Guide to Collecting Dairy Business Analysis Project Data Using the 1998 Forms[1]

M. J. Hoekema
Department of Dairy and Poultry Sciences, University of Florida, Gainesville.

Introduction

The Dairy Business Analysis Project was started in 1996 in an effort to improve the financial performance of participating dairies and better understand the costs of producing milk in Florida. Recently, this project has expanded the number participants and is collecting information from dairies in the Southeast. Because the project collects financial data from a wide variety of businesses, it is helpful to understand both the data collection methodology and the underlying accounting assumptions.

This guide is designed to help effectively collect and interpret financial performance data. While the audience is primarily made up of extension agents, it is possible for anyone submitting data to use this guide as background to the forms and the accounting assumptions that are followed.

The basic philosophy of the project is to collect cash operating information from participants and accrual adjust this information with relevant balance sheet information. In order to achieve this objective, a series of data collection forms were designed that collect complete income statement, balance sheet, cash flow, and owner's equity information. What results is a complete financial picture of the business that provides valid profit measures that are directly comparable between participants.

What follows is a page by page guide to collecting data using the 1998 version of the forms. A total of fourteen pages are used to collect complete financial performance information. The pages are organized by accounting concept. They also contain several calculations that are not apparent by observation. While the forms have undergone four revisions to date, this current revision incorporates suggestions and experiences from those collecting the data on a regular basis. They were also designed to facilitate the systematic treatment of several special cases that have arisen in the past.

Dairy Description (page 1)

This page collects physical data that describes the dairy using various items. While the information is not financial in nature, it collects information that helps link physical production with financial performance information. This is very important for reporting and research, as this type of link is nearly impossible to make using other methodologies. It is also valuable for interpreting financial performance when compiling the report.

---

[1] University of Florida Dairy and Poultry Science Department Report DBAP 98-02. This is a near-final draft of a proposed Extension Circular to be published by Florida Coop. Extension. Date this draft printed: November 30, 1998. Content is solely the responsibility of the author.

Several new types of data were added to this revision of the forms. This is an attempt to collect more meaningful feed conversion, labor turnover, bST use, enterprise types, and cooling system information. An overview of the types of data is listed in Table 1.

Table 1. Dairy description variables.

Label	Description
Pounds milk sold	Pounds milk sold-from coop settlement sheets
Avg. milk plant %BF	Annual average percent butterfat
Production recording system	Specify if it is DHI, other or none. If DHI, fill in the DHI identification number for DHI ID#
Milking system	Number is the number of parlors. Parlor is type (i.e. herringbone, parallel, etc.). Size is D12, D20, etc. Fl barn is flat barn.
Milking frequency	Seasonal is a dairy which switches between 2X and 3X milking seasonally. 2X is strictly twice daily and 3X is three times daily milking. Other is for dairies with multiple barns milking different schedules or for another irregular milking frequency.
Livestock	Entries for this section specify the average numbers for cows owned, leased, heifers and calves, bulls, and other livestock. These are important numbers as most per-cow averages in the report and summaries are based upon this number. They can usually be found either from DHI herd summary data or from on-farm herd management software programs. This number is usually different than the simple average between beginning and ending inventory information.
Business type	Select the type of business entity. An LLP is a limited liability partnership. This is a hybrid between a corporation and partnership.
Housing	Specify if the dairy has freestall barns, feeding/shade barns, or no barns.
Manure system	Check which nutrient management system is most appropriate.
BST use	Two entries are necessary. First, enter the % of milking herd which received injections during the year. Second, record the number of doses used on the milking herd during the year.
Labor inventory	Record total annual labor used (in full-time-months) for each classification. Be sure to take an accurate inventory as several efficiency measures are based on this information.
Labor turnover	This is a new addition in 1998. Enter the number of full-time months used at the beginning of the year, the number of layoffs, number of terminations/resignations, and the number of new hires. This should record labor turnover information.
Enterprises	Select which enterprises were active in the business during the year. Use 1% of gross revenues as a guideline for including an enterprise.
% Dry matter from pasture	Enter an estimate of the portion of total dry matter that is provided by pasture. This includes heifers.
Feed purchased (tons)	Enter the total amount of feed that was purchased during the year. This figure will be used to measure feed efficiency, nutrient flow, and feed price. If the total includes both forage and concentrate purchases, make a note of this on the notes page.
Land inventory	Take an inventory of all land, owned or rented. Note the distinction between cultivated land, improved pasture, and non-improved pasture. Land that is both cultivated and used as pasture for part of the year would be considered as cultivated land. Be sure that acres are only entered once.
Feeding system	Select which feeding system is dominant on the farm. If multiple systems are used, check all that apply.
Cooling system	Select all that apply.
Harvested crops	This is a tabulation of all crops that were harvested from the dairy during the year. Record crop type, acres, total production (tons as fed) and percent dry matter of the harvested crop. This can be recorded by field, cutting, or crop. Tons dry matter is

	calculated automatically. This information is extremely useful in calculating several efficiency measures.

