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# CASHPRO

## A Computer Spreadsheet for Projecting Annual Cash Flows and Pro Forma Income Statements

**by**

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By
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## Introduction

This is a users manual for CASHPRO, an Excel 5.0 spreadsheet designed to assist in the projection of cash flows for farm businesses. The spreadsheet is designed to encourage use of correct procedures in projecting cash flows and to ease the process of making the projections.

Projections of the expected cash flows for a future year are useful to evaluate the financial feasibility of changes in the business, and as information for the ongoing management of a business. When changes are being made in a business, cash flow projections provide evidence as to whether the business will be able to make all required payments after the change is made. For an ongoing business projected cash flows can be compared to actual flows to evaluate various cost and return items of the business.

Cash flow projections are also useful in assessing the profitability of a change in the business. However, an investment with positive net cash flows is not necessarily a profitable investment. The cash flows play an important part in assessing the profitability of an investment, but non- cash inflows and outflows (for example, depreciation) must be taken into consideration to determine profitability.

Valid cash flow projections can be obtained only if proper procedures are use in the process. Some basic rules must be followed to insure useful projections. These basic rules include:

1. **Project cash flows from accrual (or accrual adjusted) receipt and expense values.** DO NOT project cash flows from cash flows! For example, assume a dairy farm with cash feed expense of $100,000 in a year in which accounts payable for feed increased by $30,000 and the inventory of feed on hand declined by $20,000. Projecting next year from the $100,000 cash expense will grossly underestimate feed expense.

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To insure projections from an appropriate base the first cash flow worksheet in this spreadsheet provides a place to make the entries necessary to obtain an accrual adjusted set of base year cash flows.

2. **Exclude unusual occurrences from the base year data used for projections**. If the base year is unusual in some way, using it as a base for projecting the future is certain to result in poor projections. For example, if crop yields were unusually high, projecting future year income based on the resulting receipts is sure to exaggerate expected income.

   To handle the adjustments necessary to exclude the effects of an unusual year, a column is included on the accrual adjustment worksheet for normal year adjustments. "Normal" in this case refers to an average situation of the type that could be expected in future years. It does not refer to what the farmer "hopes" to get, nor the best the farmer has ever achieved, even if he/she thinks of that as "normal."

3. **Use causal logic in estimating each receipt and expense item**. DO NOT just mindlessly multiply each item by the percentage change in cows or acres. Because some labor is usually provided by the operator, labor cost rarely changes in proportion to cows or acres. Taxes do not necessarily change when cow numbers change. Insurance may not change when acres change. Many business changes involve different percentage changes in crops versus livestock. Multiplying all expenses by the change in cow numbers in that case is sure to result in errors in the projections. Many other examples could be cited. Examples of causal logic are presented in table 1.

   To encourage use of causal logic, the cash flow projection worksheet includes space to record the basis used for projecting each item (notes for projections) as well as the planned dollar change.

4. **Be sure to adjust for inflation**, or changes in prices. Input prices for items that are not farm produced tend to increase in price each year. Farm based input and output prices tend to be quite volatile. Using a best estimate of expected price changes will usually greatly improve cash flow estimates.

   A column for expected inflation rates in included in the cash flow projection worksheet and the entered values are automatically included in the projected values.

5. **Livestock farms that grow forages or concentrates should carefully assess their forage and/or concentrate balance** whenever significant changes are taking place in the size or composition of the animal herd or cropping program. Feed costs are a large expense and are frequently misestimated because sufficient effort is not made to assess the amount needed versus the amount provided. This is particularly true

when the relative proportions of various crops or livestock groups are being changed i.e., more corn silage and less corn grain or hay.

To handle these situations, forage and concentrate balance worksheets are provided. The results of these worksheets can then be incorporated in the cash flow projections. The forage balance worksheet is based on dry matter. Although dry matter does not accurately represent all the characteristics of alternate forages, it will usually provide a close enough estimate of the quantity of forage needed to make a close estimate of forage costs.

Once cash flows are estimated, it is usually a short step to development of a pro forma income statement. Addition of the non cash items such as depreciation, inventory change, changes in accounts payable and receivable, and non operating gains and losses are necessary to complete the income statement.

This program facilitates the development of a pro forma income statement by providing a form listing the added data needed, and then incorporating those data with the projected cash flows to generate a pro forma income statement. A complete pro forma statement can then be printed.

## Spreadsheet Layout

The various worksheets that makeup the spreadsheet are laid out across the top of the Excel matrix as shown below.

| | | | | | | |
|---|---|---|---|---|---|---|
| A1<br><br>Base year data | N1<br><br>Projected cash flows | AA1<br><br>Forage balance | AU1<br><br>Concen-trate balance | BI1<br><br>Total inflows and outflow | BU1<br><br>Added data for income state-ment | CD1<br><br>Income State-ment |

# Basic Menu Structure

The program is menu driven. The main menu can be reached using Ctrl M (hold down control and press m). The basic menu structure is as follows.

| Menu Item | Operation |
|---|---|
| **Base** | Go to base year receipt and expense worksheet |
| **Future** | Go to the calculation of planned year cash flows |
| **Roughage** | Go to forage balance worksheet |
| **Concentrate** | Go to concentrate balance worksheet |
| **Total** | Go to the total cash inflow and outflow summary |
| **Income** | Go to the Pro forma Income Statement Menu:<br>**Input** — Go to input form to enter added data needed for income statement<br>**Statement** — Go to the pro forma income statement |
| **Print** | Go to the Print Menu:<br>**Cash** — Go to cash flow print menu<br>**Projections** — Print base year and projected year cash flows<br>**Forage** — Print forage balance worksheet<br>**Concentrate** — Print concentrate balance worksheet<br>**All** — Print base year and projected year cash flows as well as forage and concentrate balance worksheets<br>**Summary** — Prints total cash inflow and outflow summary for the year.<br>**Income** — Prints proforma income statement<br>**All** — Prints all of the above (cash flow projection, inflow/outflow summary, and proforma income statement) |
| **Clear** | Go to the Clear Menu:<br>**Base** — Clears all except the base year data<br>**All** — Clears all data from all worksheets |

## Case Farm

To illustrate the process of cash flow projection, balance sheets and cash flow statements with explanatory notes for an case farm have been included in this publication. This case illustrates use of the computer program for a major expansion, so both the transition year and average future year data are included. The farm is Amber Ridge Farms, which was a 141 cow, 625 acre dairy and crop operation on December, 31 1998. They were planning to expand on August, 1 1999 to 270 cows and will shift from sale of dry corn and wheat to annual high moisture corn sales of 200 tons. For this farm, 1998 is the base year, 1999 is the transition year, and the years 2000 and beyond are represented by the average future year. The worksheets for the transition year are included along with the discussion of data entry and use of the program. The worksheets for the average future year and the explanation of the farm situation are included at the end of the manual.

## Data Entry

Entry of data is accomplished by going to the various sections of the statements and entering data in the appropriate locations. Each page of forms can be reached by appropriate selection using the menu, you will be taken to the upper left corner of the statement.

Enter data only in unprotected cells. These cells will usually appear in blue or, at least, some color other than black. Protected cells contain equations for calculation of data or transfer of data from another section of the worksheet.

Unprotecting a cell and entering data will wipe out the equation for all future uses of the program. With unprotected cells in color, it is easier to determine if all the required data have been entered.

In using these worksheets, it is recommended that the following order be used. If the farm is not a livestock farm, start with number 3.

1. If the farm being analyzed is a livestock farm and any forage is home grown or the composition of the herd (i.e., heifers as a percent of cows) will change:
   a. Determine if it would be advisable to assess the adequacy of the amount of forage available, or if the cost of purchased forage should be assessed in detail.
   b. If so, complete the forage balance worksheet.

2. If the farm being analyzed is a livestock farm and any grains are grown on the farm or the composition of the herd (i.e., heifers as a percent of cows) will change:
   a. Determine if it would be advisable to conduct a detailed analysis of concentrate needs and costs.
   b. If so, complete the forage balance worksheet.
3. Enter the base year data in the accrual adjusted and normalized receipts and expenses worksheet. Remember: if you have accrual receipt and expense data, you need only complete the cash received (enter the accrual data here) and normal year adjustment columns.
4. Complete the projected cash flows worksheet. The normal accrual receipts and expenses will be automatically brought forward from the base year worksheet (completed in step three above).

5. If an assessment of the total cash flows for the year is desired, complete the Total Inflows and Outflows worksheet. The farm cash flow data will automatically be brought forward from the cash flow projection worksheet. The Net Cash Flow Excess (Deficit) that is determined by this worksheet indicates the total cash flow position of the business for the year.
6. If a pro forma income statement is desired, complete the Additional Data Input For Preparing Income Statement From Cash Flow Projections worksheet. Once these data are entered the pro forma income statement will be complete.

## Completing the Worksheets

### Forage Production Balance Worksheet

Begin by entering all crop and production information for the base year (1998 for Amber Ridge Farms) in the base year (left) column. Inventory data should be available from your balance sheets. Be sure to enter your % Dry Matter figures for your forages in decimal form (.32 not 32).

Enter Animal Unit data for the base year. Units/animal is an indication of relative consumption for different animal groups. Choose one animal group as your standard (for a dairy herd, cows would be the normal standard). Assign your standard (cows) a units/animal of 1.0. Then, assign other animal groups unit/animal values depending on the percent that their forage consumption is of the base. For example, if cows is your standard and a open heifer consumes 70% as much forage as a cow, enter 1 in units/animal for cows .7 and for open heifers.

Enter your Percent Change in Feed Use In Planned Year as a whole number (1.05 would represent a 5% increase over the base year) and your Planned Year Dry Matter per Animal Unit will be calculated. If there is no change in feed use, enter a 1.0.

Care should be taken in selecting the planned year beginning and end of year inventory values. Be sure the values relate to the year being projected. If you are doing a projection for next year or a transition year, Beginning of Year Inventory for the planned year will usually be the same as the End of Year Inventory for the base year. However, the end of planned year inventory must be estimated based on planned production and inventory needs. If you are projecting an average future year that does not immediately follow the base year, it is often possible to use the End of Year Inventory for the transition year as your Beginning of Year Inventory. In most cases the beginning and end of year inventories will be the same when projecting an average future year. If a sequence of years is being projected, the end of year inventory for one year is the beginning of year inventory for the next.

Enter all planned production, sales, and purchase of forages' information for the planned year. Then enter your Animal Units for planned the year. If the number of animals change during the year, such as with a transition year, use the weighted average number of animals throughout the year.

*Forage Production Balance worksheet*

NAME Amber Ridge Farms Projections for 1999

**FORAGE PRODUCTION BALANCE**

BASE YEAR

BEGINNING OF YEAR INVENTORY

| Crop | Tons | % Dry Matter | Dry matter on hand |
|---|---|---|---|
| Corn silage | 1450 | 0.32 | 464 |
| Hay crop sil | 420 | 0.4 | 168 |
| | | | 0 |
| | | | 0 |
| | | | 0 |
| Total tons dry matter | | | 632 a |

PRODUCTION DURING YEAR

| Crop | Acreage | Tons / acre As fed | % Dry Matter | Dry matter Produced |
|---|---|---|---|---|
| Corn silage | 75 | 25 | 0.32 | 600 |
| Hay crop sil | 175 | 5.6 | 0.4 | 392 |
| | | | | 0 |
| | | | | 0 |
| | | | | 0 |
| | | | | 0 |
| Total tons dry matter | | | | 992 b |

FORAGE PURCHASES DURING YEAR

| Crop | Tons | % Dry Matter | Dry matter Purchased |
|---|---|---|---|
| | | | 0 |
| | | | 0 |
| | | | 0 |
| Total tons dry matter | | | 0 c |

FORAGE SALES DURING THE YEAR

| Crop | Tons | % Dry Matter | Dry matter Sold |
|---|---|---|---|
| | | | 0 |
| | | | 0 |
| | | | 0 |
| Total tons dry matter | | | 0 d |

END OF YEAR INVENTORY

| Crop | Tons | % Dry Matter | Dry matter on hand |
|---|---|---|---|
| Corn silagge | 1310 | 0.32 | 419 |
| Hay crop sil | 515 | 0.4 | 206 |
| | | | 0 |
| | | | 0 |
| | | | 0 |
| Total tons dry matter | | | 625 e |

Total tons dry matter used (disappearance)
(beg.+ produced + purchases - sales - end)(a+b+c-d-e) 999 f

ANIMAL UNITS

| Animal | units/animal | Number of Animals | Total units |
|---|---|---|---|
| Cows | 1 | 141 | 141 |
| Bred heifers | 1 | | 0 |
| Open heifers | | | 0 |
| Calves | | | 0 |
| Total units | | | 141 g |

| | | |
|---|---|---|
| Base year dry matter used (f) | | 999 |
| Base year dry matter used (f) | | 999 |
| Base year number of animal units (g) | | 141 |
| Base year dry matter per animal unit (f/g) | | 7.09 |
| 1.0 plus percent change in feed use in planned year | (x) | 0.98 |
| Planned year dry matter per animal unit | | 6.95 |

PLANNED YEAR

BEGINNING OF YEAR INVENTORY

| Crop | Tons | % Dry Matter | Dry matter on hand |
|---|---|---|---|
| Corn silage | 1310 | 0.32 | 419 |
| Hay crop sil | 515 | 0.4 | 206 |
| | | | 0 |
| | | | 0 |
| | | | 0 |
| Total tons dry matter | | | 625 h |

