purchaser that has not been recorded in your cash record system.

Description

Enter a description of the item. This could refer to a customer or an outstanding invoice.

Beginning

Enter the total dollar amount that was owing to you at the beginning of the fiscal year.

Ending

Enter the total dollar amount that was owing to you at the end of the fiscal year.

Change

CowProfit\$ calculates the difference between beginning and ending values.

Enterprise Labels

The next columns are the enterprises that you have selected or entered in the Configuration section. In each enterprise column, assign an appropriate portion of the total amount. This process is called *allocation*. Use percentages or *proportional allocation*.

4.1.8 Supply Inventory

On this screen, enter the beginning and ending amounts of your supply inventory (in dollars). CowProfit\$ uses the calculated value to adjust the total costs figure to reflect the change in inventory of supply goods. This would include such things as fertilizer, herbicide and fuel.

Description

Enter a description of the item or supply item.

Beginning

Enter the total dollar amount that was on hand at the beginning of the fiscal year.

Ending

Enter the total dollar amount that was on hand at the end of the fiscal year.

Change

CowProfit\$ calculates the difference between beginning and ending values.

Enterprise Labels

The next columns are the enterprises that you have selected or entered in the Configuration section. In each enterprise column, assign an appropriate portion of the total amount. This process is called *allocation*. Use percentages or *proportional allocation*.

4.1.9 Purch., Feed Inventory

On this grid enter the beginning and the ending amounts of your Purchased Feed Inventory. CowProfit\$ requires that Purchased Feed Inventory be kept separately from homegrown feeds inventory. CowProfit\$ uses the calculated value to adjust the total cost figure to reflect the change in inventory value. Feed items include: prepared rations, supplements and purchased forage, bedding or grain.

Description

Enter a description of the item or supply item.

Type

Choose the type of purchased inventory (feed or bedding) from the drop-down menu.

Beginning

Enter the total dollar amount that was on hand at the beginning of the fiscal year.

Ending

Enter the total dollar amount that was on hand at the end of the fiscal year.

Change

CowProfit\$ calculates the difference between beginning and ending values.

Enterprise Labels

The next columns are the enterprises that you have selected or entered in the Configuration section. In each enterprise column, assign an appropriate portion of the total amount. This process is called allocation. Use percentages or *proportional allocation*.

4.1.10 Unpaid Labour

On this screen, you enter the number of hours and dollar value of labour that was an unpaid cash expense. This is used to compare hired labour for other farms as well as determine return to unpaid labour in the standardized reports.

Description

Enter a description of the type of activity that involved unpaid labour. These may be done annually or by major job function such as seeding or calving.

Hours

Enter the number of hours of unpaid labour.

\$/hour

Enter the value of that labour. This is what you would pay someone else to do that activity.

Total Dollars

CowProfit\$ calculates the dollar value based on hours and dollars per hour.

Enterprise Labels

The next columns are the enterprises that you have selected or entered in the Configuration section. In each enterprise column, assign an appropriate portion of the total amount. This process is called *allocation*. Use percentages or *proportional allocation*.

See the additional Tips & Hints section for Unpaid Labour

4.1.11 Error Log

CowProfit\$ has an error-checking process that is activated each time you view or print a report. The Error Log lists all of these errors. It will help you identify missed steps, missing information or errors that may affect the reliability of your reports. Typical errors would include unallocated items, inventories being out of balance and incomplete data entry in the Revenue or Expense screens. The Error Log can also be viewed or printed by using CowProfit\$ report printing commands.

4.2 Animal & Crop

4.2.1 Cow-Calf and Feeder Inventory Grids

Cow-Calf and Feeder - The Cow Calf and Feeder screens track beginning and ending inventories as well as transfers to and from the various classes of livestock. CowProfit\$ supports both transfers within an enterprise and among the various enterprises. Up to five cow-calf enterprises and five feeder enterprises are possible. CowProfit\$ tracks beginning and ending inventories, transfers within and among

the enterprises as well as the total pounds of calf produced and pounds of gain.

4.2.2 Cow Calf

In this section, you enter transfer and production information for each Cow Calf enterprise that was selected in the Configuration section. You use this information to create a value of production number.

Bull/ Steer Calves

These are male calves that have not yet been weaned from the cow. Typically they are calves less than 10 months of age.

Heifer Calves

These are the female calves that have not yet been weaned from the cow. Typically they are calves less than 10 months of age.

Yearling Bulls

These are intact male animals that are weaned but less than 2 years of age.

Yearling Heifers

These are females that are weaned but have not yet had their first calf.

Bulls

These are mature intact males that are greater than 2 years of age. Most commonly used in the breeding herd.

Cows/Bred Heifers

These are mature females that are greater than 2 years of age. Most commonly used in the breeding herd.

Beginning Inv.

Enter the number of animals of each type on hand at the beginning of the fiscal period.

Price per head

Enter the average price/value of each animal at the beginning of the fiscal period.

Live Births

Enter the number of animals that were born alive in this fiscal period.