Livestock (page 2)

Some confusion has arisen about exactly what is trying to be accomplished by having several different distinctions of livestock. Farm Financial Standards Council recommendations require that purchased cattle be kept separate from those raised and expensed. In an attempt to collect this information and provide better information to our clients, the form was redesigned to collect herd inventory information in order to make this distinction. What results is a better estimate of herd replacement expenses that will not be distorted by herd expansion as was previously the case.

The livestock inventory forms list three separate items for cows; *raised/expensed*, *capitalized*, and *leased*. The *raised/expensed* category is collected as the number of head and value per head. Be sure to not include any *capitalized* cows in this number. Enter *capitalized* cows on the next line in the same manner. Also take inventory of any *leased* cattle and enter in the next line.

So what exactly are *capitalized* cows? The term *capitalized* livestock refers to the fact that these animals were purchased at some point in time with the purchase price converted into the *basis* for the asset value. Depreciation is then calculated over the useful life of the asset and claimed according to the depreciation schedule. When purchased cattle are sold, they are not treated as ordinary revenue. Instead, the sale price is matched to the original *basis* and the depreciation claimed throughout the life of the *capitalized* cow. If the resulting value is negative, a *loss* on the sale is computed. Conversely, if the resulting value is positive, a *gain* on sale is realized. As such, the 'costs' of replacement are realized in depreciation expense (the purchase price spread out over the useful life) and any gain or loss on the sale of *capitalized* livestock.

While it may seem unproductive to keep *capitalized* livestock separate from those *raised*, the distinction has implications on measuring and interpreting farm profits. For instance, an inventory increase in raised cows is treated as a positive adjustment to cow revenues reflecting farm productivity. However, if the cow inventory increased due to purchases, the increase should be separated from raised cattle since the purchase was not necessarily due to the farm being more productive (e.g. the money for the purchase may have been borrowed). The only way to know for sure is to keep the types of cattle separate.

Most of the information required for these distinctions are found on Internal Revenue Service tax forms. While there are some differences between the forms filed for corporate (1120), partnership (1065), and individual (1040) returns, the base forms that report this information are the same. The information will be found on Form 4562-Depreciation and Amortization and on Form 4797-Sales of Business Property[2]. What follows are four steps that will get the information required on page two for *capitalized* livestock.

Step 1-Calculating end of year inventory and livestock depreciation.

a) Go to **Form 4562**-Depreciation and Amortization.

[2] Farmer's Tax Guide. 1998. Department of the Treasury-Internal Revenue Service. Publication 225.

b) Find attached depreciation worksheet (format of worksheet may vary between farms).
c) Add up all the 'cost or other basis' which list 'cows' or 'dairy cows' under 'Description of Property'. This total will give you 'ending' value and number of cows. Enter this on page 2 of the forms.
d) Add up the 'Depreciation' deduction for the same entries. This will give total livestock depreciation for the year. Enter this on page 2 of the forms.

Step 2-Calculating capital livestock sales.

a) Go to **Form 4797**-Sales of Business Property.
b) Find *Part I-Sales or exchange of property used in a trade or business…*
c) For any 'cows' or 'dairy cows' listed in the table beneath **line 2**, sum up the *gross sale price* listed in **column d**.
d) DO NOT INCLUDE GROSS PRICE FOR SALES FROM RAISED CATTLE.
e) Look also under *Part III-Gain from disposition of property under sections 1245…* If any purchased cattle were sold for a gain, they will be listed in the table under **line 19**. Record sum of 'gross sales price' from **line 20** for property corresponding to table in **line 19**.
f) Sum up totals from steps 2c and 2e. This is total capital livestock sold. Enter this on page 2.