PRODUCTION DURING YEAR

| Crop | Acreage | Tons / acre As fed | % Dry Matter | Dry matter Produced |
|---|---|---|---|---|
| Corn silage | 215 | 25 | 0.32 | 1720 |
| Hay crop sil | 190 | 6 | 0.4 | 456 |
| | | | | 0 |
| | | | | 0 |
| | | | | 0 |
| | | | | 0 |
| Total tons dry matter | | | | 2176 i |

FORAGE PURCHASES DURING YEAR

| Crop | Tons | % Dry Matter | Dry matter Purchased |
|---|---|---|---|
| | | | 0 |
| | | | 0 |
| | | | 0 |
| Total tons dry matter | | | 0 j |

FORAGE SALES DURING THE YEAR

| Crop | Tons | % Dry Matter | Dry matter Sold |
|---|---|---|---|
| | | | 0 |
| | | | 0 |
| | | | 0 |
| Total tons dry matter | | | 0 k |

END OF YEAR INVENTORY

| Crop | Tons | % Dry Matter | Dry matter on hand |
|---|---|---|---|
| Corn silagge | 3580 | 0.32 | 1146 |
| Hay crop sil | 570 | 0.4 | 228 |
| | | | 0 |
| | | | 0 |
| | | | 0 |
| Total tons dry matter | | | 1374 l |

Total tons of dry matter available
(h+i+j-k-l) 1427 m

ANIMAL UNITS

| Animal | Number of Animals | Total units |
|---|---|---|
| Cows | 197 | 197 |
| Bred heifers | 10 | 10 |
| Open heifers | | 0 |
| Calves | | 0 |
| Total units | | 207 n |

| | | |
|---|---|---|
| Planned year dry matter per animal unit | | 6.95 |
| Planned year dry matter per animal unit | | 6.95 |
| Planned yr. no. of animal units (n) | (x) | 207 |
| Planned year dry matter use | | 1439 |
| Planned year dry matter availability | (-) | 1427 |
| Deficit (or excess) tons dry matter | | 12 |

When all the data are entered, your Deficit (or excess) Tons of Dry Matter will automatically be calculated in the bottom right cell. If your deficit/excess is greater than 10-15% of Tons of Dry Matter Available for use in the average future year, changes in your plan are suggested.

Once the forage balance is satisfactory, the projected purchases and sales information should be placed on the Projected Cash Flows worksheet as change in crop sales and/or forage purchases. The final projected cash receipt/expense columns should equal the quantity sold or purchased on the forage balance sheet for the planned year times the price at which you expect to buy or sell. For example, Amber Ridge Farms crop sales equal zero in the planned year. Since the normal accrual base is $56,000, enter the planned change in crop sales as -56,000. If excess forage needs to be bought, you would enter an amount in the Planned Change in Crop Expense such that when it is added to the Normal Accrual Forage Expense, the sum equals the cost of the forage that you planned to buy (tons purchased on Forage Production Balance times their cost per ton). For example, if the forage balance worksheet indicated the need to purchase 108 tons of dry matter and you expected to buy .90 percent dry matter hay for $100 per ton, the total forage expense would be $12,000 (108/.9 x $100). If the normal accrual forage expense were $5,000, you would enter $7,000 in the planned change in expense column.

**Concentrate Feed Production Balance Worksheet**

In the top half of the worksheet, enter all appropriate information for concentrate and grain/oil seed production, purchases, sales, and use in the base year. The left column is for purchased concentrates. This may be a complete mixed ration, minerals only or whatever is purchased by this farm. Use one of the other columns for each grain/oil seed crop grown on the farm or for which you have specific purchase plans.

Enter the base year number of animals and units per animal for each type of livestock. Units/animal is an indication of relative concentrate consumption for different animal groups. Choose one animal group as your standard (for a dairy herd, cows would be the normal standard). Assign your standard (cows) a units/animal of 1.0. Then, assign other animal groups unit/animal values depending on the percent that their concentrate consumption is of the base. For example, if cows is your standard and a open heifer consumes 15% as much concentrate as a cow, enter 1 in units/animal for cows .15 and for open heifers.

When all the base year data are entered (as indicated above) the program will calculate base year use / animal unit for each crop/feed.

Enter the number of animals of each type for the planned year. Remember to use a weighted average of animal numbers for a transition year and the final numbers for an average year. It is assumed that the relative use per animal unit will be the same for the planned year as the base year.

Enter 1 plus the change in concentrate feed use expected in the planned year compared to the base year. For example, Amber Ridge Farms expects feed use to be 2 percent lower in 1999 than in the base year. Thus, a .98 is entered (1-.02).

Enter production information for feed crops and then your beginning year inventory. As discussed under the forage production balance, the base year end inventory can be used as the beginning inventory for next year or a transition year.

*Concentrate Feed Production Balance*

NAME Amber Ridge Farms  Projections for 1999

**CONCENTRATE FEED PRODUCTION BALANCE**

| | | BASE YEAR | | | | |
|---|---|---|---|---|---|---|
| Concentrate | Purchased | High moisture | | | | |
| or feed crop | feed | corn | | | | |
| (UNIT) | dollars | Tons | | | | |
| Production: | | | | | | |
| Acres | | 100 | | | | |
| Yield/acre | | 4.2 | | | | |
| Amount produced (a) | 0 | 420 | | | | |
| Beginning inventory (b) | 2480 | 300 | | | | |
| Purchases (c) | 95000 | | | | | |
| Sales (d) | | | | | | |
| End inventory (e) | 2550 | 345 | | | | |
| Amount used (a+b+c-d-e) | 94930 | 375 | | | | |
| Base year animal units | 141 | 141 | | | | |
| Base year use/animal unit | 673.26 | 2.660 | | | | |
| 1+ % change in plan year use | 0.98 | 0.98 | | | | |
| Planned year use/ animal unit | 659.79 | 2.607 | | | | |
| Planned year animal units | 207 | 207 | | | | |
| Total planned year use (f) | 136577 | 540 | | | | |
| | | PLANNED YEAR | | | | |
| Production: | 0 | | | | | |
| Acres | | 210 | | | | |
| Yield/acre | | 4.1 | | | | |
| Amount produced | 0 | 861 | | | | |
| Beginning inventory | 2550 | 345 | | | | |
| Purchases (accrual) | | | | | | |
| Sales | | | | | | |
| End inventory | 3000 | 615 | | | | |
| Amount available plan year(g) | -450 | 591 | | | | |
| Planned use - available (f-g) | 137027 | -51 | | | | |
| Planned year price per unit | 0.93 | 70 | | | | |
| Planned year excess / deficit | 127435 | -3570 | | | | |
| Planned year cost ($) | | | | | | |

Total planned year feed cost (sum of individual concentrates and crops) 123865

| ANIMAL UNITS | | Base Year | | Planned Year | |
|---|---|---|---|---|---|
| Animal | units/animal | Number of Animals | Total units | Number of Animals | Total units |
| Cows | 1 | 141 | 141 | 197 | 197 |
| Bred heifers | 1 | | 0 | 10 | 10 |
| Open heifers | | | 0 | | 0 |
| Calves | | | 0 | | 0 |
| Total units | | | 141 | | 207 |

Average future year inventories must be estimated based on production and use plans.

Next, enter what you plan on purchasing, selling, and having in inventory at the End of the year. Keep in mind that a feed inventory buildup during a transition year is needed to support higher cow numbers but that inventory levels should remain the same for an average future year.

The "Planned use – available" figure will be calculated. Positive amounts here represent what you need to buy in the planned year and negative amounts represent what have in excess with the base year feeding program and the planned number of animals. Enter the price per unit for all concentrates and feeds. Total planned year feed cost will be calculated for each column. In some cases the cost excess/deficit may be negative (as shown for Amber Ridge high moisture corn), indicating that more of that feed is being grown or purchased than needed with the historical feeding program. Modest negative numbers are likely little cause for concern. They indicate that a little more of that feed will be fed and substitute for purchased feed, or that a little more will be sold (or less purchased) and the funds (savings) used to reduce the purchased feed amount.

If you entered planned purchases of a feed (other than general purchased feed), enter the cost of the tons, bushels etc. under "Planned year cost($)." This will be added to the total planned year concentrate cost.

The results from this worksheet are carried forward to the Projected Cash Flows worksheet. If feed crops are sold, enter the amount in the Planned Change in Receipts column under "feed sales" that makes the Projected Cash Receipt column correct. For example, for Amber Ridge Farms, projected feed sales are $14,000 (200 tons of HMC * $70/ton) up from zero in Normal Accrual Receipts so the Planned Change in Receipts for feed sales is $14,000. If normal accrual feed sales were $50,000 and no other crops were involved, you would enter –36,000 ($50,000 - $14,000) in the planned change column so that projected receipts would be $14,000.

Since the Concentrate Feed Balance Worksheet determines total concentrate feed cost, enter the amount in Planned Change in Expense for feed expense that when added to the Normal Accrual Expense equals the Total year feed cost at the bottom of the Concentrate Feed Production Worksheet. For Amber Ridge, the Projected Cash Expense figure is $123,865 (127,435 concentrate purchases + -3,570 HMC purchases). Therefore, Planned Change in Expense for feed expense is $28,865 (123,865 – 95,000).

### Accrual Adjusted and Normalized Receipts and Expenses Worksheet

If the farm is not a livestock farm or it was determined that calculation of forage and concentrate feed balances were unnecessary, entries will start with this worksheet.

Begin by entering base year receipt and expense information in the Cash Received/Cash Expense columns. If you entered accrual information, go on to Normal Year Adjustment.

If cash data were entered in the Cash Received/Cash Expense column, enter relevant Change in Inventory or Prepaid Expense information as the end of base year inventory value minus the end of prior year (beginning of this year) inventory value. Change in Receivables/Change in Payables are entered similarly in the next

column. Subtract the end of base years' receivable/payable balance from the prior year (beginning of this year) value to get the number to enter in this column. An example of both Change in Inventory and Change in Receivable/Payable is shown under 1998 crop sales for Amber Ridge Farms. Cash crop sales were $85,900. They also had a $11,840 decrease (111,965 – 123,805) in inventory and a $18,000 decrease (see notes) in outstanding crop receivables from 12/31/97 to 12/31/98. Entering this information created a 1998 Normal Accrual Crop Receipt figure of $56,060 (85,900 - 11,840 - 18,000). Clearly, it is important that the balance sheets be completed at exactly the end of each year, so that the change in inventory exactly represents the same year as the cash value. Balance sheets as of other dates than the end of the year (and beginning of the next year) will cause errors in the projections.

If the base year is abnormal in some way, this is corrected by entering Normal Year Adjustments. Enter the change necessary to make the resulting receipts and expenses represent normal (average for this farm) performance. For example, machinery repairs for Amber Ridge Farms had an unusual cost of $2,500 in 1998 that was not expected to reoccur so a negative $2,500 is entered to make the data represent a normal year. If a cost or receipt were unusually low in the base year its normalizing entry would be positive.

This worksheet provides the base data for projecting any future year. Once it is complete projections for next year, the transition year and/or future years can be made without changing this worksheet.

# Accrual Adjusted and Normalized Receipts and Expenses

NAME Amber Ridge Farms YEAR 1998

**ACCRUAL ADJUSTED AND NORMALIZED RECEIPTS AND EXPENSES**

| Operating Receipt Item | Cash Received | Change in Inventory | Change in Receivables | Normal Year Adjustment | Normal Accrual Receipts |
|---|---|---|---|---|---|
| Milk, eggs | 412700 | | 9400 | | 422100 |
| Culled livestock | 23500 | | | | 23500 |
| Breeding stock | | | | | 0 |
| Feeding livestock | | | | | 0 |
| Calves | 6200 | | | | 6200 |
| Crop sales | 85900 | -11840 | -18000 | | 56060 |
| Feed Sales | | | | | 0 |
| Government Rct's | 15600 | | | | 15600 |
| Custom work | 2200 | | | | 2200 |
| Miscellaneous | 12800 | | | | 12800 |
| **Total** | 558900 | -11840 | -8600 | 0 | 538460 |

| Operating Expense Item | Cash Expense | Change in Inventory or Prepaid exp. | Change in Payables | Normal Year Adjustment | Normal Accrual Expenses |
|---|---|---|---|---|---|
| Hired labor | 19500 | | | | 19500 |
| Livestock feed | 94800 | | 200 | | 95000 |
| Stock roughage | | | | | 0 |
| Machine hire | 900 | | | | 900 |
| Mach. repairs | 18400 | 300 | -150 | -2500 | 15450 |
| Fuel and oil | 14500 | | -300 | | 14200 |
| Replacement stock | 40146 | | | | 40146 |
| Pur. feeding stock | | | | | 0 |
| Breeding | 4500 | 100 | | | 4400 |
| Vet & medicine | 12300 | -100 | | | 12400 |
| Bedding | | | | | 0 |
| Livestock supplies | | | | | 0 |
| Cattle lease & rent | | | | | 0 |
| Custom boarding | | | | | 0 |
| bST | 12400 | | | | 12400 |
| Other livest'k exp. | 7400 | | | | 7400 |
| Marketing | 3300 | | | | 3300 |
| Fertilizer & lime | 17300 | | | | 17300 |
| Seeds & plants | 15700 | 6900 | | | 8800 |
| Chemicals, spray | 11200 | | | | 11200 |
| Storage & drying | | | | | 0 |
| Other crop exp. | 12900 | | | | 12900 |
| Real estate repairs | 10200 | | | | 10200 |
| Taxes | 35900 | | | | 35900 |
| R.E. rent & lease | 11500 | | | | 11500 |
| Insurance | 10000 | | | | 10000 |
| Utilities | 8600 | | | | 8600 |
| Miscellaneous | 8800 | | | | 8800 |
| **Total** | 370246 | 7200 | -250 | -2500 | 360296 |

Total normalized accrual receipts minus expenses excluding interest 178164

1. Include cash received from the sale of purchased livestock with the sale of culled or breeding livestock. Exclude the gain or loss from sale of purchased breeding livestock from the calculations. Total accrual income will differ from that found on the income statement if the income statement treats purchased breeding livestock like other depreciable assets.

