



# Computerizing Your Farm Records

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This white paper was written for producers who are just beginning the process of computerizing farm records or for those wanting to upgrade current systems for better access to important management information.

Today, there are many software programs available that offer solutions spanning from simple bookkeeping to accrual and managerial accounting.

Selecting the RIGHT software to manage your farm is not an easy task.

This information will simplify the selection process and help you avoid mistakes.

Red Wing Software has over twenty-five years of experience developing and supporting software for agriculture. In this white paper, we make software recommendations based on our experience working with producers who have computerized their financial records. The recommendations will provide you with a system that is fast, easy to operate, versatile, and productive for years to come.

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## WHY COMPUTERIZE YOUR FARM RECORDS

Good financial data gives you the competitive edge and the confidence you need to make smart business decisions for your operation's bottom line. The single most important use for a computer on the farm is for financial recordkeeping and ANALYSIS.

### **Advantages of doing financial ANALYSIS on a computer**

- Immediate availability of the reports that your banker requires for loan renewal. (Balance sheet, Income Statement, Cash Flow)
- Improved planning of future profits based on actual history using the vast budgeting capabilities of today's computer software.
- Improved asset purchase decisions based on information available from the analysis, from which you can improve profits with the new asset and cash flow the payments.

- Pinpointing and elimination of unprofitable profit centers.

### **When to Start**

Don't immediately throw out that cumbersome, old manual system or old software in order to let the computer do all of the work. Once you've made the decision to automate, there are still some things to consider.

### **Accounting Needs**

A good financial management software system can be an improvement over a good manual accounting system, but it can not help a poor one. Make sure you're familiar with the accounting needs of your business.

### **Financial Commitment**

You will need to make a financial commitment, however a good system provides great value for the investment. At the time of this writing, you should expect to invest around \$1000 to \$3,000 for a good system (including software, annual upgrades and support). Beware of spending too little and settling for a system that doesn't meet the needs of an agriculture business.

### **Time Commitment**

Time must be allotted for setting up and learning your new software program. For the first 30 - 90 days, you'll probably want to maintain your manual system or old software and the system in parallel, which means double duty. Once the system is up and running, your efficiency will start to improve.

### **Shopping for a Computer**

The sole function of a computer is to operate software; much like a grain bin is used to provide storage for grain. No one would suggest that you limit the number of acres you farm to fit the size of your grain bin. Yet that is exactly the way many producers begin buying a computer system. Producers who do not already own a computer buy a computer first and then start looking for software to automate their farm operation. The options for review are immediately limited to software that will run on that particular machine. Find software that will give you a financial management system that is exactly right for your farm. Then your hardware selection can be more focused and efficient.

### **How to Evaluate Your Needs**

Before you begin shopping for software, it is essential that you prepare a checklist of your needs. List everything you want from the system. That sounds simple enough, but it is seldom done. Make sure the software fits your particular situation. Be sure to include the needs of any other businesses in which you are involved in, such as seed sales or trucking. Some integrated computer software systems cannot handle reporting for multiple businesses. Do not shortchange yourself. List everything, even if you are not sure it can be done; let the vendor tell you if your request is impractical. It never hurts to ask. To help you get started, we have included a few benefits that you might want to find in the financial management software you choose. Use the space in front of each item to indicate its relative importance to your business.

## SOFTWARE CONSIDERATIONS

### Software Functions and General Features Checklist

**IMPORTANT: Reports MUST conform to Generally Accepted Accounting Principles (GAAP)**

#### EASE OF USE

- ☐ Windows® driven
- ☐ Clear, concise & consistent screens
- ☐ Shortcut keys used for quick tasking
- ☐ Defaulting feature used for repeated entries
- ☐ Easy editing with audit trail
- ☐ Deleting allowed with audit trail
- ☐ Help feature to aid in entry
- ☐ Program flows in a logical sequence

#### SPEED

- ☐ Fast and easy transaction entry
- ☐ Real time data posting
- ☐ System does not slow down with increased amount of data

#### INTEGRATED

- ☐ Transactions automatically adjust assets, loans, and inventories
- ☐ Reports available directly from transaction entries
- ☐ Integrations with other software such as production records

#### ACCOUNTS

- ☐ User defined numbers in the Chart of Accounts
- ☐ Unlimited accounts available
- ☐ Updateable account list