Step 3-Calculating capital livestock purchases.

a) Look at depreciation schedule attached to **Form 4562**. Look for new purchases of dairy cattle listed for 1998. This will be found by looking at 'Date placed in service' column.
b) Sum up the 'cost or basis' for all dairy cows placed in service during 1998. This will be capital livestock purchases. Enter this on page 2.

Step 4-Calculating beginning of year inventory.

a) Take sum found in Step 3b and subtract from sum found in Step 1c. This is a shortcut method for finding basis for the previous year. Enter this as beginning of year inventory for *capitalized* livestock.
b) This can be verified by looking depreciation schedule attached to **Form 4562** for 1997 and repeating Step 1c. Any discrepancies found between the two numbers are probably none of our business.

If the dairy is involved in trading animals (i.e. swapping calves for springing heifers) and no cash is changing hands, enter the transaction as non-cash livestock transfers. These entries should be used with caution, however, as large equity and expense adjustments are possible with these entries. Be sure to document an accurate value for both the animals leaving *and* entering the business on the Notes page (i.e. number of head times price per head).

Fill out the remaining livestock inventories as shown on page 2. Be sure to take an accurate heifer and other livestock inventory where appropriate. Inventory changes will adjust revenues on the income statement. Also be sure to fill in the cow number check as it is an important validation tool and is the only place where herd turnover information is derived from.

These approaches will lead to a more accurate measure of replacement expense than simply the cost of the animals. It will also isolate productivity due to raised animal inventory from cattle investment transactions.

Feed and Supply Inventory (page 3)

While entering data for feed and supply information is not particularly difficult, there are several concepts on this page which are important to understand. The top section of the page is for recording feed inventory grown by the dairy. Changes in inventory for grown feed reflects farm productivity and affects crop revenue on the Income Statement. The bottom section of the page is for recording inventory information for *purchased* feed and supply inventory. This section adjusts expenses on the Income Statement. Accurate inventory information for both the beginning and end of year is thus important since changes affect the overall profitability of the business.

To find and collect the data for this page, record the information at the beginning and end of the year. The data can either be entered as quantity time price or as a total value. As more details are provided on the sheet, it becomes easier to look back and understand what data was entered and interpret inventory changes when reporting back to the dairy. Be sure to separate purchased feed from that grown by the dairy since the differences adjust either revenues or expenses.

Changes in Operating Accounts Receivable (page 4)

Accounts receivable are what is *owed* to the business by parties outside of the business. Since most accounts receivable are a result of productive activities of the dairy, changes directly affect revenues of the dairy. In the accrual adjusted accounting setting, accounts receivable play a pivotal role in linking the balance sheet with the income statement. Accurate recording of balances are thus very important in measuring profits.
For example, if the accounts receivable for milk (i.e. milk check owed to the dairy for the previous month's production) was larger at the end of the year than what it was at the beginning, the increase is recognized as an accrual adjustment to milk revenue on the Income Statement. Conversely, if there was a decrease, milk revenues actually decreased, driving a reduction in milk revenues.

The data for this page is entered for the beginning and end of the year by account. The change in accounts receivable is automatically calculated in the forms. This *change* must be allocated to the revenue categories listed on the right-hand side of the page. The total change on the left-hand side of the page *must* equal the total allocation. All dairies have an accounts receivable for milk.

There is a special case where money owed to the dairy would not be recorded on this page. Circumstances where money is owed for non-dairy purposes such as investments in other business interests would be entered as an 'Other' asset on page 12. If cashflows were associated with these types of investments, they need to be recorded as either 'Other cash used' on page 5 and/or 'Capital distributions made' on page 12. Generally, any business activity which does not affect the revenues of the dairy should not be listed on page 4. It is important to keep non-dairy transactions separate in order to free revenues from distortions unrelated to dairy activity.

Dairy Receipts (page 5)

This page collects cash receipt information. All receipts are entered by category. Accrual adjustments for changes in inventory and accounts receivable are also performed in order to compute accrual receipts. Non-dairy receipts are also accounted for on this page. Table 2 lists revenue categories and their description.

Pay particular attention to accounting for all of the cash that is flowing into the business. Any transactions that are not dairy related should be entered in the appropriate non-dairy receipt lines.

Table 2. Revenue category description.