**Projected Cash Flows Worksheet**

This worksheet is used to make the actual cash flow projections. It is crucial that projections are based on causal logic related to actual expected occurrences. Table 1 can be used as a source of ideas for causal logic. In many cases projections for next year, or a transition year, will be very different from those for an average future year. Thus, careful consideration of the actual occurrences expected in those years is necessary.

The Normal Accrual Receipts/Expenses column of data are automatically brought forward to this worksheet from the previous worksheet. Basically, this is what would be expected to happen if no changes were made to the business and no price changes occurred.

The "Notes for projections" column is used to record the methods and numbers used in projecting the cash flows. These notes are very important for readers and users of the cash flows. It tells readers how the projections were made and helps them determine whether reasonable logic was used in making the projections. For the user, the notes provide a reminder of exactly what was used. This is particularly important when a number of alternatives are being considered, or where cash flow projections are referred to after some time has passed. It is usually hard to remember exactly how each of the numerous items were calculated, if no notes are made.

In the "Planned change in receipts/expenses" column enter the change in each item, from the normal accrual value, that is expected. These values should not be adjusted for inflation. That is, make the calculations in base year dollars. Table 1 provides suggestions for causal logic for making projections.

In the "Percent inflation adjustment" column enter the price change in each item that is expected from the base year levels. The USDA publishes inflation projections for farmers several years in advance at http://www.ers.usda.gov/briefing//baseline/. It is best, however, to use more localized projections when they are available such as those published by the Cornell Program on Dairy Markets and Policy for New York milk prices (http://cpdmp.cornell.edu/). You can use your own best estimate of what you will pay for labor, and talk to your area suppliers for price projections, if they are available, to get a better idea of your cost changes. Enter all Percent Inflation Adjustments as a percentage (7 not .07).

The Projected Cash Receipt/Projected Cash Expense columns will be automatically calculated using the normal accrual value, plus the planned change with both adjusted for the inflation rate entered.

Notice that these projections do not include interest. Frequently, cash flows are calculated to determine the amount available for debt payments and family living. Since debt payments generally include interest, leaving interest out of these calculations avoids the necessity of separating interest from principal. Of course, if a pro forma income statement is prepared, the separation must be made at that point.

*Projected Cash Flows*

NAME Amber Ridge Farms Projections for 1999

**PROJECTED CASH FLOWS**

| Operating Receipt Item | Base unit for Projections | Normal Accrual Receipts | Planned Change in Receipts | Percent Inflation Adjustment | Projected Cash Receipts |
|---|---|---|---|---|---|
| Milk, eggs | +33% | 422100 | 139293 | -6 | 527709 |
| Culled livestock | 13/40=33% | 23500 | 7755 | 10 | 34381 |
| Breeding stock | | 0 | | | 0 |
| Feeding livestock | | 0 | | | 0 |
| Calves | +91% | 6200 | 5642 | 10 | 13026 |
| Crop sales | no sales | 56060 | -56060 | | 0 |
| Feed Sales | | 0 | | | 0 |
| Government Rct's | | 15600 | | | 15600 |
| Custom work | | 2200 | | 1 | 2222 |
| Miscellaneous | +4% | 12800 | 512 | 2 | 13578 |
| **Total** | | 538460 | | | 606516 |

| Operating Expense Item | Base Unit for Projections | Normal Accrual Expenses | Planned Change in Expenses | Percent Inflation Adjustment | Projected Cash Expenses |
|---|---|---|---|---|---|
| Hired labor | 15,000+6,240 | 19500 | 21240 | 2 | 41555 |
| Livestock feed | concenrtate bal | 95000 | 28865 | | 123865 |
| Stock roughage | 12 x 45 | 0 | 540 | | 540 |
| Machine hire | not hired | 900 | -900 | | 0 |
| Mach. repairs | +40%c,+5%a | 15450 | 1745 | 2 | 17539 |
| Fuel and oil | +40%c,+5%a | 14200 | 1604 | | 15804 |
| Replacement stock | +33% | 40146 | 13248 | 10 | 58733 |
| Pur. feeding stock | | 0 | | | 0 |
| Breeding | +40% | 4400 | 1760 | 2 | 6283 |
| Vet & medicine | +40% | 12400 | 4960 | 3 | 17881 |
| Bedding | | 0 | | | 0 |
| Livestock supplies | | 0 | | | 0 |
| Cattle lease & rent | | 0 | | | 0 |
| Custom boarding | | 0 | | | 0 |
| bST | +40% | 12400 | 4960 | 3 | 17881 |
| Other livest'k exp. | +40% | 7400 | 2960 | 2 | 10567 |
| Marketing | +40% | 3300 | 1089 | 2 | 4477 |
| Fertilizer & lime | +1% | 17300 | 173 | 3 | 17997 |
| Seeds & plants | +2% | 8800 | 176 | | 8976 |
| Chemicals, spray | +5% | 11200 | 560 | 2 | 11995 |
| Storage & drying | | 0 | | | 0 |
| Other crop exp. | -14% | 12900 | -1806 | 1 | 11205 |
| Real estate repairs | +19% | 10200 | 1938 | 1 | 12259 |
| Taxes | | 35900 | | 3 | 36977 |
| R.E. rent & lease | | 11500 | | | 11500 |
| Insurance | +20% | 10000 | 2000 | 2 | 12240 |
| Utilities | +33% | 8600 | 2838 | 2 | 11667 |
| Miscellaneous | +7% | 8800 | 616 | 2 | 9604 |
| **Total** | | 360296 | | | 459545 |
| | | Projected cash receipts minus expense excluding interest | | | 146971 |

*Suggestions for projecting a transition year:*

The year in which major changes are made in a business usually represents a significant transition. Projecting such a transition year is often difficult, particularly on livestock farms. The business usually starts as the prior year business with modest changes and ends the year as the changed business. If the changes that affect costs and receipts occur within a month or so, an average of the two business situations weighted by the number of months each is in effect can be used. For example, in 1999 Amber Ridge plans on averaging 145 milking cows until August, 1 when the addition to 270 cows will to take place. Furthermore, they project a five percent decrease in milk production for the year as the herd adjusts to the expansion. Therefore, milk sales are going to be based on 197 cows (145 x 7 + 270 x 5) / 12), a 40% ((197 / 141) - 1) increase over the base year. The percentage increase in milk production for the year, entered in the Base Unit for Projections, is increase in cow numbers times change in productivity or 33% ((1.4 x .95) – 1). The Planned Change in Receipts will be the base year sales times percent increase in production, which is $139,293 (422,100 x .33).

In cases where more gradual changes take place, monthly weighted averages can be use. For example, if in the above situation, herd size were to increase gradually during August through October, the weighted average could be calculated as:

| | | |
|---|---|---|
| Jan. – July | 145 cows | 7 months |
| August | 175 cows | 1 month |
| September | 210 | 1 month |
| October | 240 | 1 month |
| November | 270 | 2 months |

(7 x 145 + 175 + 210 + 240 + 2 x 270)/12 = 182 = average herd size

## Table 1. Example Basis for Projections

(All listed below may also need to be adjusted for inflation)

1. Milk Sales – Per cow adjusted for production level and price.
2. Crop Sales – Acres for sale, production level and price.
3. Cattle Sales – Per cow adjusted for price

4. Other Farm Receipts – Last year adjusted for known changes.
5. Nonfarm Income – Last years adjusted for likely changes.
6. Labor Expense – Last year total adjusted for planned changes in the number employed and wage rates.

7. Feed (Concentrate) – Last year per cow adjusted for changes in feed crop acres and prices.
8. Feed (Forage) – Last year adjusted for planed change in forage production rate.
9. Machine Hire – Last year adjusted for planned changes in hire of machines.

10. Machine Repairs – Percent of machinery investment adjusted for change in acres and animals. For dairy farms, the change in number of cows plus number of acres can often be used.
11. Fuel – Per crop acre adjusted for number of cows. For dairy farms, the change in number of cows plus number of acres can often be used.
12. Breeding Expense – Per cow.

13. Vet and Medicine – Per cow.
14. Milk Marketing – Per cwt. of milk.
15. Other Livestock Expense – Per cow.

16. Fertilizer and Lime – Per crop acre adjusted for crop mix change.
17. Seeds and Plants - Per crop acre adjusted for crop mix change.
18. Spray and Chemicals - Per crop acre adjusted for crop mix change.

19. Other Crop Expense – Per crop acre.
20. Land, Building & Fence Repair – Per dollar real estate investment.
21. Taxes – Per dollar real estate investment (excluding last 10 years building investment).

22. Real Estate Rent – Amount rented and rental rates.
23. Insurance – Per dollar asset value.
24. Utilities – Per cow or per acre of crops dried.
25. Miscellaneous Expense – Per dollar other expenses. For dairy farms, the change in number of cows plus number of acres can often be used.

*Suggestions for Average Future Year:*

An average future year projection is designed to represent the business after the planned changes are made, under the assumption that no further changes are made. Some businesses operate in a relatively unchanged state for a few years after a major change. In this case the average future year represents the expected cash flows for those years. It is also useful for situations where further changes to the business are planned. It indicates whether the "after this change" situation is viable. In case the changes planned for future years cannot be made or the external environment changes such that the planned changes are inadvisable, the average future indicates whether the business is viable without additional change.

Make projections for the average future year based on the character of the business after all planned changes have taken place. For Amber Ridge farms, milk will increase by 91% from the base year ((270 / 141) - 1) since productivity will return to 1998 levels.

*General suggestions for projections*

Estimating machinery costs for changes in livestock numbers can be difficult. Most of these expenses are usually attributed to the crop operation, but major changes in livestock numbers can materially influence machinery expense items. Based on crop and livestock budgets, it appears that the machinery expenses for one cow and normal attendant young stock are often similar to the expenses of one acre of grain and forage crops.

Using this assumption for Amber Ridge Farms, the 1998 actual expenses can be divided between livestock and crops. 1998 fuel expense was $14,200 and there were 141 cows and 615 production acres of crops. Thus, 18.65 (141 / 141 + 615) percent of the expense was for cows. That represents $2,648 (.1865 x 14,200). The remainder, $11,552, was for crops. Cow numbers are increasing 91% and there is a projected 5% increase in fuel expense due to more corn silage production, so the Planned Change in Expense for fuel expense is $2,908 ((2,648 x .91) + (11,552 x .05)).

| | 1998 fuel expense | % change | Total Increase |
|---|---|---|---|
| Cows | 2,648 | 91% | 2,410 |
| Acres | 11,552 | 5% | 578 |
| Total | 14,200 | | 2,908 |

An advantage of this procedure is that it relates expenses to the actual experience of this business. The experience of this farm is used as the base and adjustment are calculated from percentage changes in the activities of the business. If it is a business with high machinery costs, that characteristic will be carried through into the projected cash flows.

When crop mix changes, crop expenses need to be adjusted for the basic differences between crops. One way to accomplish this is to use relative crop coefficients for each expense item. Relative crop coefficients are estimated by selecting a base (main) crop, giving it a crop coefficient value of 1.0 and then calculating the level of use of other crops relative to that of the base crop. For example, if normal fertilizer and lime expenses are $60 for corn, $18 for hay and

$36 for wheat. Setting the corn coefficient to 1.0 makes the coefficients for hay and wheat .3 (18/60) and .6 (36/60) for wheat. Since corn is the base, these become corn equivalents. Using these coefficients, the corn equivalents produced in the base year and the fertilizer and lime cost per corn equivalents for the base year can be calculated as shown below.

| | **A** | **B** | **A * B** |
|---|---|---|---|
| Crop | Corn Equivalent | 1998 crop acres | Total Corn Equivalents |
| Corn, Silage + HMC | 1 | 400 | 400 |
| Hay and Haylage | .3 | 175 | 53 |
| Wheat | .6 | 40 | 24 |
| Total | | 615 | 477 |

Assuming similar cropping practices and costs, the projected year's corn equivalent will be 482 (see below).

| | **A** | **B** | **A * B** |
|---|---|---|---|
| Crop | % of Corn use / acre | Planned Acres | Total Corn Eq |
| Corn, Silage + HMC | 1 | 425 | 425 |
| Hay and Haylage | .3 | 190 | 57 |
| Total | | 615 | 482 |

Since corn equivalent increased by one percent (482/477 – 1), fertilizer and lime costs are projected to increase by one percent or $173 ($17,300 x 1%).

This procedure has the advantage that cash flows are projected from the actual experience of this farm, and thus, build in the level of costs generally experienced by this farm. It is often more accurate than using the planned costs per acre to calculate farm expenses because farms are often consistently higher or lower than planned per acre expenses would imply.