Purchases

Enter the number and weights of any animals purchased in this fiscal period. (The dollar amounts are captured on the Expenses screen of the Financial section.)

Deaths

Enter the number of animals in a particular animal class that died in the fiscal period.

Sales

Enter the number of animals that were sold in this fiscal period. (Note the dollar amount is captured on the Revenue screen in the Financial section.)

Transfers in

CowProfit\$ calculates and records the transfers in from data entered into the Transfers out cells by the user. Double click on the Transfers in cell to get a pop-up screen showing the details of the transfer. "Transfers in" cells are for information purposes only; no data entry is necessary.

Transfers out

Enter the number of animals and animal type transferred from this enterprise to other enterprises and animal types. When you enter a number or double click on a black Transfers out cell, a pop-up screen appears and asks for more information such as number of head, average weight and price. Enter the price in either column as price per head or price per pound. Price per head may be more relevant for breeding herd stock and price per pound may be more relevant for feeder/slaughter animals. Click the "Done" button in the top right to exit the pop-up screen. Remember that this screen shows transfers "from" (as listed in the screen title bar) and you choose the appropriate enterprise and animal type to transfer the animals to. The choices are based upon standard cow calf practices. Animals can be transferred to another enterprise but they must be "promoted" in age. For example, Yearling Bred Heifers in Cow Calf 1 can be transferred only to Cows/Bred Heifers or to the Feeder operations. There is no transfer from Yearling Bred Heifers in Cow Calf 1 to Yearling Bred Heifers in Cow Calf 2. Only mature animals such as Cows/Bred Heifers, Bulls and Feeders can transfer "laterally."

Ending Inv.

CowProfit\$ calculates what your inventory should be at fiscal year end. If this does not match your records, review your earlier entries in Beginning Inventory, Births, Sales, Deaths and Transfers.

Ending Price

Ending price is the price for your ending inventory on a per head basis. As a default, the ending price is the same as the beginning price, but you have the option to change the value to deal with changes in *market value*.

Example: see Assets as market Value as Opposed to Book Value.

4.2.3 Feeders

In this section, you enter transfer and production information for each enterprise that was selected in the Configuration section. You use this information to create a value of production number for the feeder/slaughter enterprises.

Beginning Inv.

Enter the number of animals of this type on hand at the beginning of the fiscal period. The change in inventory is used to determine the *accrual* value of production. Description is the description of the animals. (Note: If you place the cursor on any of the black cells, you will get a pop-up screen by typing an entry, double clicking on the cell or pressing "Enter" on the keyboard.) Number of head and Lbs per head are for that description or group of cattle. Enter either the price per head or price per lb. CowProfit\$ calculates the other value. You can add lines by moving your cursor down from the existing line. Click the "Done" button to close this screen and return to the feeder enterprise.

Price

This is the weighted average price for beginning inventory.

Purchases

Double-click on the black cell to open the purchase pop-up screen.

Enter the number of head and the average weight per head. Enter either the price per lb. or per head; the program will calculate the other price for you.

Deaths

Enter the number of animals that died during this fiscal period for this enterprise.

Sales

Double-click on the black cell to open the pop-up screen.

Enter the number of head and the average weight per head. Enter either the price per pound or per head; the program will calculate the other price for you.

Transfers in

These are the numbers of animals and pounds transferred into the enterprise from other enterprises. CowProfit\$ calculates this by adding all the transfers out from other enterprises. Double click on the Transfers in cell to get a pop-up screen showing the details of the transfer.

Transfers out

This is the number of animals and animal type transferred from this enterprise to other enterprises and animal types. When you enter a number or double click on a black Transfers out cell, a pop-up screen appears and asks for more information such as number of head, average weight and price. Enter the price in either column as price per head or price per pound. Price per head may be more relevant for breeding herd stock and price per pound may be more relevant for feeder/slaughter animals. Click the "Done" button in the top right to exit the pop-up screen. Remember that this screen shows transfers "from" (as listed in the screen title bar) and you choose the appropriate enterprise and animal type to transfer the animals to. Feeders can be transferred to any livestock enterprise and any animal type, except calves. This allows flexibility to reflect strategies such as transferring heifer calves into a Feeder enterprise and later bringing them back into the Cow Calf enterprise as Cows/Bred Heifers.

Ending Inv.

This is the number of animals on hand at the end of the fiscal period. Double-click on the black cell to open the pop-up screen then enter the number of head, average weight for this class of animals and price per pound (or price per head). You can add lines by using the down cursor or using the add a line icon (+). CowProfit\$ uses this ending inventory information to calculate the total number of pounds gained for the period. It also compares the total ending inventory number provided by you with the calculated one and identifies any discrepancy. Details are provided in the "Notes" box.

Ending Price

This is the calculated weighted average of your ending inventory prices that were entered in the Ending Inv. pop-up screen.