Category	Description
Milk sales	Milk receipts including over order premiums and component differentials. This does not include dividends or co-op payments for goods other than milk.
Cow sales	Receipts for all sales of raised cows. This does not include receipts for sale of purchased cows. Enter these on page 2, capital livestock sales.
Heifer and calf sales	Receipts for all sales of raised heifers and calves. This would include bull calf sales. This does not include the sales of purchased heifers or calves. Enter these on page 2, capital livestock sales.
Other livestock	Receipts for all sales of other livestock. This does not include the sales of purchased livestock. Enter these on page 2, capital livestock sales.
Crops	Receipts for all crop sales. Do not include the resale of purchased crops.
Gov't receipts	This includes all government payments for dairy production activities. This does not include tax refunds.
Gas tax refund	Any refunds for gas tax are included.
Other	Other receipts related to dairy business activity are included here. This includes dividends in coop's, interest income, or rental of dairy property. Receipts not related to dairy production should be recorded as 'Other cash used'.
Cash income	If dairy accounts are not separate from personal accounts, record personal cash receipts here. This is also used for nondairy work, tax refunds, principal and interest received from prior sale of dairy assets, other sales, income from public offices, or other nondairy income that is available for debt payments and family living.
Other cash used	Other cash used is all the rest of the cash flowing into the business from outside. Include cash from personal savings accounts, stock or bonds converted to cash, cash gifts, and inheritances.
Noncash capital transfers	An entry should be recorded here if any capital was transferred to the business without the exchange of cash. Any gifts, inheritances, or other capital transfers into the business should be recorded here.

Changes in Accounts Payable Worksheet (page 6)

Accounts payable are technically liabilities which the dairies *owe* to parties outside of the business for goods or services rendered. In essence, they are bills that have not yet been paid. In the accrual-adjusted accounting system, accounts payable are directly linked to the expenses which they affect. Because of this relationship with dairy expenses and subsequent profits, it is especially important to accurately record and allocate accounts payable.

Accounts payable information is easiest collected by recording beginning and end of year balances by vendor account. The change in each account is calculated in the form. After balances have been recorded, the *change* must be allocated to the expense category which it affects listed on the right hand side of the sheet. If an account/vendor affects more than one expense category, split the allocations accordingly. Make certain that when the allocation is finished that the total allocations equal the total changes.

There are several special cases to consider when allocating payables among expense categories. If a dairy has an accounts payable listed which did not affect dairy expenses, record the payable and allocate the change to 'Non-dairy expenses'. If money is owed to someone that is not a formal accounts payable and represents a 'loan' to the business, record the balances and payments as a formal liability on page 14. If any special considerations/handling of payables are used, make a note of it on the notes page so that the handling of special cases can be more easily understood.

Prepaid Expenses (page 7)

Prepaid expenses are assets which the business has expended cash for but has not yet received delivery for the goods and services. In the accrual adjusted accounting system, changes in prepaid expenses will adjust the overall expense of the dairy. Farms are allowed to prepay feed and supplies according to Internal Revenue Service tax code[3]. Because of the prevalence that prepaid expenses are used and the substantial portion of total expenses that the transactions can make up, it is important to take careful inventory and properly categorize to the corresponding expense.

To enter the data, take inventory for beginning and end of year balances for all prepaid expenses. List the balances in correspondence with the associated expense. To determine which expenses are appropriate, refer to the category descriptions in the Expense page section. Enter any non-dairy prepaid expenses under 'Non-dairy expenses'.

Dairy Expenses (page 8)

This page records all the cash expenditures for dairy related expenses during the year. The page also calculates accrual expenses by adjusting expenses for changes in supply inventories, prepaid

[3] Farmer's Tax Guide. 1998. Department of the Treasury, Internal Revenue Service. Publication 225.

expenses, and accounts payable. The majority of the information recorded on this page will come directly from any cash profit and loss statement that the dairy might provide. The expense descriptions in Table 3 should help allocate expenses appropriately.

Special note should be taken that this page records *cash* expenditures. If a business uses accrual accounting procedures, the expenses must be modified so that cash expenses are recorded. This must be done so that balance sheet information will correspond with expense information.

Care must also be taken so that capital and operating expenditures are separated. The report produced from this data makes the assumption that capital investments are separated from operating activities. It is also important that transactions are not counted twice. This is particularly important when entering rent, lease, and livestock transactions. The profits of the business directly depend on the appropriate handling and classification of these transactions.

Machinery, Equipment Inventory and Depreciation (page 9)

This page is designed to collect inventory, depreciation, and investing activity for machinery and equipment. The form consists of two parts, an optional purchasing and sales work sheet at the top and an inventory and depreciation recording sheet at the bottom. Only the information in the bottom section is required.