**Total Inflows and Outflows**

The Total Inflows and Outflows worksheet is designed to summarize the total cash flow position of the business for the year. It incorporates the cash flows from operation of the business, calculated in the cash flows worksheet, with the flows from financing, non farm sources and family living to obtain the net cash flow for the business.

The total cash income and total cash expenses (except interest) are taken directly from the cash flow projection worksheet.

Cash operating interest expense is the interest on operating debt that is expected to be paid during the year. This interest is not part of term debt payments. Interest on term debt is not included here. It can be estimated by determining the amount of operating debt that will be outstanding each month

during the year and then applying the expected interest rate. It would be part of a monthly cash flow budget, if one were prepared. Determining operating interest is complicated by the fact that there may be no operating debt outstanding at the end of the year, but considerable interest may still be paid.

Amber Ridge farms expects to pay about $1,500 per year in operating interest on accounts payable and operating funds borrowed and repaid during the year.

Non farm cash income is cash from outside the business that contributes to the business cash flow. It should be net cash income in cases where it is generated from activities that also have expenses that are not already counted in farm expenses. It may be used directly to pay family living expenses or used in the business in other ways. If non farm income is used for family living expenses, a zero may be entered here and the actual family living expenses listed below reduced by the amount of non farm income. However, it is usually easier, and more straightforward to enter total net cash non farm income on this line and then enter total family living expenses below.

Capital asset sales refers to cash income received from the sale of capital assets. This would generally include machinery, land and buildings. Do not include the routine sale of cull livestock or breeding livestock, if they are already included as part of the livestock sale receipts in the farm cash flow projections worksheet.

Funds borrowed refers to gross funds borrowed (principal). It is the sum of the loans borrowed during the year. All term debt proceeds should be included. The proceeds from operating loans that were borrowed and repaid during the year may be included or excluded. If they are included, be sure to include he amount repaid with scheduled term debt payments. Farms with zero operating debt at the end of each year may find it easier to omit operating debt borrowings and repayment. If the operating debt outstanding at the beginning and end of the year are different, borrowings and repayments, or at least the net difference, should be entered.

For 1999 Amber Ridge Farms is requesting a $350,000 cattle and equipment loan and a $395,000 real estate loan. They have not had a history of operating loan balances at the end of the year and plan to have any operating loans repaid by the end of each year. Thus, they have chosen to exclude the principal on operating notes from the cash flow.

For an average future year, borrowed funds will be connected with purchase of replacement capital assets. On most farms this will be for replacement machinery. In order to avoid escalating debt payments in future years (to keep the average future year really average) funds borrowed will only be the amounts re-borrowed in a rollover or revolving-debt financing situation. For example, Amber Ridge has a $150,000 rollover machinery loan that they make payments on like a regular five-year loan, but they can re-borrow and re-extend the principle. Monthly payments of $3,114 in the first year on the $150,000 revolving machinery loan, would decrease the principle to $125,122, so they can and plan to re-borrow $24,878 (150,000-126,122) annually. This will go in the Funds borrowed cell.

*Total Inflows and Outflows*

Name Amber Ridge Farms Year 1999

## TOTAL INFLOWS AND OUTFLOWS

| | | | |
|---|---|---|---|
| Total cash income | | 606516 | |
| Total cash expenses (Excluding Interest) | (-) | 459545 | |
| Operating interest expense | (-) | 1500 | |
| Net cash income | | | 145471 |
| Nonfarm cash income | | (+) | |
| Capital asset sales | | (+) | |
| Funds borrowed | | (+) | 745000 |
| TOTAL INFLOWS | | | 890471 |
| Scheduled term debt payments (principle and interest): | | | |
| Before refinancing | | 53585 | |
| After refinancing | (+) | 56070 | |
| Total | | 109655 | |
| Principal refinanced (and included in funds borrowed) | (+) | 323281 | |
| Capital investments | (+) | 429800 | |
| Family living expenses | (+) | 65000 | |
| TOTAL OUTFLOWS | | | (-) 927736 |
| NET CASH FLOW EXCESS (DEFICIT) | | | -37265 |

Scheduled term debt payments include principal and interest payments on term debt. It also includes principal repaid on operating debt as long as the amounts borrowed are included up under funds borrowed. Alternately, if an operating loan pay down is expected, only the net pay down can be included in the scheduled debt payments. If a major refinancing occurs in the business, it will usually be easier to use the before and after refinancing lines. If major refinancing does not occur during the year (as occurs with an average future year), place all planned debt payments in the before refinancing line. Capital lease payments should be included with debt payments (be sure they are not also included in operating expenses).

Principal refinanced refers to the principal listed under funds borrowed that represents refinancing. For example, the two new loans listed up under funds borrowed include refinancing (paying off of existing loans with new funds borrowed) of $323,281 of existing debt. Clearly, the amount refinanced could be excluded from the funds borrowed and this line left at zero. However, it is usually more straightforward to list the total loans under funds borrowed and list the amount refinance here.

Capital investments include purchase of all capital assets, such as machinery, cattle, land and buildings. Exclude purchases of replacement livestock that have been included in the cash flow projection worksheet. If replacement livestock are not included in the annual cash flow projections, they should be included here and any financing for them included up under funds borrowed. Include expansion livestock. Include replacement machinery.

Amber Ridge Farms had 1999 investments of $429,800, including $150,000 of cattle, $243,800 for real estate and $36,000 in replacement machinery.

For an average future year annual machinery purchased must be estimated and included. From historical purchase behavior, Amber Ridge spends about 14% of their average machinery investment every year in additional machinery purchases. Using the projected end of transition year machinery market value of $302,800, they can expect to spend an average of $42,392 ($302,800 * .14) each year on additional machinery investment.

Family living expenses include the amount of cash withdrawn from the business for all families and individuals making such withdrawals. It includes both family living expenses and income taxes to be paid. It is recommended that any non farm income that is used for family living be listed up under non farm income and that total family living expenses be listed on this line. However, if preferred the family living expense can be the amount withdrawn from the farm business and non farm income can be excluded from the total inflows and outflows. Amber Ridge Farms estimate their family living expenses for 1999 to be $65,000.

Net cash flow excess (deficit) is the net cash flow position of the business under the plans incorporated in the projections.

Deficits often occur inn a transition year due to a lag in receivables, inventory build-up, and other transition expenses that will occur. If your net cash flow is deficit, however, you should plan on additional borrowing or assure a line of credit in excess of that amount to avoid cash shortfalls.

For an average future year, a deficit indicates that the plan does not work and implies that normal operations are going to cause borrowing from (reductions of) the equity in the business. Changes in the basic investment, disinvestment, method of operation, financing terms or level of family withdrawal are necessary. If the excess amount is greater than 10% of total cash inflows, you may want to plan different uses of your cash (such as less borrowing), to make more efficient use of capital and have less idle cash.

In addition to average year cash flow excess or deficit, you can calculate your farms average future year sustainable debt repayment ability. Do this by deleting the contents of scheduled debt payments cells and the net cash flow excess will be the money available to service debt in the future.

To calculate the maximum debt that your farm can handle under the current debt structure, divide sustainable debt repayment ability by the average debt service cost percentage for your situation. Debt service cost percentage is total scheduled debt payments for the year divided by the average of principle outstanding in that year.

To calculate the amount of additional debt that your farm can handle, re-enter the scheduled debt payments in the average future year results and divide the Net Cash flow excess by the debt service cost (total annual payment amount divided by loan principle) of the type of additional debt you plan on adding.

**Additional Data Input for Preparing Income Statement from Cash Flows worksheet**

This worksheet includes the information, in addition to that developed in the previous worksheets, that is necessary to construct a pro forma accrual income statement. You must enter all non-stared cells for all versions of the income statement. Entering data in all the non-stared cells will provide net farm income before taxes. Entering the information requested in the single stared cells (*) extends the net farm income to an after tax basis. Completing all cells including the double stared cells (**) results in a combined net farm and non-farm income on an after tax basis.

The added data needed include the inventory change expected during the year, interest expense (separate from principal), depreciation and non-operating gains and losses. Taxes data are needed to get to an after tax basis and non-farm income is necessary to provide a combined farm and non farm statement.

Inventory change from beginning to end of projected year includes all the inventory changes expected during the year being projected. Unless inventory balances are not expected to change during the year, a pro forma balance sheet for the end of the projected year will be necessary. Enter end of year values minus prior year (beginning of year) values. When projecting “next year” or a transition year, changes in inventories will frequently be expected.

By definition, an average future year projection will normally not have any inventory changes. A number in this section of the sheet for an average future year projection means a sustained growth or decline in that item on a farm that is planning no changes.

In the Interest expense section, enter all interest that is paid in the planned year on all debt (term (capital) and operating) in the first cell. Enter all interest

paid on leases in the second cell. Interest on term debt and leases is determined by separating term debt payments into interest and principal. Operating interest will require estimating the average outstanding balance and applying the expected interest rate.

Depreciation is the amount of depreciation expected to be taken in the planned year. This can be easily obtained from a well designed depreciation schedule by adding the new purchases with their expected depreciation methods. Depreciation can be estimated by adding first year depreciation on expansion assets purchased in the planned year to the prior year's total depreciation amount.

Hedging net income includes the net gain/loss expected from the hedging operation for the planned year. Be sure that the entered values are consistent with the commodity prices used in the receipts section of the cash flows.

Non-operating gains and losses for machinery/real estate and purchased breeding livestock sales are the net tax gains or losses on the sales of capital assets. Cost of these assets has been included in the income in the form of depreciation. If the asset sells for more or less than the undepreciated balance, too much or too little depreciation has been charged in prior years. Thus, there is a gain or loss that results from the sale. These gains or losses are entered in this section.

Percent of livestock sale income that results from the sale of purchased animals is the proportion of income from the sale of animals that comes from the sale of animals that had been purchased, rather than raised. The net cost of purchased animals is charged to the business in the form of depreciation, with any discrepancies between tax depreciation and actual depreciation accounted for by non-operating gains and losses. Thus, the actual cash income from the sale of purchased animals does not go on the income statement. Under culled animals, enter the percent of the "culled livestock" income projected on the Cash Flow Projection worksheet that is expected to result from the sale of purchased animals. Under Breeding stock enter the percent of "Breeding stock" income projected on the Cash Flow Projection worksheet that is expected to result from the sale of purchased animals. Enter both numbers as a percentage (25, not .25). The program will exclude the sale of purchased animals from the income statement and include the remainder (the proportion not purchased) of the livestock sales as sale of raised livestock.

In the Amber Ridge situation, all replacements are purchased. Thus, 100 percent of the sale of culled animals results from the sale of purchased animals. There were no breeding livestock sales, so that line was left blank. However, if they had breeding livestock sales and they raised no animals, 100 would also be entered on the breeding stock line.

Change in the base value of raised breeding livestock is the income or loss that results from changing the base value of breeding livestock from the end of the prior year (beginning of this year) to the end of the year. If base values are held constant during the year, this will be zero. For an average future year calculation, this should always be zero. In fact, for most projection situations, this entry can be left at zero without significant error.

Taxes is the amount of income and social security taxes that are expected to be paid in the planned year. Enter values here if after tax net income is desired.

*Additional Data Input for Preparing Income Statement from Cash Flows*

Name: Amber Ridge Farms  Year: 1999

**ADDITIONAL DATA INPUT FOR PREPARING INCOME STATEMENT FROM CASH FLOW PROJECTIONS**

**Inventory change from beginning to end of projected year (from balance sheet)**

Assets that influence income:

| | | |
|---|---|---|
| Crop and feed inventory | 27360 | |
| Raised breeding livestock (quanitity only) | | |
| Feeder livestock and poultry | | |
| Notes and accounts receivable | 18898 | |
| Advance government payments | | |

Assets and liabilities that influence expenses:

| | | |
|---|---|---|
| Investment in growing crops | -2450 | |
| Supplies | 1004 | |
| Prepaid expenses | -8000 | |
| Accounts payable | 3874 | |
| Accrued property and R.E. taxes | | |
| Accrued employer payroll withholding | 250 | |
| Accrued rent and lease payments | | |
| Total accrual expense adjustment | | -5322 |
| Accrued interest | | 1005 |
| * Current portion of deferred taxes (farm) | | 13370 |
| * Accrued income and Social Security taxes (farm) | | -5500 |
| ** Accrued income and Social Security taxes (nonfarm) | | |

**Interest expense**

| | |
|---|---|
| Interest on loans (cash or by renewal) | 41900 |
| Interest portion of capital lease payments | 367 |

**Depreciation**

| | |
|---|---|
| Depreciation on Machinery and Equipment | 31500 |
| Depreciation on buildings and improvements | 17140 |
| Depreciation on purchased breeding livestock | 44800 |
| Depreciation portion of capital lease payments | 3041 |

**Hedging** Net income from hedging operations

**Non-operating gains and losses**

| | |
|---|---|
| Gain or loss on sale of machinery and RE | |
| Gain or loss on sale of purchased breeding livestock | 5800 |
| Percent of income from sale of purchased animals: | |
| Culled livestock | 100 |
| Breeding stock | |
| Change in base value of raised breeding livestock | |

**Taxes**

| | |
|---|---|
| * Cash farm income tax expense | |
| ** Cash nonfarm income tax expense | |

**Nonfarm income**

| | |
|---|---|
| ** Operator and Spouses wage off farm (net of expenses) | |
| ** Interest and dividends | |
| ** Gain or loss on the sale of nonfarm assets | |
| ** Other nonfarm income | |
| ** **Extraordinary income or expense** | |

* Required only if after tax farm income is being calculated
** Required only if nonfarm income is included in net income calculation

Cash farm income tax expense is the amount of income tax that is expected to be paid in the projected year. Technically this will be the amount paid on the prior year's income and the change in "accrued income and social security taxes" included under the inventory changes will adjust this to the amount paid for this years income. An alternate way to handle the tax expense entries is to leave the change in "accrued income and social security taxes" blank and enter in this section the amount of taxes expected to be paid on the income generated in the planned (projected) year. If non-farm income is not going to be entered, leave the non-farm tax expense line blank.