#### PROFIT CENTERS

- ☐ Profit centers tracked by fiscal year and production year
- ☐ Unlimited profit center tracking
- ☐ Multiple levels of profit centers allowed
- ☐ Differentiation between profit centers and production centers
- ☐ Two-quantity tracking allowed for each profit center (i.e. pounds & number of head)

## **SPECIFIC FEATURES**

- \_\_\_ The program provides both cash-basis tax information and accrual management reports
- \_\_\_ Intra-farm transfers allowed (grain fed to hogs)
- \_\_\_ Assets listed with cost, market value, book value and depreciation
- \_\_\_ Loans tracked by principal, interest rate and accrued interest
- \_\_\_ Inventory can be kept with two quantities
- \_\_\_ Accounts payable available
- \_\_\_ Accounts receivable with invoicing available
- \_\_\_ Handles multiple entities that can be combined for analysis or reported individually
- \_\_\_ Handles Inter-entity transactions
- \_\_\_ Livestock purchased for resale is tracked (purchased now and expensed when sold)
- \_\_\_ Owner's equity maintained (retained earnings & contributions)
- \_\_\_ Investments in production / work -in-process tracked
- \_\_\_ Checks can be "batch" printed
- \_\_\_ A vendor file for checks and labels maintained
- \_\_\_ Reports can be run any time
- \_\_\_ Instructions for error handling included
- \_\_\_ All transaction detail maintained

## **EDITING ABILITY**

- \_\_\_ Mistakes corrected or additional transactions can be entered in previous accounting periods
- \_\_\_ Correction of errors before or after end of month or end of year allowed
- \_\_\_ Transactions can be edited before or after posting
- \_\_\_ Audit trail generated

## **AVAILABLE REPORTS**

- \_\_\_ General ledger listing - listing transactions by account
- \_\_\_ P&L statements monthly, quarterly and yearly
- \_\_\_ Cash flow budget and actual
- \_\_\_ Profit center analysis budget and actual
- \_\_\_ Balance sheet at end of any month, quarter or year
- \_\_\_ Trial Balance Report

- \_\_\_ Schedule F tax information
- \_\_\_ Checkbook reconciliation
- \_\_\_ Ability to search for transactions that match user-defined criteria
- \_\_\_ Reports listed in user-defined format

### **STANDARD COMPLIANCE**

- \_\_\_ Maintains information to meet industry standards
- \_\_\_ Reports information in industry standard formats
- \_\_\_ Conforms to GAAP

## **HOW TO START THE SOFTWARE REVIEW**

Now that you have identified what you need, it is time to go shopping. To begin the process, send a questionnaire to potential vendors.

The questionnaire should reflect the items that you found important in your checklist. You may want to send a copy of your checklist to each prospective vendor and ask him to respond item-by-item. Don't buy futures. That might be appropriate in the commodities market, but it's not for software. Capabilities planned for next month often have a way of not showing up until next year or the year after – or never. Also, include a statement in your cover letter that says, "Your response to this questionnaire will be considered an integral part of the software that I choose."

**MAKE SURE THE PROGRAM COMES WITH A 30-DAY MONEY BACK GUARANTEE.**

The response of the vendors is important. If they fail to respond to your questionnaire, how will they respond to problems you may later encounter? After receiving the finished questionnaires, narrow the field to two finalists and ask to review a full working version of the software. When you purchase, we recommend that you buy full programs only. Demos are limited. Only full programs tell you the "whole story" — what the software can and cannot do.

## **THE SOFTWARE TRIAL**

### **How to Analyze a Financial Management Software Program**

Financial management software can be very complex. Your objective is to judge the performance of the software in handling your farm's needs. The vendor's objective is to sell you a system. Therefore, it is imperative that you control the program review. Create your own scenario for the analysis, and use the sample information that comes with the program to do your analysis.

### **Assemble Your Data Before You Buy**

Prepare a complete set of records that you would like to enter into the program. Here are some suggestions on what to consider:

### **Diagram Your Operation**

Draw up a diagram of your operation. Include profit centers (corn, cattle), production centers (fields, feed lots), assets, loans, inventories, vendor names, income and expense accounts. Again, you may not have to create an entire accounting system, but provide enough information so you know the program can manage the situation on your farms.

### **Separate Entities**

Be sure to look at your needs according to each entity and owner if you have more than one and want to keep their transactions separate.

### **What to Do with the Program during the Trial Period**

After you have prepared your data to enter into the full program, you need to prepare yourself. Use the comprehensive checklist to review the functions that you want the program to perform. This is very important, because you don't want to miss essential details or not completely process the sample data that you prepared.