4.2.4 Forage, Grain and Straw

CowProfit\$ handles these three types of enterprises in the same manner. Beginning and ending inventories, production, sales and transfers out to Cow Calf, Feeder or Other enterprises are recorded and tracked here. Up to five of each type of enterprise and up to nine crops per enterprise are supported. Note that ending inventory calculations are based on total tonnes, lb. per unit and price per unit. The number of units in ending inventory is calculated from this data. The result is that if units consisting of different weights are used within one crop, the number of units of ending inventory may appear incorrect. The Straw enterprise is exactly like its Forage and Grain counterparts except for one feature. In the Straw pop-up "Transfers out" screen (accessed by double clicking on the black cell), there is an extra line in the Allocations section that lets you assign a portion of the transfer to bedding and a portion to feed. This can be done using the proportional allocation system or percentages. Remember that percentages always have to add to 100%. One strategy is to set up the Straw enterprise using separate crops for feed and bedding. In this case you would allocate transfers completely to feed and bedding respectively. The simpler option is to use only one crop and allocate some proportion of the total transfer to bedding.

4.2.5 Forage

In this section, you enter beginning and ending inventories as well as transfer, production and sales information for each forage enterprise selected in the Configuration section.

Crop

Crop types are specified in the Configuration section. Each enterprise can have up to 9 crops. You can add crops by using the File, Modify Enterprises/Crops command. Once created, neither enterprises nor crops can be deleted.

Description

The second column specifies beginning inventory, production, sales, transfers out or ending inventory.

Number of units

Enter the number of physical units.

Units

Describe each physical unit. You may use one of the drop-down menu choices (bales, tons, etc.) or type in your own description.

Lbs per unit

Enter the weight (in pounds) of the unit specified in the previous column. If you have chosen tons, tonnes or lbs in the Units column, CowProfit\$ enters the current number of lbs. for you.

Price per unit

Enter the dollar value of the unit specified in the previous column. This price should be based on market value, not cost .

Total Tonnes

This calculated field is based on the number of units and unit weights. Standardizing on tonnes allows CowProfit\$ to report all forage, grain and straw enterprises on a "per tonne produced" basis.

Total Value

This is a calculated field based on the number of units, unit weights and unit price.

Beginning Inv.

Enter the amount of inventory that was on hand at the beginning of the fiscal year.

Production

Enter the amount of this crop produced by the forage enterprise.

Sales

Enter the amount of each crop that was sold during the analysis period. Price per unit is not required for sales as the dollar value will have been captured on the Revenue screen of the Financial section and allocated to the appropriate forage enterprise.

Transfers out

Enter the amount of each crop that was transferred to other livestock enterprises. Double click on the black "Transfers out" cell to see the pop-up screen where transfer details are entered. Use percentages or proportional allocation.

Ending Inv.

This is the calculated amount of inventory on hand at the end of the fiscal year. This is also referred to as closing inventory.

4.2.6 Grain

In this section, you enter beginning and ending inventories as well as transfer, production and sales information for each grain enterprise selected in the Configuration section.

Crop

Crop types are specified in the Configuration section. Each enterprise can have up to 9 crops. You can add crops by using the File, Modify Enterprises/Crops command. Once created, neither enterprises nor crops can be deleted.

Description

The second column specifies beginning inventory, production, sales, transfers out and ending inventory.

Number of units

Enter the number of physical units.

Units

Describe the physical units. You may use one of the drop-down menu choices (bales, tonnes, etc.) or type in your own description.

Lbs per unit

Enter the weight (in pounds) of the unit specified in the previous column.

Price per unit

Enter the dollar value of the unit specified in the previous column. This price should be based on market value, not cost.

Total Tonnes

This calculated field is based on the number of units and unit weights. Standardizing on tonnes allows CowProfit\$ to report all forage, grain and straw enterprises on a "per tonne produced" basis.

Total Value

This is a calculated field based on the number of units, unit weights and unit price.

Beginning Inv.

Enter the amount of inventory that was on hand at the beginning of the fiscal year.

Production

Enter the amount of this crop produced by the grain enterprise.

Sales

Enter the amount of each crop that was sold during the analysis period. Price per unit is not required for sales as the dollar value will have been captured on the Revenue screen of the Financial section and allocated to the appropriate grain enterprise.

Transfers out

Enter the amount of each crop that was transferred to other livestock enterprises. Double click on the black "Transfers out" cell to see the pop-up screen where transfer details are entered. Use percentages or proportional allocation.

Ending Inv.

This is the calculated amount of inventory on hand at the end of the fiscal year. It is also referred to as closing inventory.

4.2.7 Straw

In this section, you enter beginning and ending inventories as well as transfer, production and sales information for each straw enterprise selected in the Configuration section.

Crop

Crop types are specified in the Configuration section. Each enterprise can have up to 9 crops. You can add crops by using the File, Modify Enterprises/Crops command. Once created, neither enterprises nor crops can be deleted.

Description

The second column specifies beginning inventory, production, sales, transfers out or ending inventory.

Number of units

Enter the number of physical units.

Units

Describe the physical units. You may use one of the drop-down menu choices (bales, tons, etc.) or type in your own description.

Lbs per unit

Enter the weight (in pounds) of the unit specified in the previous column.

Price per unit

Enter the dollar value of the unit specified in the previous column. This price should be based on market value, not cost.