If a combined farm and non farm income statement is desired, enter the non farm income in the Nonfarm income section. In each case these values should be net of expenses.

Extraordinary income or expense includes income or expense items that are so unusual that you want them recorded, but do not want them included in net income.

**Income statement**

All of the data necessary to prepare the net income statement have been entered on prior worksheets. No entries are necessary for this worksheet. It is a good idea to assess your income projections and compare them to prior year statements to be sure that the changes make sense for the changes that are being made. Comparisons to the most recent dairy farm business summary for farms of your size may also be helpful.

**Sensitivity Analysis**

Once you have completed your cash flow analysis for the planned year, it is a good idea to do sensitivity analysis. This involves changing important item values to see how they affect resulting values such as Net Cash Flow and Net Income. Some popular variables are price or production level of the primary products produced (milk on a dairy farm), price levels of important inputs (feed commodity prices for dairy farms), interest rates and total receipts and expenses.

The simplest way to vary a receipt or expense value is to change the Percent Inflation Adjustment figure in the Projected Cash Flows sheet. For example, if you wanted to see what the change in Cash Flow Excess (Deficit) would be from a 10% decrease in total milk production or average milk price for the year, subtract 10 from the Percent Inflation Adjustment value already there (if it were –7, enter -17). Then, go to the Total Inflows and Outflows sheet to observe the change in Cash Flow Excess (Deficit). If there is a large change, your budget is sensitive to that variable. If you believe that a change of that magnitude is possible and it would cause financial problems for the farm, you may want to look into risk management or assess your credit reserves for handling the coming year(s).

Since this is an integrated worksheet, you can vary any item entered in the blue cells and it will carry through to the total inflows and outflows and the income statement. However, if you are doing sensitivity to the Forage Production Balance or the Concentrate Feed Production Balance, you have to go back to the Projected Cash Flows sheet and adjust Planned Change in Receipts/ Expenses to see its effect on the rest of the budget.

*Income Statement*

**INCOME STATEMENT**

Name Amber Ridge Farms
Address

For 12 month period ending 1999

| | | | |
|---|---|---|---|
| Farm Revenue | | | |
| Crops & feed sold | | | |
| Cash sales | 0 (1a) | | |
| Inventory change (Sch) | 27360 (1b) | 27360 (1) | |
| Raised breeding livestock | | | |
| Cash sales: culled animals | 0 (2a) | | |
| sold for breeding | 0 (2b) | | |
| Quant. Inven. change (Sch) | 0 (2c) | | |
| Gain/loss on sale of purchased breeding stock (Sch) | 5800 (2d) | 5800 (2) | |
| Feeder lvstk. & poultry sold: | | | |
| Cash sales | 13026 (3a) | | |
| Inventory change (Sch) | 0 (3b) | 13026 (3) | |
| Milk, eggs & other products: | | | |
| Cash sales | | 527709 (4) | |
| Change in notes and accts. receivable (Sch) | | 18898 (5) | |
| Custom work: cash | | 2222 (6) | |
| Gov't payments and patronage dividends: | | | |
| Cash received | 15600 (7a) | | |
| Changein adv. pmts. (Sch) | 0 (7b) | 15600 (7) | |
| Income from hedging trans. (Sch) | | 0 (8) | |
| Other | | 13578 (9) | |
| Gross revenue (add lines 1 thru 9) | | | 624194 (a) |
| Farm Expenses | | | |
| Feeding lvstk. & poultry purch. | | 0 (10) | |
| Feed purchased | | 124405 (11) | |
| Other cash oper. exp. (Sch) | | 335140 (12) | |
| Accrual expense adj. (Sch) | | -5322 (13) | |
| Depreciation: | | | |
| Machinery & equipment (Sch) | 31500 (14a) | | |
| Fixed farm improvements (Sch) | 17140 (14b) | | |
| Purchased breeding stock (Sch) | 44800 (14c) | | |
| Portion of capital leases (Sch) | 3041 (14d) | 96481 (14) | |
| Total oper. exp. (add lines 10 thru 14) | | | 550704 |
| Interest exp. (Sch) | | | 43272 |
| Total expenses | | | 593976 (b) |
| Net income from farm operations | | (a-b) | 30218 (c) |
| Gain or loss on: | | | |
| Disposal of machinery and RE (Sch) | | | 0 |
| Base value change (Sch) | | | 0 |
| NET FARM INCOME | | | 30218 |
| Farm income tax expense (sch) | | | 13370 |
| AFTER TAX NET FARM INCOME | | | 16848 (d) |
| Nonfarm Income (Sch) | | | |
| Operator & Spouses wage off farm (net of exp.)(Sch) | | 0 (15) | |
| Interest and dividends (Sch) | | 0 (16) | |
| Gain (loss) on sale of nonfarm assets (Sch) | | 0 (17) | |
| Other | | 0 (18) | |
| NET NONFARM INCOME (add lines 15-18) | | | 0 (e) |
| Nonfarm income tax expense ( Sch) | | | 0 (f) |
| AFTER TAX NET NONFARM INCOME | | (e-f) | 0 (g) |
| Income before extraordinary items | | (d+g) | 16848 (h) |
| Extraordinary items - net of tax (explain) | | | 0 (i) |
| NET INCOME | | | 16848 |

# Amber Ridge Example

Below is the background notes for the transition year cash flows for Amber Ridge Farms. The worksheets were used as examples in the discussion above. Following that is the notes and worksheets for an average future year cash flows for the case farm after the expansion. 1997, 1998, and the proforma 1999 balance sheets have been included at the end to illustrate the balance sheet data that backs up the projections.

## Transition year Notes:

### Forage Production Balance

1. The average "as fed" dry matter contents of forage on Amber Ridge are 40% for Hay crop silage and 32% for corn silage and they are not expected to change in the future.
2. No Forage will be purchased or sold in 1998 unless necessary.
3. Bred Heifers have the same units per animal of forage consumption as a cow because they are purchased one month before freshening.
4. Average herd numbers for 1998 and expected numbers for 1999 are:

| | 1998 average | 1999 average |
|---|---|---|
| Cows (milk production) | 141 | 197 |
| Bred heifers | | 10 |

   Calves are sold before they are old enough to eat forage. 1999 cow numbers are expected to be 145 for 7 months and 270 for 5 months. 125 Bred heifers purchased on an average date of July 1st will freshen on an average date of August 1st, having 125 bred heifers for one month will average to 10 heifers for the whole year.
5. Beginning feed inventories and 1999 production data are as follows on the sheet.
6. Forage use is expected to be 2% lower in 1999 due to decreases in milk production.

### Concentrate Feed Production Balance

1. There aren't an y planned high moisture corn purchases or sales in 1999, but if purchases are necessary, high moisture corn can be bought for $70/ton.
2. Concentrate and Feed use is expected be 2% lower in 1999 due to decreases in milk production.
3. Concentrate costs are expected to be 7% lower in 1999.

### Notes for Accrual Adjusted and Normalized Receipts and Expenses:

1. The accounts receivable balance difference of 1997 and 1998 of –8,600 (51,700 – 43,100) was comprised of a $9,400 increase in milk receivables and a 18,000 decrease in crop receivables.
2. Supplies inventory increased $300 throughout the year from a $300 increase in machinery parts inventory, a $100 increase in breeding inventory, and a $100 decrease in medicine inventory.
3. Prepaid expense increased $6,900 from increased seed inventories.
4. Accounts Payable decreased $250 throughout the year due to a $200 increase in livestock feed payable, $150 decrease in machinery repairs payable, and a $300 decrease in fuel & oil payable.
5. Machinery and equipment repair costs were above the level of cost experienced in earlier years. Normal costs will likely be $2,500 lower.

**Projected Cash Flows**

1. Average per cow milk production is expected to decline 5% from 1998 levels as the herd adjusts to the expansion. The average herd size for the year will be 197 (145 for 7 months and 270 for 5 months), so the increase in milk production will be 33% ((197 / 141 x .95) – 1)
2. Mark Stevenson, in the New York Economic Handbook for 1999, estimates the average price of milk in 1999 to be $.93 lower than in 1998. With an average 1998 mailbox price of $15.54/cwt. ($422,100 in sales / 2,715,519 lbs. sold) the Percent Inflation Adjustment in milk price will be –6% (-.93 / 15.54).
3. Of the Bred heifers bought for expansion, only 13 (10%) are expected to be culled. A total of 40 cows were culled in 1998 and similar numbers are expected to be culled from the existing herd in 1999. The increase in culled sales above the 1998 will be 33% (13 / 40).
4. All of the added heifers will freshen in 1999, so calf sales will increase in proportion to herd size, 91% ((270 / 141) - 1).
5. There will be no crop or feed sales
6. There will be no change in government receipts or custom work receipts
7. Miscellaneous receipts will increase half as much as the business size, 4% (((197 + 615) / (141+615)) / 2) average cows and acres.
8. They will add one full time person on April 1st for $20,000/year and one part time employee on June 1st for 30hrs/wk at $8/hr. Additional cost for 1999 (before pay increases) is expected to be $21,240 (($20,000 x 9/12) + (30 x $8 x 26weeks)).
9. Machine hire was for trucks to haul dry corn. All corn in 1999 and beyond will be silage or high moisture corn so that expense will be avoided.
10. Assuming machinery repairs are the same for a cow as an acre of land, 1998 machinery expenses can be dived between livestock and crops in proportion to average cow numbers and acres. Since there were 141 cows and 615 acres, 18% (141 / (141 + 615)) is the cow proportion and 82% (615 / (141 + 615)) is the acre proportion. For 1999 the cow proportion will increase 40% ((197 / 141) – 1) with heard size and the acre proportion will increase 5% from increased corn production. With 1998 normalized 1998 machinery repairs of 15,450, planned change in machinery expense is $1,745 ((.4 x .18 x 15,450) + (.05 x .82 x 15,450))
11. Fuel and oil will increase in the same way as machinery repairs.
12. They replace all culled livestock on a cow per cow basis, so replacement stock expense will increase in the same proportion as culled cow numbers.
13. Breeding expense, vet & medicine expense, and other livestock expense are expected to change with average cow numbers, 40% ((197 / 141) – 1).
14. Marketing expense is primarily for milk hauling and some culled livestock expense, it is expected to increase in proportion to milk production.
15. Fertilizer and lime are expected to increase in proportion to corn equivalent acres:

| | **A** | **B** | **A * B** |
|---|---|---|---|
| Crop | % of Corn use / acre | 1998 crop acre mix | Total Corn Eq |
| Corn, Silage + HMC | 1 | 400 | 400 |
| Hay and Haylage | .3 | 175 | 53 |
| Wheat | .6 | 40 | 24 |
| Total | | 615 | 477 |

Assuming similar cropping practices, you can base next years crop costs on the change in your crop mix corn equivalent units.

| | **A** | **B** | **A * B** |
|---|---|---|---|
| Crop | % of Corn use / acre | Planned Acres | Total Corn Eq |
| Corn, Silage + HMC | 1 | 425 | 425 |
| Hay and Haylage | .3 | 190 | 57 |
| Total | | 615 | 482 |

The Base Unit For Projection is a 1% ((482 / 477) - 1) increase and the Planned Change in Expenses is 173 (17,300 x .01).

16. Seed costs are expected to increase in proportion to corn equivalents:

| | A | B | A * B |
|---|---|---|---|
| Crop | % of Corn use / acre | 1998 crop acre mix | Total Corn Eq |
| Corn, Silage + HMC | 1 | 400 | 400 |
| Hay and Haylage | 1.25 | 175 | 220 |
| Wheat | .8 | 40 | 32 |
| Total | | 615 | 652 |

Assuming similar cropping practices, you can base next years crop costs on the change in your crop mix corn equivalent units.

| | A | B | A * B |
|---|---|---|---|
| Crop | % of Corn use / acre | Planned Acres | Total Corn Eq |
| Corn, Silage + HMC | 1 | 425 | 425 |
| Hay and Haylage | 1.25 | 190 | 238 |
| Total | | 615 | 663 |

The Base Unit For Projection is a 2% ((663 / 652) - 1) increase and the Planned Change in Expenses is 176 (8,800 x .02).