The top portions of the sheet are worksheets for recording machinery/equipment sales and investing activities. To fill the purchase worksheet out, list a description, cash paid, and the market value of the trade-in (if any). This will calculate the market value of purchases. The sales worksheet is filled out in a similar manner except that insurance received for claims is included as a transaction.

The bottom portion of the page is required of all dairies. Enter the beginning and end of year inventory information in the appropriate spaces. Fair market values should be used for valuing assets. Record any purchases, non-cash machinery/equipment transfers, and sales in the appropriate spaces. Enter the actual tax depreciation as well.

After all the data have been entered, the numbers usually do not balance out exactly due to discrepancies between depreciation and market values of machinery and equipment. This difference is calculated as 'appreciation' and represents additional values in excess of transactional adjustments. If appreciation is excessive, reevaluate inventory and transaction information to make sure all information is included. Any special cases should be noted on the notes page

Table 3. Expense category description.

Line-item	Description
Personnel	
Salaries/wages	Expenditures for all salaries and wages. Do not include fringe benefits or profit sharing expenses.
Related payroll costs	Includes all taxes, insurance, and other payroll expenses.
Other	Any benefits, fringe benefits, or profit sharing expenditures are recorded here.
Purchased Feed	
Grain and concentrate	Includes commodity purchases that were not of forage or complete ration orientation.
Forage	Purchases for forage.
Complete ration	Mixed feeds and one-shot purchases should be recorded here.
Other feed	Any other types of feed purchases such as special supplements should be recorded here.
Crops	
Fertilizer and lime	Fertilizer and lime expense. Do not include spray or other chemicals.
Seeds and plants	Any seed or plant sprigging expenses are entered here. Do not include custom labor or machine hire expenses in this line.
Spray and other expense	Any spray, chemical, or other crop expense is listed here. Do not include custom machinery hire or land rent expenses.
Machinery	
Hire, rent, lease	Custom hire, rent, and machinery lease expenses. Do not include capital lease expenses.
Repairs and other expenses	Machinery repair, upgrade, and repair labor expenses are listed in this line-item. Do not include machinery purchases as those are recorded on the machinery inventory page.
Fuel, oil, grease	Any fuel or lubrication expenses.
Livestock	
Expensed purchases	These are expensed livestock purchases not capitalized on page 2. Be sure not to double count between these two entries.
Breeding	Enter all breeding expenses here. This includes semen, breeding supplies, breeding services, and any other breeding supply or expense. Do not include veterinary expenses.
Vet and medicine	All services, supplies, and labor associated with a veterinarian. Also include drug expenses for both over the counter and prescription medications. Do not include bST in this line item.
Bedding	Any organic or inorganic bedding expense.
Milking supplies	Milking supplies include chemicals, minor repairs, and replacement of parlor equipment. Record major renovations on machinery and equipment inventory page.
Cattle lease/rent	If cattle are rented, include expense here. Do not include if it is capital lease. Record capital lease on lease page.
Other livestock expenses	Other expenses such as herd testing, bST, and DHI expenses are listed here. Animal identification/registry expenses are also recorded here.
Milk Marketing	
Hauling	Hauling expenses.
Co-op dues	Dues paid to the milk marketing co-op are listed here.
Advertising, marketing	Promotional and marketing check-off expenses are listed here.
CCC/government assessments	Any governmental charges for milk marketing purposes. Do not include taxes.
Real Estate	
Land, building, and fence repair	Any repairs associated with real estate or buildings. Do not include major improvements or renovations as expenses. List these as capital improvements on the real estate or building inventory pages.
Taxes	Real estate assessment taxes are entered here. Do not include income or corporate taxes.
Rent and lease	Rent and leased buildings and/or real estate are listed here. Do not include capital lease expenses. Record those on the capital lease page.
Other	
Insurance	Any type of insurance expense is listed here.
Utilities (dairy share)	Record gas, electric, water, and garbage disposal fees.
Interest	All interest paid by the dairy should be included here. This includes interest on liabilities,

	leases, accounts payable, or other unsecured debt.
Miscellaneous	Miscellaneous expenses not fitting any other category are listed here.
Other overhead	Expenses associated with overhead (i.e. capital) items are listed here. Examples may include miscellaneous expenses or repairs not large enough to be capitalized.
Non-dairy expenses	Any expense not associated with dairy operating activities is listed in this line item.