Total Tonnes

This calculated field is based on the number of units and unit weights. Standardizing on tonnes allows CowProfit\$ to report all forage, grain and straw enterprises on a "per tonne produced" basis.

Total Value

This is a calculated field based on the number of units, unit weights and unit price.

Beginning Inv.

Enter the amount of inventory that was on hand at the beginning of the fiscal year.

Production

Enter the amount of this crop produced by the straw enterprise.

Sales

Enter the amount of each crop that was sold during the analysis period. Price per unit is not required for sales as the dollar value will have been captured on the Revenue screen of the Financial section and allocated to the appropriate straw enterprise.

Transfers out

Enter the amount of each crop that was transferred to other livestock enterprises as well as the proportions of feed and bedding. Double click on the black "Transfers out" cell to see the pop-up screen where transfer details are entered. Use percentages or proportional allocation.

Ending Inv.

This is the calculated amount of inventory on hand at the end of the fiscal year. It is also referred to as closing inventory.

4.2.8 Pasture

This section includes production, transfer and allocation information for all pasture enterprises that were defined in the Configuration section. This information is used to determine the value of production for each pasture enterprise and the value of transfers to other enterprises. Animal Unit Months (AUMs) are also tracked.

Description

Enter a physical description of the line item. This could be a description of a pasture, paddock or legal land location. You could describe the time frame as well as the physical location.

of Animals

Enter the number of animals that grazed this pasture for this particular time frame.

Animal Unit Equivalent

Enter a value that converts the number of animals into a standard animal unit. A standard animal unit is defined as a 1000 lb. cow with or without a calf. The following table can be used as a guideline for other types of livestock. (Source: *Guide to Range Condition & Stocking Rates for Alberta Grasslands*, 1988, R.A. Wroe, S. Smoliak, B.W. Adams, W.D. Wilms, M.L. Anderson)

Cattle	AUE
Weaned calves	.5
Heifers & steers	.67
Cows (1000 lb.) with or without calves at side	1.0
Bulls 2 yr. and over	.5
Horses	AUE
Yearlings	.75
2 yr olds	1.0
3 yrs and over	.5
Sheep & Goats	AUE
5 weaned lambs, kids, yearling to 12 months	.5
5 ewes, does, with or without lambs or kids	1.0
5 rams or bucks	.3
Deer	AUE
5 deer	

Bison	AUE
Yearling	.75
Cow	.5
Mature bull	.8

of Days

Enter the number of days the animals grazed this physical unit. CowProfit\$ uses the number of animals, animal unit equivalents and number of grazing days to calculate total animal unit months (AUMs) provided.

Total AUMs provided

This is the calculated value of total AUMs grazed for this physical unit.

\$ per AUM

Enter the dollar value of the pasture per animal unit month (AUM). Use an estimated market value.

Total Value

This is the calculated dollar value of the grazed forage.

Enterprise Labels

The next set of columns is used for allocation to the livestock enterprises. Use percentages or proportional allocation.

4.2.9 Aftermath Grazing

This section includes production, transfer and allocation information for all aftermath grazing enterprises that were defined in the Configuration section. This information is used to determine the value of production for each aftermath enterprise and the value of transfers to other enterprises. Animal Unit Months (AUMs) are also tracked.

Description

Enter a physical description of the line item. This could be a description of a pasture, paddock or legal land location. You could describe the time frame as well as the physical location.

of Animals

Enter the number of animals that grazed this pasture for this particular time frame.

Animal Unit Equivalent

Enter a value that converts the number of animals into a standard animal unit. A standard animal unit is defined as a 1000 lb. cow with or without a calf. The following table can be used as a guideline for other types of livestock. (Source: *Guide to Range Condition & Stocking Rates for Alberta Grasslands*, 1988, R.A. Wroe, S. Smoliak, B.W. Adams, W.D. Wilms, M.L. Anderson)

Cattle	AUE
Weaned calves	.5
Heifers & steers	.67
Cows (1000 lb.) with or without calves at side	1.0
Bulls 2 yr. and over	.5

Horses	AUE
Yearlings	.75
2 yr olds	1.0
3 yrs and over	.5
Sheep & Goats	AUE
5 weaned lambs, kids, yearling to 12 months	.5
5 ewes, does, with or without lambs or kids	1.0
5 rams or bucks	.3
Deer	AUE
5 deer	1.0
Bison	AUE
Yearling	.75
Cow	.5
Mature bull	.8

of Days

Enter the number of days the animals grazed this physical unit. CowProfit\$ uses the number of animals, animal unit equivalents and number of grazing days to calculate total animal unit months (AUMs) provided.

Total AUMs provided

This is the calculated value of total AUMs grazed for this physical unit.

\$ per AUM

Enter the dollar value of the pasture per animal unit month (AUM). Use an estimated market value.

Total Value

This is the calculated dollar value of the grazed forage.

Enterprise Labels

The next set of columns is used for allocation to the livestock enterprises. Use percentages or proportional allocation.