17. Chemical and spray expense is expected to increase on corn equivalent units in for the change in crop mix from 1998 to 1999 with the following % of Corn use / acre numbers: Hay acres = .1, wheat acres = .1, corn acres = 1
18. Other crop expenses are expected to increase on corn equivalent units in for the change in crop mix from 1998 to 1999 with the following % of Corn use / acre numbers: Hay acres = .5, wheat acres = .7, high moisture corn acres = 1, shelled corn and corn silage acres = .5
19. Real estate taxes repairs will change in proportion to the change in market value of real estate after lost capital: 19% ((607,520 / 510,000) - 1).
20. Real estate taxes will change in proportion to the change in taxable real estate. There is a ten-year exemption on new buildings, so real estate taxes should not change except for inflation.
21. Real estate rents and leases are not expected to change in 1999.
22. Insurance will change in proportion to total farm assets: 20% ((1,375,101 / 1,141,935) –1)
23. The majority of utility expense is for milk cooling so it will increase in proportion to milk production.
24. Miscellaneous expense will change in proportion to the business size, average cows and acres.
25. Based on discussions with local suppliers, USDA forecasts, and other sources, 1999 inflation adjustments are as entered on the Projected Cash Flows sheet.

**Total Inflows and Outflows**

1. A loan of $745,000 will be taken out to pay off $323,281 in existing loans and finance $429,800 in capital purchases (expansion and additional machinery investment).
2. Principle and interest payments made on existing debt and leases from 1/99 to 7/99 will be $53,585 and after refinancing in 8/99 $56,070 will be spent in the remaining five months of the year.
3. No capital assets will be sold.
4. Family living expense will be $65,000.,
5. Any cash flow deficit will be carried on the operating line of credit

**Additional Data Input for Preparing Income Statement from Cash Flows**

1. Changes in inventory and payables will be as follows on the sheet.

2. Interest expense will be $367 for the lease and on loans $15,552 in interest will be paid before refinancing and will $24,848 be paid after. With an additional $1,500 paid in operating interest, the total interest expense for debt is $41,900.
3. Depreciation will be as follows:
   Machinery will depreciate in the same amount as last year, $31,500.
   Existing Buildings will depreciate $4,950 and the new freestall, parlor, and bunk silo will depreciate 12,190 in the first year. Total = $17,140
   Cattle Depreciation will be $44,800, $29,800 on the existing herd (same as last year) and $15,000 (150,000 value / 5 years x .5 (first year convention)).
4. Taxes are projected to be zero in the transition year due to low net income
5. No gain or loss on the sale of real estate or machinery
6. The gain from livestock sales will be $5,800, same as last year.

## Average Future Year Notes:

**Forage Production Balance**

1. Average future year end (and beginning) inventories will be similar to those for the end of 1999.
2. No forage is planned to be purchased or sold.
3. Forage use per animal will return to 1998 levels
4. Excess forage production less than 15% of total available on the Forage Production Balance, will be considered good and not result in planned sales.
5. Future forage yield projections are as so:

| | Acres | Yield in Tons / Acre | % Dry Matter | Dry Matter Tons |
|---|---|---|---|---|
| Corn Silage | 215 | 25 | .32 | 1720 |
| Hay Silage | 190 | 6 | .4 | 456 |
| Total | | | | 2176 |

**Concentrate Feed Production Balance**

1. Average future year end (and beginning) inventories will be similar to end of 1999 inventories.
2. Feed and concentrate use per animal will be the same as in 1998.
3. Purchased concentrate feed costs will return to 1998 levels.
4. 210 acres of high moisture corn will be planted with an expected yield of 4.1 tons/ acre.
5. 200 tons of high moisture corn will be sold.
6. If they need additional high moisture corn silage, it can be bought for $70/ton.

**Projected Cash Flows**

1. The expected average number of cows in the heard will be 270 and bred heifers will not be grown on the farm.
2. Milk production is expected to return to 1998 levels.
3. Average future mailbox price for milk is expected to be $1.10/cwt. lower than in 1998. Total milk sales of $422,000 divided by 2,715,519 pounds sold of milk in 1998 indicates an average price of $15.54. Therefore, $1.10 lower is a 7% decrease (-1.10 / 15.54).
4. Culled livestock and calf sales will be proportional to average cow numbers.
5. Government Receipts will remain the same.
6. 200 tons of high moisture corn will be sold for $70/ton.
7. Miscellaneous receipts will increase half as much as the increase in business size (total crop acres (excluding pasture) and cows). ((270+615/141+615)-1)/2 = 9%
8. Two added employees (one full time, one part time) will be hired for the full year ($32,480).

9. All costs will have the same inflation as in 1999 except for feed costs and purchased replacements. Feed costs will come from the Forage and Concentrate Feed Balances and purchased replacements will return to 1998 price levels with no inflation.
10. Machinery repair and fuel and oil costs associated with the dairy will change in proportion to herd size. Crop associated costs will increase 5% due to the increased corn silage production. See the example on page 6.
11. Livestock and utilities expenses will change in proportion to cow numbers.
12. The change in the crop program will occur in 1999 and will continue at those levels.
13. Since the new investment was included in the real estate expense estimate of 1999, real estate expenses will continue at 1999 levels (Real estate repairs, taxes, rent and leases, and insurance)
14. Miscellaneous expense will change in proportion to business size (cows plus acres)

**Total Inflows and Outflows**

1. Annual operating interest is projected to be $1,500
2. Average machinery investment is expected to be 14% of 12/31/1999 projected machinery market value, $42,392 ($302,800 * .14).
3. There revolving machinery line of credit it as follows:
   P / Y = 12
   N = 60
   PV =150,000
   FV = 0
   PMT = 3114
   If they make payments for one year, the remaining principle will be $125,122, and they can refinance $24,878 (150,000- 125,122) every year.
4. Future (2000) debt payments will be as follows:
   390,000 – 5 year cattle and revolving machinery loan, 8% monthly payments = $7,908
   395,000 – 15 year real estate mortgage, 8.25% monthly payments = 3,833
   Total monthly payments = 11,741
   Annual debt payments = 140,892 (11,741 * 12)
5. Family living expenses are expected to continue at $65,000 per year.

**Additional Data Input for Preparing Income Statement from Cash Flows**

1. Interest paid in the future (year 2000) is expected to be:

| Loan | Pmts in 2000 | Amount | Total paid | Principle Paid | Interest |
|---|---|---|---|---|---|
| Lease | 5 | $ 284 | $ 1,420 | $ 1,378 | $ 41 |
| Cattle & Mach | 12 | 7,097 | 85,164 | 56,307 | 25,857 |
| Real Estate | 12 | 3,833 | 45,996 | 13,927 | 32,069 |
| Op Interest | | | 1,500 | | 1,500 |
| Total | | | | | 56,467 |

2. Depreciation is expected to be:

| | |
|---|---|
| Machinery – the same as machinery purchases for the year since the average future year is only to maintain the current inventory | $42,392 |
| Real Estate | 29,330 |
| Purchased Breeding Livestock – heifer purchases for the year ($76,697) times .5 since they will be ½depreciated at sale | 38,349 |

3. Gain on the sale of culled livestock will be $11,026, Income from the sale of culled animals minus the undepreciated balance of those animals (49,374 – 38,348)
4. Income taxes are expected to be $10,000

**Average Future Cash Flow Projection Worksheets:**

The completed worksheets for Amber Ridge Farms for an average future year after the expansion has been completed are shown below.

*Forage Production Balance*

NAME Amber Ridge Farms Proiections for ave. future

**FORAGE PRODUCTION BALANCE**

BASE YEAR

BEGINNING OF YEAR INVENTORY

| Crop | Tons | % Dry Matter | Dry matter on hand |
|---|---|---|---|
| Corn silage | 1450 | 0.32 | 464 |
| Hay crop sil | 420 | 0.4 | 168 |
| | | | 0 |
| | | | 0 |
| | | | 0 |
| Total tons dry matter | | | 632 a |

PRODUCTION DURING YEAR

| Crop | Acreage | Tons / acre As fed | % Dry Matter | Dry matter Produced |
|---|---|---|---|---|
| Corn silage | 75 | 25 | 0.32 | 600 |
| Hay crop sil | 175 | 5.6 | 0.4 | 392 |
| | | | | 0 |
| | | | | 0 |
| | | | | 0 |
| | | | | 0 |
| Total tons dry matter | | | | 992 b |

FORAGE PURCHASES DURING YEAR

| Crop | Tons | % Dry Matter | Dry matter Purchased |
|---|---|---|---|
| | | | 0 |
| | | | 0 |
| | | | 0 |
| Total tons dry matter | | | 0 c |

FORAGE SALES DURING THE YEAR

| Crop | Tons | % Dry Matter | Dry matter Sold |
|---|---|---|---|
| | | | 0 |
| | | | 0 |
| | | | 0 |
| Total tons dry matter | | | 0 d |

END OF YEAR INVENTORY

| Crop | Tons | % Dry Matter | Dry matter on hand |
|---|---|---|---|
| Corn silagge | 1310 | 0.32 | 419 |
| Hay crop sil | 515 | 0.4 | 206 |
| | | | 0 |
| | | | 0 |
| | | | 0 |
| Total tons dry matter | | | 625 e |

Total tons dry matter used (disappearance)
(beg.+ produced + purchases - sales - end)(a+b+c-d-e) 999 f

ANIMAL UNITS

| Animal | units/animal | Number of Animals | Total units |
|---|---|---|---|
| Cows | 1 | 141 | 141 |
| Bred heifers | 1 | | 0 |
| Open heifers | | | 0 |
| Calves | | | 0 |
| Total units | | | 141 g |

| | | |
|---|---|---|
| Base year dry matter used (f) | | 999 |
| Base year number of animal units (g) | | 141 |
| Base year dry matter per animal unit (f/g) | | 7.09 |
| 1.0 plus percent change in feed use in planned year | (x) | 1 |
| Planned year dry matter per animal unit | | 7.09 |

PLANNED YEAR

| Tons | % Dry Matter | Dry matter on hand |
|---|---|---|
| 3580 | 0.32 | 1146 |
| 570 | 0.4 | 228 |
| | | 0 |
| | | 0 |
| | | 0 |
| | | 1374 h |

| Acreage | Tons / acre As fed | % Dry Matter | Dry matter Produced |
|---|---|---|---|
| 215 | 25 | 0.32 | 1720 |
| 190 | 6 | 0.4 | 456 |
| | | | 0 |
| | | | 0 |
| | | | 0 |
| | | | 0 |
| Total tons dry matter | | | 2176 i |

| Tons | % Dry Matter | Dry matter Purchased |
|---|---|---|
| | | 0 |
| | | 0 |
| | | 0 |
| Total tons dry matter | | 0 j |

| Tons | % Dry Matter | Dry matter Sold |
|---|---|---|
| | | 0 |
| | | 0 |
| | | 0 |
| Total tons dry matter | | 0 k |

| Tons | % Dry Matter | Dry matter on hand |
|---|---|---|
| 3580 | 0.32 | 1146 |
| 570 | 0.4 | 228 |
| | | 0 |
| | | 0 |
| | | 0 |
| Total tons dry matter | | 1374 l |

Total tons of dry matter available
(h+i+j-k-l) 2176 m

| Number of Animals | Total units |
|---|---|
| 270 | 270 |
| | 0 |
| | 0 |
| | 0 |
| | 270 n |

| | | |
|---|---|---|
| Planned year dry matter per animal unit | | 7.09 |
| Planned yr. no. of animal units (n) | (x) | 270 |
| Planned year dry matter use | | 1914 |
| Planned year dry matter availability | (-) | 2176 |
| Deficit (or excess) tons dry matter | | -262 |

*Concentrate Feed Production Balance*

NAME Amber Ridge Farms  Projections for ave. future

**CONCENTRATE FEED PRODUCTION BALANCE**

| Concentrate or feed crop | | Purchased feed | High moisture corn | | | |
|---|---|---|---|---|---|---|
| (UNIT) | | dollars | Tons | | | |
| **BASE YEAR** | | | | | | |
| Production: | | | | | | |
| Acres | | | 100 | | | |
| Yield/acre | | | 4.2 | | | |
| Amount produced | (a) | 0 | 420 | | | |
| Beginning inventory | (b) | 2480 | 300 | | | |
| Purchases | (c) | 95000 | | | | |
| Sales | (d) | | | | | |
| End inventory | (e) | 2550 | 345 | | | |
| Amount used (a+b+c-d-e) | | 94930 | 375 | | | |
| Base year animal units | | 141 | 141 | | | |
| Base year use/animal unit | | 673.26 | 2.660 | | | |
| 1+ % change in plan year use | | 1.00 | 1.00 | | | |
| Planned year use/ animal unit | | 673.26 | 2.660 | | | |
| Planned year animal units | | 270 | 270 | | | |
| Total planned year use | (f) | 181780 | 718 | | | |
| **PLANNED YEAR** | | | | | | |
| Production: | | 0 | | | | |
| Acres | | | 210 | | | |
| Yield/acre | | | 4.1 | | | |
| Amount produced | | 0 | 861 | | | |
| Beginning inventory | | 3000 | 615 | | | |
| Purchases | (accrual) | | | | | |
| Sales | | | 200 | | | |
| End inventory | | 3000 | 615 | | | |
| Amount available plan year | (g) | 0 | 661 | | | |
| Planned use - available | (f-g) | 181780 | 57 | | | |
| Planned year price per unit | | 1 | 70 | | | |
| Planned year excess / deficit | | 181780 | 3990 | | | |
| Planned year cost ($) | | | | | | |