### **Working with the Program during the Trial Period**

The simplicity with which you enter your transactions is critical, as a majority of your time using the program will be spent entering your data.

#### **STEP 1**

**Installing the program on your computer:** Follow the instructions in the manual to install the program disks on your computer.

#### **STEP 2**

**What is the first thing you enter to access the software?** You should not have to issue any "computer commands" at this point. The software should be "menu driven," giving a list of choices that you select by pointing and clicking.

#### **STEP 3**

**Entering your operation diagram:** You drew up a plan of your operation that included profit centers, chart of accounts, production centers, storage locations, assets, loans, and inventories. If the program provides you with a sample chart of accounts you can compare it to yours and come up with a chart of accounts that best details your operation. One of the menu selections should deal with the entry of your operation structure. You should be able to create, examine and edit entries for each one of the accounts, profit centers, assets, loans, etc.

#### **STEP 4**

**Enter an expense that requires multiple divisions:** (say for the purchase of seed, chemicals, and fertilizer on one invoice). This expense entry will more than likely require a vendor number or name, profit center and/or production center allocation, bank account and a date. How fast is the entry? How easy is it to call up

vendor names? Do the headings for transaction entry default when you are subdividing, to avoid repeat entries of dates, bank account numbers, etc.? Can you easily correct mistakes (can you back up easily to edit)? Is there a place for a notation to define these transactions? Did you have to know what to debit and credit or did the program take care of that for you? Were you confused as to what information the software wanted?

#### **STEP 5**

**Entering an income transaction:** When you enter a receipt you should be able to assign it to a profit center, production center, storage location, loan, or asset. Like the expense entry, the income entry should be fast, easy, easily corrected, have default screens for subdivisions and have room for a notation. Try entering an income for the sale of a crop. Is it easy to adjust the inventory of that crop? Did you have to understand debit and credit accounting?

#### **STEP 6**

**Adding and deleting a name from the vendor file:** You are in the middle of entering a transaction and you see that the vendor is not on the name list. Can you add the name right there in the middle of entering the transaction or do you have to exit and go to another part of the program? You have 40 transactions and are in the process of checking them for accuracy. Can you edit a transaction right then or do you have to go to another part of the program to correct a mistake?

#### **STEP 7**

**Checking your bank balances:** After you have entered your month of transactions go to the bank balances to check them for accuracy. What was your beginning balance in each account? What cash receipts were added to and what cash expenditures were subtracted from each account? Is the resulting balance accurate?

#### **STEP 8**

**Searching your financial data:** Because of its speed, a computer can do things in seconds that would normally take you hours. Say you want to locate a specific transaction because you have just received a notice for non-payment. Does the program have a section to search for such a transaction? How easy is it to define the transaction you wish to find? Do you need to know the transaction number or can you locate it by other transaction detail?

#### **STEP 9**

**Producing a balance sheet:** The balance sheet shows a picture of your financial position at any given moment. Banks require balance sheets to get financing. Balance sheets are also very useful as a tool to aid in your financial decisions. How easy is it to produce a balance sheet - is it in a pre-programmed format or do you design your own report format to get one? The balance sheet should list your assets and liabilities in categories, separating current from long-term assets and show your net worth at a specific moment in time. Can you prepare a projected balance sheet?

## **STEP 10**

**Using a Cash Flow:** The cash flow will show your income and expenses month by month or quarterly. The cash flow has many benefits, but two stand out. Banks are requiring cash flows as they reflect your ability to repay your debt. Farmers are using the cash flow to plug in “what if” figures to produce a budget for the upcoming fiscal year. For example, with the cash flow you should be able to plug in a \$40,000 tractor purchase and determine whether you have the ability to cash flow that purchase, whether you should trade-in, and what principal and interest payments you can best manage. With this interactive capability you should be able to project a budget and get help with major financial decisions; the computer can help. Does the program allow you to transfer the actual data into the cash flow to make projections? Can you work with quantities as well as dollar amounts? If prices change can you enter the new price or must you manually recalculate the total value? Will the computer save your projection? Can you later compare actual results to your projection?

## **STEP 11**

**Generating an Income Statement:** The income statement measures profit or loss over a period of time. This report is very useful in evaluating your farming operation because it tells you whether you are profitable or not. The program should produce an income statement as often as you wish. It should produce the report on a monthly, quarterly or year-to-date basis. You should also be able to compare last year with this year and this year with a budgeted income statement. If the financial management program is going to help your operation, it has to be able to provide you with the reports you need now and will need in the future to spot problems quickly and correct them before they get out of hand. Can the software you are evaluating produce reports according to Generally Accepted Accounting Principles? Can it produce historical as well as budgeted reports? Can it compare one year to another? Can you modify the format to conform to your needs?