4.2.10 Purchased and Home-Grown Feed Inventories

Purchased and Home-Grown Feed Inventories

In CowProfit\$, purchased and home-grown feed must be tracked separately. All feed purchases are allocated directly to livestock or other enterprises and any purchased feed inventory changes apply to the livestock and other enterprises. Here's why. In typical cow calf operations, one of the main purposes of forage, grain and straw enterprises is to produce feed and bedding for livestock. CowProfit\$ tracks this production as well as transfers to the various livestock enterprises. Any unused feed and bedding remains as ending inventory within the forage, grain and straw enterprises. When these same products (forage, grain and straw) are purchased from the marketplace, a cash cost is incurred by the livestock enterprise. Any purchased feed remaining at the end of the year becomes Purchased Feed Inventory. This inventory is tracked on the Purch. Feed Inv. screen in the Financial section. Beginning and ending inventories should be allocated to the various livestock or other enterprises in the same proportion that was used to allocate the original feed purchase. Changes in Purch. Feed Inv. values are applied to the Winter Feed cost in the appropriate livestock or other enterprise report. In summary, CowProfit\$ considers purchased and home-grown feeds to be completely different products, and treats them accordingly.

4.2.11 Other

"Other" enterprises are those that do not fit within the standard CowProfit\$ enterprise format. No production, purchase or sales information is supported in "Other" enterprises, only beginning and ending product inventory values. Feed and pasture can be allocated from those enterprises to "Other" enterprises, but products produced in "Other" enterprises cannot be transferred or allocated anywhere else.

This section allows CowProfit\$ to include other or unusual enterprises. You can define up to 5 of these enterprises using the Configuration section. Once created, they cannot be deleted. Examples of other enterprises would be pigs, alternative livestock and home-based businesses. The only purpose for the Other section is to determine the value of changes in product inventory. Note that feed (forage, straw, grain, pasture and aftermath grazing) can be transferred to Other enterprises, but nothing can be transferred from Other enterprises..

Description

Enter a physical description of the inventory.

Beginning Quantity

Enter the number of units that were on hand at the beginning of the fiscal year. These units could be numbers of animals, tonnes, bags, blocks, etc., anything that is produced by the enterprise.

Beginning Unit Price

Enter a dollar value per unit for the inventory on hand at the beginning of the fiscal year.

Ending Quantity

Enter the number of units that were on hand at the end of the fiscal year. These units could be numbers of animals, tonnes, bags, blocks, etc., anything that is produced by the enterprise.

Ending Unit Price

Enter a dollar value per unit for the inventory on hand at the end of the fiscal year.

Change

This is the calculated change in value of the "Other" enterprise's product inventory. You use this number to help create an enterprise report for these "Other" enterprises.

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5 Definitions & Glossary

5.1 Value of Production

Value of Production is the total revenue produced (not just the amount sold), less livestock purchases. It includes adjustments for product inventory changes and accounts receivable as well as transfers to and from other enterprises

5.2 Variable Costs

Variable Costs are those expenses that tend to increase or decrease with changing levels of production. They are sometimes called direct costs or direct expenses. Variable costs include adjustments for changes in supply inventory and accounts payable. The categories of Winter Feed and Bedding include feed and bedding transferred from other enterprises as well as purchased. These amounts also include adjustments for any changes in Purchased Feed Inventory.

5.3 Total Capital Costs

Capital costs are also called fixed costs, indirect costs or overhead. These are the costs that are not directly associated with production. Except for depreciation, all of these costs are cash costs.

5.4 Cash Costs

CowProfit\$ keeps track of cash costs separately from accrual (non-cash) costs. Cash costs represent only those items that were purchased from outside the business and for which payment has been made. Accrual costs include deemed and estimated costs such as feed transferred from the forage enterprise, inventory adjustments and depreciation.

5.5 Total Production Costs

This total includes all costs, cash and accrual, that were incurred by the enterprise. CowProfit\$ also reports these costs on a "per unit of production" basis. This "unit cost" is one of the single most important indicators in the production of a commodity. Examples include "cost per lb. of calf produced" for cow calf enterprises and "cost per tonne produced" for forage enterprises.

5.6 Gross Margin

Gross Margin is the Value of Production less Total Production Costs (except for unpaid labour and depreciation).

5.7 Return to Equity

Return to Equity represents the "bottom line," and may be the best single indicator of financial success. It is equivalent to the Net Income for the enterprise. It is calculated by subtracting Total Production Costs (including Unpaid Labour) from the Value of Production. Return to Equity is the total return from the enterprise to the owner's equity and management.

5.8 Investment

This section of the report shows the value of machinery and buildings that has been allocated to the enterprise as a total and per unit of production. Cow calf enterprise reports show breeding stock

investment which consists of Cows/Bred Heifers, Bulls, Yearling Bred Heifers and Yearling Bulls on hand at the beginning of the year.

5.9 Contribution Margin

Contribution Margin is defined as the Value of Production minus Variable Costs. See the Winner & Losers report for more details.