Total planned year feed cost (sum of individual concentrates and crops) 185770

| ANIMAL UNITS | | Base Year | | Planned Year | |
|---|---|---|---|---|---|
| Animal | units/animal | Number of Animals | Total units | Number of Animals | Total units |
| Cows | 1 | 141 | 141 | 270 | 270 |
| Bred heifers | 1 | | 0 | 0 | 0 |
| Open heifers | | | 0 | | 0 |
| Calves | | | 0 | | 0 |
| Total units | | | 141 | | 270 |

Projected Cash Flows

NAME Amber Ridge Farms Projections for ave. future

**PROJECTED CASH FLOWS**

| Operating Receipt Item | Base unit for Projections | Normal Accrual Receipts | Planned Change in Receipts | Percent Inflation Adjustment | Projected Cash Receipts |
|---|---|---|---|---|---|
| Milk, eggs | +91% | 422100 | 384111 | -7 | 749776 |
| Culled livestock | +91% | 23500 | 21385 | 10 | 49374 |
| Breeding stock | | 0 | | | 0 |
| Feeding livestock | | 0 | | | 0 |
| Calves | +91% | 6200 | 5642 | 10 | 13026 |
| Crop sales | no sales | 56060 | -56060 | | 0 |
| Feed Sales | 200 x $70 | 0 | 14000 | | 14000 |
| Government Rct's | | 15600 | | | 15600 |
| Custom work | | 2200 | | 1 | 2222 |
| Miscellaneous | +9% | 12800 | 1152 | 2 | 14231 |
| **Total** | | 538460 | | | 858229 |

| Operating Expense Item | Base Unit for Projections | Normal Accrual Expenses | Planned Change in Expenses | Percent Inflation Adjustment | Projected Cash Expenses |
|---|---|---|---|---|---|
| Hired labor | 20,000+12,480 | 19500 | 32480 | 2 | 53020 |
| Livestock feed | concenrtate bal | 95000 | 90770 | | 185770 |
| Stock roughage | forage balance | 0 | | | 0 |
| Machine hire | not hired | 900 | -900 | | 0 |
| Mach. repairs | +91%c,+5%a | 15450 | 3164 | 2 | 18986 |
| Fuel and oil | +91%c,+5%a | 14200 | 2908 | | 17108 |
| Replacement stock | +91% | 40146 | 36533 | | 76679 |
| Pur. feeding stock | | 0 | | | 0 |
| Breeding | +91% | 4400 | 4004 | 2 | 8572 |
| Vet & medicine | +91% | 12400 | 11284 | 3 | 24395 |
| Bedding | | 0 | | | 0 |
| Livestock supplies | | 0 | | | 0 |
| Cattle lease & rent | | 0 | | | 0 |
| Custom boarding | | 0 | | | 0 |
| bST | +91% | 12400 | 11284 | 3 | 24395 |
| Other livest'k exp. | +91% | 7400 | 6734 | 2 | 14417 |
| Marketing | +91% | 3300 | 3003 | 2 | 6429 |
| Fertilizer & lime | +1% | 17300 | 173 | 3 | 17997 |
| Seeds & plants | +2% | 8800 | 176 | | 8976 |
| Chemicals, spray | +5% | 11200 | 560 | 2 | 11995 |
| Storage & drying | | 0 | | | 0 |
| Other crop exp. | -14% | 12900 | -1806 | 1 | 11205 |
| Real estate repairs | +19% | 10200 | 1938 | 1 | 12259 |
| Taxes | | 35900 | | 3 | 36977 |
| R.E. rent & lease | | 11500 | | | 11500 |
| Insurance | +20% | 10000 | 2000 | 2 | 12240 |
| Utilities | +91% | 8600 | 7826 | 2 | 16755 |
| Miscellaneous | +17% | 8800 | 1496 | 2 | 10502 |
| **Total** | | 360296 | | | 580177 |
| | | | Projected cash receipts minus expense excluding interest | | 278052 |

*Total Inflows and Outflows*

Name Amber Ridge Farms Year ave. future

## TOTAL INFLOWS AND OUTFLOWS

| | | | |
|---|---|---|---|
| Total cash income | | 858229 | |
| Total cash expenses (Excluding Interest) | (-) | 580177 | |
| Operating interest expense | (-) | 1500 | |
| Net cash income | | | 276552 |
| Nonfarm cash income | | | (+) |
| Capital asset sales | | | (+) |
| Funds borrowed | | | (+) 24878 |
| TOTAL INFLOWS | | | 301430 |
| Scheduled term debt payments (principle and interest): | | | |
| Before refinancing | | 140892 | |
| After refinancing | (+) | | |
| Total | | 140892 | |
| Principal refinanced (and included in funds borrowed) | (+) | | |
| Capital investments | (+) | 42392 | |
| Family living expenses | (+) | 65000 | |
| TOTAL OUTFLOWS | | | (-) 248284 |
| NET CASH FLOW EXCESS (DEFICIT) | | | 53146 |

*Additional Data Input for Preparing Income Statement from Cash Flows*

Name: Amber Ridge Farms Year: ave. future

**ADDITIONAL DATA INPUT FOR PREPARING INCOME STATEMENT FROM CASH FLOW PROJECTIONS**

**Inventory change from beginning to end of projected year (from balance sheet)**

Assets that influence income:

| | | |
|---|---|---|
| Crop and feed inventory | | |
| Raised breeding livestock (quanitity only) | | |
| Feeder livestock and poultry | | |
| Notes and accounts receivable | | |
| Advance government payments | | |

Assets and liabilities that influence expenses:

| | | |
|---|---|---|
| Investment in growing crops | | |
| Supplies | | |
| Prepaid expenses | | |
| Accounts payable | | |
| Accrued property and R.E. taxes | | |
| Accrued employer payroll withholding | | |
| Accrued rent and lease payments | | |
| Total accrual expense adjustment | | 0 |
| Accrued interest | | |
| * Current portion of deferred taxes (farm) | | |
| * Accrued income and Social Security taxes (farm) | | |
| ** Accrued income and Social Security taxes (nonfarm) | | |

**Interest expense**

| | |
|---|---|
| Interest on loans (cash or by renewal) | 59426 |
| Interest portion of capital lease payments | 41 |

**Depreciation**

| | |
|---|---|
| Depreciation on Machinery and Equipment | 42392 |
| Depreciation on buildings and improvements | 29330 |
| Depreciation on purchased breeding livestock | 38349 |
| Depreciation portion of capital lease payments | |

**Hedging** Net income from hedging operations

**Non-operating gains and losses**

| | |
|---|---|
| Gain or loss on sale of machinery and RE | |
| Gain or loss on sale of purchased breeding livestock | 11026 |
| Percent of income from sale of purchased animals: | |
| Culled livestock | 100 |
| Breeding stock | |
| Change in base value of raised breeding livestock | |

**Taxes**

| | |
|---|---|
| * Cash farm income tax expense | 10000 |
| ** Cash nonfarm income tax expense | |

**Nonfarm income**

| | |
|---|---|
| ** Operator and Spouses wage off farm (net of expenses) | |
| ** Interest and dividends | |
| ** Gain or loss on the sale of nonfarm assets | |
| ** Other nonfarm income | |
| ** **Extraordinary income or expense** | |

* Required only if after tax farm income is being calculated
** Required only if nonfarm income is included in net income calculation

*Income Statement*

**INCOME STATEMENT**

Name Amber Ridge Farms — For 12 month period ending ave. future
Address

| | | | |
|---|---|---|---|
| Farm Revenue | | | |
| Crops & feed sold | | | |
| Cash sales | 14000 (1a) | | |
| Inventory change (Sch) | 0 (1b) | 14000 (1) | |
| Raised breeding livestock | | | |
| Cash sales: culled animals | 0 (2a) | | |
| sold for breeding | 0 (2b) | | |
| Quant. Inven. change (Sch) | 0 (2c) | | |
| Gain/loss on sale of purchased breeding stock (Sch) | 11026 (2d) | 11026 (2) | |
| Feeder lvstk. & poultry sold: | | | |
| Cash sales | 13026 (3a) | | |
| Inventory change (Sch) | 0 (3b) | 13026 (3) | |
| Milk, eggs & other products: | | | |
| Cash sales | | 749776 (4) | |
| Change in notes and accts. receivable (Sch) | | 0 (5) | |
| Custom work: cash | | 2222 (6) | |
| Gov't payments and patronage dividends: | | | |
| Cash received | 15600 (7a) | | |
| Changein adv. pmts. (Sch) | 0 (7b) | 15600 (7) | |
| Income from hedging trans. (Sch) | | 0 (8) | |
| Other | | 14231 (9) | |
| Gross revenue (add lines 1 thru 9) | | | 819881 (a) |
| Farm Expenses | | | |
| Feeding lvstk. & poultry purch. | | 0 (10) | |
| Feed purchased | | 185770 (11) | |
| Other cash oper. exp. (Sch) | | 394407 (12) | |
| Accrual expense adj. (Sch) | | 0 (13) | |
| Depreciation: | | | |
| Machinery & equipment (Sch) | 42392 (14a) | | |
| Fixed farm improvements (Sch) | 29330 (14b) | | |
| Purchased breeding stock (Sch) | 38349 (14c) | | |
| Portion of capital leases (Sch) | 0 (14d) | 110071 (14) | |
| Total oper. exp. (add lines 10 thru 14) | | | 690248 |
| Interest exp. (Sch) | | | 59467 |
| Total expenses | | | 749715 (b) |
| Net income from farm operations | | (a-b) | 70166 (c) |
| Gain or loss on: | | | |
| Disposal of machinery and RE (Sch) | | | 0 |
| Base value change (Sch) | | | 0 |
| NET FARM INCOME | | | 70166 |
| Farm income tax expense (sch) | | | 10000 |
| AFTER TAX NET FARM INCOME | | | 60166 (d) |
| Nonfarm Income (Sch) | | | |
| Operator & Spouses wage off farm (net of exp.)(Sch) | | 0 (15) | |
| Interest and dividends (Sch) | | 0 (16) | |
| Gain (loss) on sale of nonfarm assets (Sch) | | 0 (17) | |
| Other | | 0 (18) | |
| NET NONFARM INCOME (add lines 15-18) | | | 0 (e) |
| Nonfarm income tax expense ( Sch) | | | 0 (f) |
| AFTER TAX NET NONFARM INCOME | | (e-f) | 0 (g) |
| Income before extraordinary items | | (d+g) | 60166 (h) |
| Extraordinary items - net of tax (explain) | | | 0 (i) |
| NET INCOME | | | 60166 |

# 1997 Balance Sheet

**Balance Sheet - End of Last Year (Beginning Balance)**

Name Amber Ridge Farms as of 12/31/97

Address

| **Assets** | | | | | Cost Value | 0 |
|---|---|---|---|---|---|---|
| Cash, checking & savings accts. | | | | | 2750 | 2750 |
| Marketable stock, bonds (B6) | | | | | 0 | 0 |
| Hedging account equity | | | | | 0 | 0 |
| Accounts receivable | | | | | 51700 | 51700 |
| Livestock & poultry to be sold: | | | | | | |
| Kind | no. | ave.# | $/Unit | Value | | |
| | | | | 0 | | |
| | | | | 0 | | |
| | | | | 0 | | |
| | | | | 0 | | |
| | | | | 0 | 0 | 0 |
| | | Tax basis | | | | |
| Crops and feed: | | | | | | |
| Item | Quant. | Unit | $/Unit | Value | | |
| Shell Corn | 420 | Tons | 103 | 43260 | | |
| Wheat | 1700 | Bu | 3.45 | 5865 | | |
| Corn Silage | 1450 | Tons | 20 | 29000 | | |
| HM Corn | 300 | Tons | 88 | 26400 | | |
| Hay C Silage | 420 | Tons | 40 | 16800 | | |
| Concentrate | 8 | Tons | 310 | 2480 | 123805 | 123805 |
| Cash invest. in growing crops: | | | | | | |
| Crop | Acres | $/Unit | Value | | | |
| Wheat | 40 | 65 | 2600 | | | |
| | | | 0 | | 2600 | 2600 |
| Supplies (sch. B4) | | | | | 2000 | 2000 |
| Prepaid expense | | | | | 1100 | 1100 |
| Other | | | | | 0 | 0 |
| **Total Current Farm Assets** | | | | | 183955 | 183955 |
| Noncurrent Farm Assets | | | | | | |
| Notes and accounts receivable | | | | | 0 | 0 |
| Breeding stock: purchased | | | | | 100650 | 123300 |
| raised | | | | | | |
| Machinery (sch. B2) | | | | | 141500 | 300500 |
| Livestock leases (sch. B8) | | | | | 0 | 0 |
| Machinery leases (sch. B8) | | | | | 7119 | 7119 |
| Building leases (sch. B8) | | | | | 0 | 0 |
| Cooperative investment (sch. B6) | | | | | 15300 | 15300 |
| Farm real estate (sch. B3) | | | | | 317225 | 505000 |
| Contracts receivable | | | | | 0 | 0 |
| Other | | | | | 0 | 0 |
| **Total Noncurrent Farm Assets** | | | | | 581794 | 951219 |
| **Total Farm Assets** | | | | | 765749 | 1135174 |
| Nonfarm Assets: | | | | | Tax basis | |
| Current: | | | | | 0 | 0 |
| Marketable stock, bonds(B6) | | | | | | |
| Other | | | | | 0 | 0 |
| Noncurrent: | | | | | 0 | 0 |
| Retirement accounts | | | | | | |
| Cash value of life ins. | | | | | | |
| Vehicles & household (B5) | | | | | | |
| Nonfarm R.E. (Sch B7) | | | | | | |
| Other | | | | | | |
| **Total Nonfarm Assets** | | | | | 0 | 0 |
| **Total Assets** | | | | | 765749 | 1135174 |