Building Purchases and Sales (page 10)

This inventory page is composed similarly to the machinery and equipment inventory page. However, several differences are important to point out although the concepts are the same.

At the top of the page is a purchase and sales worksheet that is optional. If new buildings or improvements were purchased during the year, list the description along with the total cost. 'Lost capital' is that value of the asset which was lost in the transaction due to a variety of reasons (this, however, is an unusual situation). Sales and capital losses are recorded on the right hand side of the worksheet.

The information in the bottom of the page is required for each dairy. Enter the beginning and end of year market values for buildings and improvements. Also record any purchases and lost capital. Record non-cash capital transfers into the building. Record building and improvement depreciation from the tax forms. Enter the sale price, sale expenses, and any note/liens held by the seller. After all the data is in, the spreadsheet compares the transactions to the balance and calculates the difference as 'appreciation'. Nominal amounts of appreciation are normal for a dairy with excessive amounts suggesting incomplete inventory or transaction information.

Land Purchases and Sales (page 11)

This page is filled out exactly as page 10. The difference is that this page collects information solely for real estate transactions. Because of this, no depreciation is listed. All of the other information is the same.

Other Assets, Paid-in-Capital (page 12)

There are several important concepts on this page which often make the difference between complete and incomplete information being collected from a dairy. This page collects beginning and end of year balances for a variety of 'other' assets in the business. It also collects important miscellaneous transaction information. Any paid-in-capital transaction and balance information is also recorded on this page. Table 4 lists other asset categories and their associated descriptions.

As evident from the category descriptions, care must be taken to appropriately record asset information. This also applies to recording miscellaneous transaction activities in the middle of the sheet. Record any owner withdrawals as appropriate. This can be in the form of cash, capital, or family living expenses. Record the net for social security and income taxes paid. This includes the net for refunds and payments but does not include taxes paid on employees. 'Capital distributions made' is used to account for gifts or capital distributions from the business accounts. If the business maintains stock or paid-in-capital information, record payment distributions in the paid-in-capital section and not as a capital distribution.

The next section involves a different concept. The paid-in-capital section accounts for all capital paid into the business by owners/investors in the business. This differs from a liability in that a formal payback contract on the investment is not required. Instead, the investment is recorded as 'equity' in the business. This is also known as 'stock' in the business. Enter paid-in-capital balances for a dairy if separate records are kept which track paid-in-capital and retained earnings. You will find this in corporations and those dairies that practice cost accounting.

To record the information, record the beginning and end of year values. Enter any additional paid-in-capital. Record additions or reductions in retained earnings due to value changes or distributions. The spreadsheet calculates a net value for paid-in-capital and any gain or loss in value. Large values for gain/loss suggest that incomplete balance or transaction information may have been collected.

Table 4. Other asset descriptions.

Category	Description
Machinery Leased	This is the fair market value of the machinery which is under a capital lease by the business. If a machinery lease is recorded on page 13, a value must be recorded here.
Buildings Leased	This is the fair market value of buildings which are under a capital lease by the business. If a building lease is recorded by the business on page 13, a value must be recorded here.
Real Estate Leased	This is the fair market value of real estate which is under a capital lease by the business. If a real estate lease is recorded by the business on page 13, a value must be recorded here.
Cash, checking and savings	The actual beginning and ending balance for the farm cash accounts are entered here. These numbers are extremely important for the statement of cashflows to reconcile.
Farm Credit stock	The beginning and ending values for Farm Credit stock are listed here.
Milk co-op stock and certificates.	This is the face value of milk co-op stocks and certificates.
Stocks and certificates	Any other stocks that the dairy owns. This can include stock in other businesses and certificates of deposits, money market funds, etc.
Other	This includes any other asset which the dairy controls that is not listed elsewhere in the forms.
Non-dairy assets	This is a special categorization for those dairies with enterprises not related to the dairy business. Use this category for those dairies with enterprises which use a substantial portion of assets within the business for activities unrelated to dairies.

Leases (page 13)

Accurate inventory and classification of capital leases is an important component of analyzing the financial position of the business. By recording a lease, it is assumed that at outside interest has a claim to the future cashflows of the business. A capital lease is, in effect, a liability which the business is indebted with.

There are a few important distinctions regarding capital leases that make them different from both operating leases and formal liabilities. In essence, a capital lease represents the purchase of an asset without borrowing money. According to the Farm Financial Standards Council and generally accepted accounting practices (GAAP), capital leases have at least one of the following characteristics[4]:

- the ownership of the asset is transferred to the lessee at the end of the lease term;
- there is a bargain purchase option at the end of the lease;
- the term of the lease contains at least 75% of the useful life of the asset;
- the present value of the lease payments is greater than or equal to 90% of the fair market value of the leased asset.