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6 Economic Discussions

6.1 Introduction

CowProfit\$ Goals - Becoming a Low-Cost Producer

In the production of a commodity, minimizing the cost per unit of production is a key economic goal. CowProfit\$ is designed to calculate the cost per pound of calf produced (as well as per cow wintered) for beef cow-calf operations. These key indicators can be used to make important management decisions by determining profitability levels, identifying trends and comparing individual data against group averages.

6.2 Underlying Concepts

CowProfit\$ is designed to analyze the economic and financial performance of your beef cow-calf operation. It starts with whole-farm numbers from your accounting system, record book or tax return and then allocates these amounts to cow-calf and other enterprises. Non-cash amounts (transfers of livestock and feed between enterprises, inventory changes and other items that won't show up in your cash records) are dealt with in the various enterprise sections.

Because CowProfit\$ starts with whole-farm numbers and works down to the individual enterprises, errors tend to be errors in allocation, not errors of omission. For example, if cow-calf fuel costs are incorrect and reported too low, then they must be too high in another enterprise because the total fuel cost is known to be correct.

6.3 Enterprise Analysis

Another major benefit of starting with whole farm numbers is that analyses are also available for feeder, forage, grain, pasture, straw and aftermath grazing enterprises. Cow-calf enterprises seldom exist in isolation so analyzing all of your enterprises is almost a necessity. CowProfit\$' "winners and losers" report tells you which of your enterprises are profitable and which are not. This ability to do enterprise analysis is one of CowProfit\$ most important features.

6.4 Cash vs. Accrual Analyses

Cash accounting refers to the process where expenses and revenues are considered only when payment is actually made or received. In contrast, accrual accounting recognizes expenses and revenues when they are incurred or earned. Like the majority of farm accounting systems, CowProfit\$ uses a cash accounting process and then relies on accrual adjustments to complete the analysis. Cash transaction information is entered into the Revenue and Expense screens (found in the Financial section). Accrual (non-cash) adjustments made in the various enterprise screens include transfers of feed and livestock among enterprises, depreciation, and changes in inventories, payables and receivables.

6.5 Assets as Market Value as Opposed to Book Value

CowProfit\$ requires asset values in several sections: in the Machinery and Buildings screen (in order to calculate annual depreciation) and in the livestock and crops sections (to calculate inventory changes and transfers among enterprises). Valuing assets at market price is the simplest method. While this practice may not follow generally accepted accounting practices (GAAP), it is probably the best way to

achieve an accurate analysis that is comparable with benchmark data. As well, any analysis done for a bank or other lender most often requires that all assets are reported at market value.

In CowProfit\$, all assets are assumed to be at market value, with the possible exception of breeding stock. Breeding stock prices often vary considerably from year to year. CowProfit\$ assumes that ending inventory prices should be the same as beginning inventory prices. You have the option of overriding the ending inventory price, thereby claiming either the gain or the loss for the cow calf enterprise.

6.6 Machinery, Buildings and Depreciation

CowProfit\$ uses a simple method of calculating annual depreciation that is based on current value and a standard depreciation rate. The rate for power machinery is 8%, non-power machinery is 11.5% and buildings are 5%. These rates are the same ones used by Alberta Agriculture Forestry's Economics Unit. The user has the option of specifying a different depreciation rate by choosing "Custom" from the drop-down menu in the "Deprec. Type" column and then entering the desired rate in the "Deprec. Rate" column. The recommended process is to enter each machine and building separately. However, if you have calculated total power machinery, non-power machinery and building values elsewhere, you can enter those totals directly.

6.7 Units - Pounds and Tonnes

Canadian agriculture tends to use a combination of metric and imperial units. Imperial (pounds) is used almost exclusively in the cattle industry and the metric system (tonnes) is becoming the standard for grain. Pounds, metric tonnes and animal unit months (AUMs) are the three base units used in CowProfit\$. Cow calf and feeder enterprises use pounds exclusively and pasture and aftermath grazing use animal units and grazing days to calculate AUMs. Forage, straw and grain enterprises support user-defined units by specifying the number of pounds per unit. For example, the unit might be a bale weighing 850 lb. or a bushel weighing 48 lb. You might also use unusual units like a stack or a bucket, as long as its weight can be measured in pounds. Note that grain, forage and straw are priced per unit but the total weights produced, sold and transferred are measured as tonnes. A calculator is provided at the bottom of Forage, Straw and Grain sections to help convert price per tonne to price per unit.

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7 Reports

7.1 Understanding CowProfit\$' Reports

CowProfit\$ has adopted the same report format used by Alberta Agriculture Forestry's (ARD) Economics Unit. This allows direct comparisons of your CowProfit\$ analysis with average benchmark data prepared by ARD. This benchmark data is collected from Alberta farmers and ranchers and is reported annually for each production zone. The ability to compare your operation directly with average benchmark data is one of CowProfit\$ major advantages. To obtain the most recent benchmark data, search for "Economic, Productive & Financial Benchmarks for Alberta Cow/Calf Operations," or go to www.cowprofits.ca to find a link.

Under the main menu called "Reports", there are eight kinds of reports: Livestock, Crop, Pasture/Aftermath, Other Enterprise (these are collectively referred to as "enterprise reports"), Whole Farm, Winners & Losers, Transfer and Export to Data to File.