| **Liabilities** | | | | Market Value |
|---|---|---|---|---|
| Accounts payable: | | | | |
| Labor 0 | Feed | 4000 | | |
| Repair 350 | Fert. | 0 | | |
| 0 0 | | 0 0 | | |
| Chem. | Fuel | 600 | | 4950 |
| Notes payable within 12 mo | | | | |
| | | | | 1 |
| | | | | 2 |
| | | | | 3 |
| Principal portion of longer term debt due within 12 mo. | | | | |
| Noncurrent debts: notes | | | | 46922 |
| (sch. B9) mortgages | | | | 9710 |
| Capital leases (sch.B8) | | | | 2699 |
| Estimated accrued interest on: | | | | |
| Accts | Notes | | | |
| Noncurrent liab(B9) | | 1830 | | |
| Capital leases (B8) | | 71 | | 1901 |
| Estimated accrued taxes: | | | | |
| Real estate & property tax | | | | 0 |
| Employer payroll withhold | | | | 350 |
| Accrued rent & lease pmts. | | | | |
| Advance gov't receipts | | | | 0 |
| Other | | | | 0 |
| Deferred taxes (current portion - Sch. B10) | | | | 73082 |
| Accrued farm income & S.S tax | | | | 1350 |
| **Total Current** | | Cost Value | | |
| **Farm Liabilities** | | 67882 | | 140964 |
| Noncurrent Farm Liabilities | | | | |
| (Principal due beyond 12 mo.) | | | | |
| Notes payable (Sch. B9) | | | | 168205 |
| | | | | 0 |
| Mortgages & Contracts (Sch. B9) | | | | 156836 |
| | | | | 0 |
| | | | | 0 |
| Leases (Sch. B8) | | | | 4420 |
| Deferred taxes (noncurrent portion - Sch. B10) | | | | 95057 |
| | | Cost Value | | |
| **Total Noncurrent** | | 329461 | | 424518 |
| **Total Farm Liabilities** | | 397343 | | 565482 |
| **Farm Owner Equity** | | 368406 | | 569692 |
| Nonfarm Liabilities: | | | | |
| Current: | | | | 0 |
| | | | | 0 |
| Noncurrent: | | | | 0 |
| | | | | 0 |
| | | | | 0 |
| Deferred tax: nonfarm (B10) | | | | 0 |
| Accrued nonfarm income & s.s. tax | | | | 0 |
| **Total Nonfarm Liabilities** | | | | 0 |
| **Total Liabilities** | | | | 565482 |
| **Owner Equity** | | | | 569692 |
| **Total Liab.&Owner Equity** | | | | 1135174 |

# 1998 Balance Sheet

**Balance Sheet - End of Last Year (Beginning Balance)**

Name: Amber Ridge Farms  as of: 12/31/98

Address:

| **Assets** | | | | Cost Value | 0 | **Liabilities** | | Market Value |
|---|---|---|---|---|---|---|---|---|
| Cash, checking & savings accts. | | | | 3900 | 3900 | Accounts payable: | | |
| Marketable stock, bonds (B6) | | | | 0 | 0 | Labor 0 | Feed 4200 | |
| Hedging account equity | | | | 0 | 0 | Repair 200 | Fert. 0 | |
| Accounts receivable | | | | 43100 | 43100 | 0 0 0 | 0 | |
| Livestock & poultry to be sold: | | | | | | Chem. | Fuel 300 | 4700 |
| Kind | no. | ave.# | $/Unit | Value | | Notes payable within 12 mo | | |
| | | | | 0 | | | | 1 |
| | | | | 0 | | | | 2 |
| | | | | 0 | | | | 3 |
| | | | | 0 | | Principal portion of longer | | |
| | | | | 0 | 0 0 | term debt due within 12 mo. | | |
| | | Tax basis | | | | Noncurrent debts: notes | | 51997 |
| Crops and feed: | | | | | | (sch. B9) mortgages | | 10807 |
| Item | Quant. | Unit | $/Unit | Value | | Capital leases (sch.B8) | | 3041 |
| Shell Corn | 475 | Tons | 75 | 35625 | | Estimated accrued interest on: | | |
| Wheat | 1660 | Bu | 2.75 | 4565 | | Accts | Notes | |
| Corn Silage | 1310 | Tons | 20 | 26200 | | Noncurrent liab(B9) | 1620 | |
| HM Corn | 345 | Tons | 65 | 22425 | | Capital leases (B8) | 44 | 1664 |
| Hay C Silage | 515 | Tons | 40 | 20600 | | Estimated accrued taxes: | | |
| Concentrate | 10 | Tons | 255 | 2550 | 111965 111965 | Real estate & property tax | | 0 |
| | | | | | | Employer payroll withhold | | 250 |
| Cash invest. in growing crops: | | | | | | Accrued rent & lease pmts. | | |
| Crop | Acres | $/Unit | Value | | | Advance gov't receipts | | 0 |
| Wheat | 35 | 70 | 2450 | | | Other | | 0 |
| | | | 0 | 2450 | 2450 | Deferred taxes (current | | |
| Supplies (sch. B4) | | | | 2300 | 2300 | portion - Sch. B10) | | 67704 |
| Prepaid expense | | | | 8000 | 8000 | Accrued farm income & S.S tax | | 5500 |
| Other | | | | 0 | 0 | **Total Current** | Cost Value | |
| **Total Current Farm Assets** | | | | 171715 | 171715 | **Farm Liabilities** | 77959 | 145663 |
| Noncurrent Farm Assets | | | | | | Noncurrent Farm Liabilities | | |
| Notes and accounts receivable | | | | 0 | 0 | (Principal due beyond 12 mo.) | | |
| Breeding stock: purchased | | | | 109244 | 138600 | Notes payable (Sch. B9) | | 150636 |
| raised | | | | | | | | 0 |
| Machinery (sch. B2) | | | | 142600 | 302800 | Mortgages & Contracts (Sch. B9) | | 145886 |
| Livestock leases (sch. B8) | | | | 0 | 0 | | | 0 |
| Machinery leases (sch. B8) | | | | 4420 | 4420 | | | 0 |
| Building leases (sch. B8) | | | | 0 | 0 | Leases (Sch. B8) | | 1379 |
| Cooperative investment (sch. B6) | | | | 14400 | 14400 | Deferred taxes (noncurrent | | |
| Farm real estate (sch. B3) | | | | 312275 | 510000 | portion - Sch. B10) | | 100274 |
| Contracts receivable | | | | 0 | 0 | | Cost Value | |
| Other | | | | 0 | 0 | **Total Noncurrent** | 297901 | 398175 |
| **Total Noncurrent Farm Assets** | | | | 582939 | 970220 | **Total Farm Liabilities** | 375860 | 543838 |
| **Total Farm Assets** | | | | 754654 | 1141935 | **Farm Owner Equity** | 378794 | 598097 |
| Nonfarm Assets: | | | | Tax basis | | Nonfarm Liabilities: | | |
| Current: | | | | 0 | 0 | Current: | | 0 |
| Marketable stock, bonds(B6) | | | | | | | | 0 |
| Other | | | | 0 | 0 | Noncurrent: | | 0 |
| Noncurrent: | | | | 0 | 0 | | | 0 |
| Retirement accounts | | | | | | | | 0 |
| Cash value of life ins. | | | | | | Deferred tax: nonfarm (B10) | | 0 |
| Vehicles & household (B5) | | | | | | Accrued nonfarm income & s.s. tax | | 0 |
| Nonfarm R.E. (Sch B7) | | | | | | **Total Nonfarm Liabilities** | | 0 |
| Other | | | | | | **Total Liabilities** | | 543838 |
| **Total Nonfarm Assets** | | | | 0 | 0 | **Owner Equity** | | 598097 |
| **Total Assets** | | | | 754654 | 1141935 | **Total Liab.&Owner Equity** | | 1141935 |

# 1999 Proforma Balance Sheet

**Balance Sheet - End of Last Year (Beginning Balance)**

Name: Amber Ridge Farms  as of: 12/31/99

Address:

| **Assets** | | | | | Cost Value | 0 | **Liabilities** | | | Market Value |
|---|---|---|---|---|---|---|---|---|---|---|
| Cash, checking & savings accts. | | | | | 3900 | 3900 | Accounts payable: | | | |
| Marketable stock, bonds (B6) | | | | | 0 | 0 | Labor 0 | Feed | | |
| Hedging account equity | | | | | 0 | 0 | Repair | Fert. | 0 | |
| Accounts receivable | | | | | 61998 | 61998 | 0 0 | All | 8574 | |
| Livestock & poultry to be sold: | | | | | | | Chem. | Fuel | | 8574 |
| Kind | no. | ave.# | $/Unit | Value | | | Notes payable within 12 mo | | | |
| | | | | 0 | | | | | | 1 |
| | | | | 0 | | | | | | 2 |
| | | | | 0 | | | | | | 3 |
| | | | | 0 | | | Principal portion of longer | | | |
| | | | | 0 | 0 | 0 | term debt due within 12 mo. | | | |
| | | Tax basis | | | | | Noncurrent debts: notes | | | 59307 |
| Crops and feed: | | | | | | | (sch. B9) mortgages | | | 13927 |
| Item | Quant. | Unit | $/Unit | Value | | | Capital leases (sch.B8) | | | 1379 |
| Corn Silage | 3580 | Tons | 20 | 71600 | | | Estimated accrued interest on: | | | |
| HM Corn | 645 | Tons | 65 | 41925 | | | Accts | Notes | | |
| Hay C Silage | 570 | Tons | 40 | 22800 | | | Noncurrent liab(B9) | | 2655 | |
| Concentrate | 3000 | | 1 | 3000 | | | Capital leases (B8) | | 14 | 2669 |
| | | | | 0 | | | Estimated accrued taxes: | | | |
| | | | | 0 | 139325 | 139325 | Real estate & property tax | | | 0 |
| | | | | | | | Employer payroll withhold | | | 500 |
| Cash invest. in growing crops: | | | | | | | Accrued rent & lease pmts. | | | |
| Crop | Acres | $/Unit | Value | | | | Advance gov't receipts | | | 0 |
| | | | | 0 | | | Other | | | 0 |
| | | | | 0 | 0 | 0 | Deferred taxes (current | | | |
| Supplies (sch. B4) | | | | | 3454 | 3454 | portion - Sch. B10) | | | 81074 |
| Prepaid expense | | | | | 0 | | Accrued farm income & S.S tax | | | |
| Other | | | | | 0 | 0 | **Total Current** | Cost Value | | |
| **Total Current Farm Assets** | | | | | 208677 | 208677 | **Farm Liabilities** | | 86356 | 167430 |
| Noncurrent Farm Assets | | | | | | | Noncurrent Farm Liabilities | | | |
| Notes and accounts receivable | | | | | 0 | 0 | (Principal due beyond 12 mo.) | | | |
| Breeding stock: purchased | | | | | 249104 | 254700 | Notes payable (Sch. B9) | | | 290693 |
| raised | | | | | | | | | | 0 |
| Machinery (sch. B2) | | | | | 142600 | 302800 | Mortgages & Contracts (Sch. B9) | | | 381073 |
| Livestock leases (sch. B8) | | | | | 0 | 0 | | | | 0 |
| Machinery leases (sch. B8) | | | | | 1379 | 1379 | | | | 0 |
| Building leases (sch. B8) | | | | | 0 | 0 | Leases (Sch. B8) | | | |
| Cooperative investment (sch. B6) | | | | | 25 | 25 | Deferred taxes (noncurrent | | | |
| Farm real estate (sch. B3) | | | | | 538935 | 607520 | portion - Sch. B10) | | | 57803 |
| Contracts receivable | | | | | 0 | 0 | | Cost Value | | |
| Other | | | | | 0 | 0 | **Total Noncurrent** | | 671766 | 729569 |
| **Total Noncurrent Farm Assets** | | | | | 932043 | 1166424 | **Total Farm Liabilities** | | 758122 | 896999 |
| **Total Farm Assets** | | | | | 1140720 | 1375101 | **Farm Owner Equity** | | 382598 | 478102 |
| Nonfarm Assets: | | | | | Tax basis | | Nonfarm Liabilities: | | | |
| Current: | | | | | 0 | 0 | Current: | | | 0 |
| Marketable stock, bonds(B6) | | | | | | | | | | 0 |
| Other | | | | | 0 | 0 | Noncurrent: | | | 0 |
| Noncurrent: | | | | | 0 | 0 | | | | 0 |
| Retirement accounts | | | | | | | | | | 0 |
| Cash value of life ins. | | | | | | | Deferred tax: nonfarm (B10) | | | 0 |
| Vehicles & household (B5) | | | | | | | Accrued nonfarm income & s.s. tax | | | 0 |
| Nonfarm R.E. (Sch B7) | | | | | | | **Total Nonfarm Liabilities** | | | 0 |
| Other | | | | | | | **Total Liabilities** | | | 896999 |
| **Total Nonfarm Assets** | | | | | 0 | 0 | **Owner Equity** | | | 478102 |
| **Total Assets** | | | | | 1140720 | 1375101 | **Total Liab.&Owner Equity** | | | 1375101 |