# **CASH VERSUS ACCRUAL ACCOUNTING**

A computer software program should give you the ability to keep both cash and accrual records for your operation. This is important because of the tax advantage available to farmers for filing cash basis tax returns. But cash information alone is all but meaningless for making management decisions. You need accrual-based reports to be able to interpret the information from your farm and make intelligent decisions. Let's start by taking a look at both cash and accrual accounting.

## **Cash Accounting Systems**

In cash accounting systems, an income is recorded when the money is in your possession. Likewise, an expense is recorded when the goods or services are actually paid for. The benefit of reporting your taxes on a cash basis comes from the ability to manipulate the timing of the receipt of income and the payment of expenses. Cash accounting does not correlate use of the item purchased with the production of income. You could pay for chemicals at the end of 2005, and use part of them in the spring of 2006, and apply the rest on the 2007 crop. That decision may have been wise tax planning, but if you look at



profitability in 2005 on the cash basis it is greatly distorted due to the high chemical expense. In fact, 2006 and 2007 are also distorted because there was no chemical expense. Therefore, net income was higher than it should be.

### **Accrual Accounting Systems**

Accrual accounting systems match expenses with generated revenue. In the above example, the accrual accounting system would not count the chemicals purchased in 2005 as an accrual expense. The chemicals were used partially on the 2006 crop and partially on the 2007 crop. The expense would be matched to the income generated by the 2006 and 2007 crops. This raises another interesting difference between cash and accrual. When is income generated? Accrual accounting considers crop income to be generated when it is harvested. At that point, you can measure its worth by determining how many units have been harvested and multiply that times the value per unit. Once harvested, your decision to sell or store becomes a management decision. Regardless of that decision, income has been generated.

## **QUESTIONS TO ASK VENDORS**

1. How long have you been writing agricultural software?
2. Do you have programmers on staff to handle error corrections, updates and new programs?
3. What kind of support do you offer:
  - a) Full time support staff?
  - b) Toll free number?
  - c) Online/e-mail?
  - d) Seminars?
  - e) Is there local Dealer support available?
4. What kind of documentation is provided?
5. What kind of help can I expect with set-up?
6. Do they provide user references to contact? If so, ask users:
  - a) How do you feel about support?
  - b) Was documentation adequate for setup and operation of program?
  - c) Does the system perform as well as you expected?
  - d) What do you like the most about the system?
  - e) What do you like the least about the system?

## DEFINITION OF TERMS

The following terms are helpful when selecting and reviewing software or shopping for a computer.

### **ACCRUAL BASIS**

Recognizing events and conditions as they apply to profit and loss. This method of accounting identifies income and expenses with specific periods of time and records them as incurred, without regard to the date of receipt or payment of cash (example: purchasing fertilizer in January but expensing it at harvest time).

### **ASSETS**

Tangible and intangible resources that your operation owns. (land, sheds, computer).

### **BACKUP**

Copying data from hard disk to diskette, tape or CD to produce a spare copy of data to use in case the original data is damaged or erased.

### **BALANCE SHEET**

A summary of the resources (assets) your operation owns, the liabilities it owes to creditors, and the owner's equity at a given point in time.

### **BOOK VALUE**

Original cost of an asset minus the accumulated depreciation of that asset.

### **BYTE**

A group of bits (usually 8). A byte can be used to represent one character (number or letter) of information.

### **CASH BASIS**

Accounting method where income and expenses are recorded when received and paid, without regard to the period to which they apply.

### **CASH FLOW STATEMENT**

Summarizes twelve months of receipts and expenditures. Can also be used to create projections or budgets of future needs.

### **CHART OF ACCOUNTS**

A list of your expenses, income, asset, loan, and owner equity types.

### **CURRENT ASSETS**

Cash and assets that can easily be converted to cash or consumed in the very near future, usually within one year.

### **CURRENT LIABILITIES**

Liabilities which must be repaid in the near future, usually within one year.

### **CURSOR**

An electronically generated symbol that appears on the screen to tell the operator where the next character (letter or number) will appear.

**DEPRECIATION**

Allocating an asset's cost over its expected useful lifetime for tax or analysis purposes.