7.2 Enterprise Reports

All of the enterprise reports (as well as the Whole Farm report) are based on the Alberta Agriculture's Economic Unit format discussed above.

7.3 Whole Farm Report

CowProfit\$ Whole Farm Report format is the same as the one used by Alberta Agriculture Forestry's Economic Unit. It is nearly the same as CowProfit\$ enterprise reports. The differences are that there are no transfers between enterprises and that Return to Equity is replaced by Net Farm Income. The former includes Unpaid Labour, while the latter does not. Net Farm Income is one of the key indicators of whole-farm profitability.

7.4 Winners & Losers Report

The Winners & Losers Report is CowProfit\$ enterprise analysis summary. It lists each enterprise with its corresponding Cash Revenue, Cash Expenses, Total Revenue, Total Expenses, Cash Income, Contribution Margin and Return to Equity. The Return to Equity column shows which enterprises are profitable and which are not. The Cash Income column shows which enterprises are cash deficient and which are cash surplus. Contribution Margin may be the best single indicator of whether or not an enterprise is pulling its weight. Contribution Margin is defined as Value of Production minus Variable Costs. If Contribution Margin is positive, it means that the enterprise is paying a portion of fixed costs and has a positive effect on the business. If it is negative, the enterprise is having a negative effect on the business.

Remember that results for each enterprise depend on the allocations made by the user and by the prices placed on inter-enterprise transfers. For example, if forage transfer prices are set too high, that enterprise will appear very profitable while the livestock enterprise that is using the feed will be unduly penalized. The recommended strategy is to price all transfers at market value, or the price for which the product usually trades on the open market. This will produce the best analysis since you will be able to decide which enterprises should be continued and perhaps expanded, and which ones need work. Decisions to expand or wind down enterprises should never be made on the strength of one year's information. It may make sense to keep enterprises that appear to be money losers if they are allowing

another enterprise to be more profitable. A forage enterprise may show a negative contribution margin but by providing a reliable feed supply to the livestock enterprises, it may make sense to keep it.

Summary of Accrual Adjustments

On the same page as the Winners & Losers Report is the Summary of Accrual Adjustments. The main purpose of this report is to show the effect that non-cash adjustments, like changes in inventory, accounts receivable and payable and depreciation, have on each enterprise as well as on the whole farm. It is also valuable for understanding, verifying and explaining CowProfit\$ system of analysis.

7.5 Transfer Report

This report summarizes transfers of livestock, feed and bedding among enterprises. It shows the dollar values transferred, the enterprise from which the transfer came and the enterprise which received the transfer. This report is used to understand, verify and explain your CowProfit\$ analysis

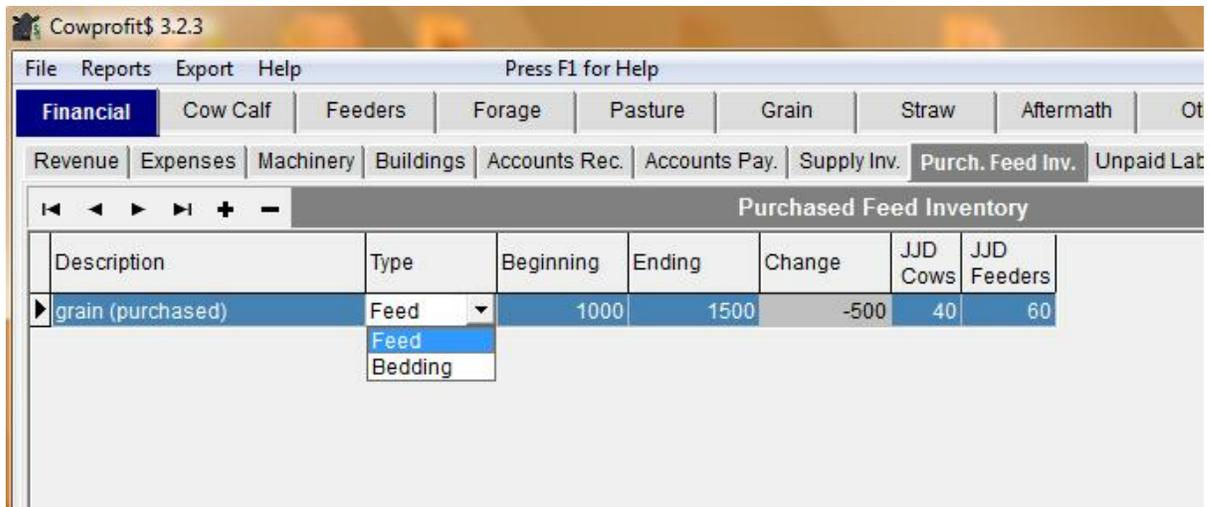
Part



8 Appendix

8.1 Known Bugs and Quirks

BUG: In the Purchased Feed Inventory screen, selecting Bedding does not produce the expected result. Instead, bedding amounts are included in the “Winter Feed” line, and not under Bedding, in CowProfit\$ reports.