Generally, capital leases are used by businesses to finance asset acquisition without the outright purchase of the asset. Asset control is an important distinction between an operating and capital lease. In an operating lease, the lessee usually does not assume any risk or ownership control of the asset. Conversely, in a capital lease, the lessee assumes most of the control and risks of the asset while the lessor finances the leased asset with the lease payments.

The distinction between a capital lease and formal liability is difficult to make since they are treated similarly on the balance sheet. The key in understanding the distinction is one of cashflows and title. In a capital lease, no cash enters or leaves the business aside from payments. In a formal liability, the money is *borrowed* from an institution or individual and used to *purchase* the asset.

In some cases, the dealer/manufacturer may finance the purchase without cash trading hands. However, for a formal liability, the entire purchase price (less down payment, rebates, discounts, etc.) is financed by the dealer/manufacturer and the purchaser assumes control of the asset. If the transaction was a capital lease, the transaction would be termed as such by the dealer and would be subject to the rules of capital leases.

Once the capital lease distinction is made, entering the lease into the forms is similar to that of liabilities. The lease types are *cattle*, *machinery and equipment*, *buildings*, *real estate*, *whole farm*, and *non-dairy leases*. An amortization schedule of the leases is needed to complete the form. The principal balance for *Jan. 1* and *Dec. 31* is entered for each lease. *Payments* for the year are divided between *interest* and *principal*. Any *new leases* are entered as the entire portion of the lease. Next year's *planned payments* are entered as the *payment amount* times the *number* of annual payments.

Entering the planned payments for next year is an important step to take because of the calculations for term debt coverage and payment capacity measures. Because capital leases represent a claim against the future cashflows of the business, it is important to separate the claims between those occurring in the short term (within one year) and the long term (greater than one year). While this 'partitioning' may seem academic, it is a necessary step in order to measure the cash flow ability of the business.

[4] Farm Financial Standards Council. 1995. Financial Guidelines for Agricultural Producers. Exposure Draft.

Liabilities (p. 14)

Accounting and recording liabilities is similar to that of capital leases. Specific attention must be paid to the term length, note type, payment and borrowing activity, and the entering of *next year's planned payments*.

Both the term length and note type are often linked to the type of asset purchased. *Term debt* is reserved for those notes which the term is over one year. *Short-term debt* is used to buy capital items (not operating expenses) and has a life of less than one year. *Operating debt* is used exclusively for operating capital (which may also be used to service debt) and is usually referred to as a 'line of credit' by the lending institution. Because short term debt and operating debt are both financed for one year or less, the entire portion of principal is listed on the balance sheet as 'current'.

Enter the *principal balance* for *Jan. 1* and *Dec. 31* for each note. Separate the payments made during the year into interest and principal portions. Enter any *new borrowings* and record the amount and number per year of *next year's planned payments*.

Special consideration should be given to accounting for operating debt. Because of the volatility that this type of note can have, pay specific attention to the beginning and ending balances of the note along with accompanying payments and borrowings. It is possible for the business to have a beginning balance, pay off the balance to zero during the year, and borrow again during the year on the same operating note/line of credit. Accurately recording borrowing and payment activity during the year is critical for the statement of cashflows to balance.

Accounting for capital owed to entities other than lending institutions is another consideration to make when accounting for liabilities. Paid-in-capital is reserved for those capital investments that are made in the business without the expectation of regular, amortized payments. No fixed maturity date is set and the terms of the contract are very loose. Usually, paid-in-capital does not secure an asset as collateral. Because paid-in-capital is equity in the business, dividend payments are not treated as interest but are entered as capital distributions. The distinction between a liability and paid-in-capital is an important one on the balance sheet. Enter all paid-in-capital information on page 12.

Other Considerations

Collecting complete financial information from a dairy business is a rigorous and time-consuming activity. However, when appropriately done, this activity leads to a wealth of information from the business being collected that is extremely useful in understanding financial performance and how to improve future profitability.

As in any business, each individual dairy is different from any others. For this reason, collecting uniform financial performance information is challenging. If special cases arise, document the considerations on the notes-page. The more information that is provided, the easier troubleshooting and verifying the information becomes.