**DOUBLE ENTRY ACCOUNTING**

An accounting system in which each transaction has equal and offsetting affects to the balance sheet.

**EDIT**

The process of changing a record.

**FIXED OR LONG TERM ASSETS**

Assets used by your operation which are not classified as current assets such as real estate and buildings.

**GAAP**

Generally Accepted Accounting Principles - A method of accounting developed as a standard for businesses.

**GENERAL LEDGER**

Report that lists income and expense transactions by account.

**GIG**

Prefix for Billion; one gigabyte equals 1 billion bytes.

**GUI**

A graphical user interface such as Windows ®.

**HARDWARE**

The physical apparatus and electronics that make up a computer system including CPU, screen, printer, modem etc.

**INCOME STATEMENT**

An accrual report of financial operations during a given period of time. Sometimes called a P&L or Profit and Loss statement, it includes operating income sources, operating expenses and accrual adjustments to inventory, accrued interest, and depreciation.

**INITIALIZATION**

- (1) The process of preparing external storage media such as diskettes for access by the computer. Initialization formats the diskette into an acceptable form for reading and writing.
- (2) Setting program variables to starting values early in program execution.

**INTERMEDIATE ASSETS**

Assets which take several fiscal periods (one to five years) to depreciate, Asset whose value depreciates over time (computer, boars). (This type of asset categorizing does not conform to Generally Accepted Accounting Principles.)

**INTERMEDIATE LIABILITIES**

Liabilities which are expected to be paid in one to five years. (This type of liability categorizing does not conform to Generally Accepted Accounting Principles.)

**INVENTORY**

Assets that are produced or purchased for sale or are to be used to produce goods for resale.

## **K**

Computer shorthand for the quantity 1024. The term is an abbreviation of the unit for one thousand (kilo) and is usually used to measure computer Storage capacity and transfer rates in units such as kilobytes.

## **MARKET VALUE**

The expected selling price in today's marketplace.

## **MEGA(M)**

A prefix for million; hence 1 megabyte equals one million bytes.

## **MENU**

A list of alternative actions displayed on the screen for selection by the user.

## **MICROCOMPUTER**

A small but complete microprocessor-based computer system, including a central processing unit and input/output devices.

## **OPERATING SYSTEM**

A collection of programs for operating a computer. The operating System performs such "housekeeping" tasks as controlling the transfer of data between the computer and its peripheral devices (printer, disk drive) and accepting and interpreting information entered from the keyboard.

## **POSTING**

Adjusts your assets, inventories and loans according to information entered in transactions.

## **PRODUCTION CENTERS**

Physical locations where commodities are produced to which you can attribute income and expenses (field, farrowing building).

## **PROFIT CENTER**

A separate "business" or department which is a part of your total operation. Commonly used to separate individual crops, livestock and non-farm interests.

## **PROFIT CENTER ANALYSIS**

Summarizes selected transactions to let you look at the profitability of various parts of your business.

## **PROGRAM**

A sequence of instructions directing a computer to perform a particular function.

## **RAM**

Random Access Memory, the type of memory that serves as the computer's "scratchpad." The contents of random-access memory can be changed by action of the computer. Information is usually transferred into RAM from a permanent storage medium.

## **ROM**

Read-only memory, a type of memory that contains fixed data or instructions that are permanently loaded during the manufacturing process. A computer can use the data in read-only memory but cannot change it.

**SOFTWARE**

A general term for computer programs and documentation.

**SOURCES AND USES**

Accounts for sources of receipts coming into your operation, as well as the uses of the funds.

**STORAGE LOCATIONS**

Locations where you store crop inventories.

**USB**

Universal Serial Bus, standard on all computers purchased today and often used in replacing the use of serial and parallel ports.

**USER FRIENDLY**

Hardware and software that is designed to assist the user by being scaled to human dimensions, or by being self-taught, error proof and generally easy to use.

**SUMMARY**

Every producer should have computerized farm records in this competitive market. It not only helps you easily produce professional-looking reports for tax purposes or to receive a loan, it provides easy-to-use analysis tools that present the information you need to make smart management decisions. Decisions that will affect your future strategies.

Red Wing Software is the leader in providing ag-specific financial management software. Our products allow producers and consultants to measure and assess profitability and efficiency to make better operational decisions. Red Wing Software's vision is to create the best management software experience through personal support and attention to customers' business goals.

For more information regarding the software available from Red Wing Software, or for assistance in evaluation of any financial management software product, call, e-mail or write:

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