Explanation:

The Feed/Bedding designation for Purchased Feed Inventory was missed until the programming was complete. Correcting this error was deemed to cost more (in time and perhaps dollars) than it is worth. Note that only bedding in Purchased Feed Inventory is affected. The treatment of purchased and transferred feed and bedding works as expected in all other areas of the program.

BUG: Duplicate Enterprise Names. If two enterprises are given exactly the same name, the second enterprise will show up on the Transfer Report with no name at all. See the example below.

Transfers	To Enterprise							
	From Enterprise	Total	teds calves	teds cvs 2	teds feeders	teds feed 2	other 1	other 2
teds calves		107,250	0	0	53,625	53,625	0	0
teds cvs 2		0	0	0	0	0	0	0
teds feeders		42,900	0	0	0	42,900	0	0
teds feed 2		0	0	0	0	0	0	0
teds forage		2,800	0	933	0	933	933	0
		0	0	0	0	0	0	0
pasture 1		5,610	935	935	935	935	935	935

Explanation – The solution is to rename the problem enterprise to a unique name. In the example above, there were 2 enterprises named “teds forage.” It appears that no data are lost and no harm is done to the integrity of the data set. The Transfer Report is the only place this occurs. See the “repaired” (i.e. renamed) forage enterprises below. Once again, it was determined that to fix this quirk by implementing appropriate warnings throughout the program would cost more than it’s worth.

Cowprofit\$ 3.2.3
Test file - Dec 8 16

Transfer Report

Transfers	To Enterprise							
	From Enterprise	Total	teds calves	teds cvs 2	teds feeders	teds feed 2	other 1	other 2
teds calves		107,250	0	0	53,625	53,625	0	0
teds cvs 2		0	0	0	0	0	0	0
teds feeders		42,900	0	0	0	42,900	0	0
teds feed 2		0	0	0	0	0	0	0
teds forage		2,800	0	933	0	933	933	0
teds for 2		0	0	0	0	0	0	0
pasture 1		5,610	935	935	935	935	935	935

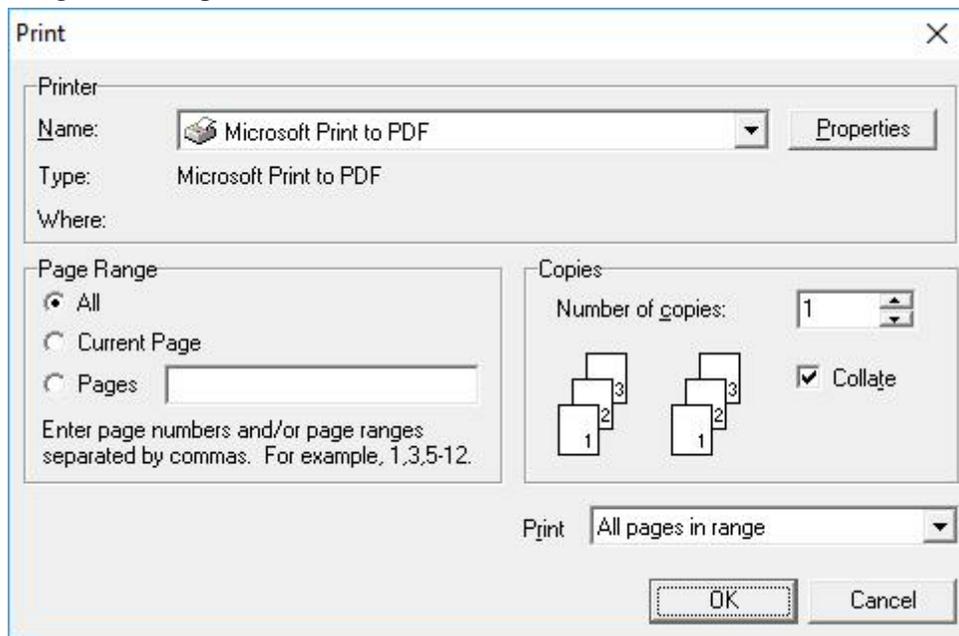
QUIRK: Scrolling in Reports (Using a Wheel Mouse)

Efforts were made to enable scrolling in CowProfit\$ reports. However, it seems that this standard Windows report generator contains a quirk that prevents it from scrolling. Again, it was decided not to invest any more effort in looking for a solution. Strangely, in at least one case, using a laptop with

a touch pad, scrolling seems to work perfectly! However, when an attached USB wheel mouse is used on the same lap top, scrolling again does not work.

QUIRK: Print-to-File Option When Printing Reports

When printing reports, there is a print-to-file option for all Enterprise and Whole Farm reports but not for Winners and Losers and Transfer reports. However, in the print dialog box, under Printer Properties, it's often possible to select a PDF print to file driver, which will accomplish the same thing. See example below.



This approach to exporting **CowProfit\$** reports is easier and more comprehensive than using the Export feature (To Cow Calf Forecaster) in the top menu line. However, the Export function (Text File (all enterprises)) is the only way to export **CowProfit\$** input data.

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