Wisconsin Bankers' Farm Bulletin

Business Methods on the Farm

By

Department of Agricultural Economics

Wisconsin College of Agriculture

Figuring profit or loss for the year.

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MILESTONES IN FARM BUSINESS, OR ANNUAL INVENTORIES.

By the Department of Economics,

College of Agriculture, University of Wisconsin.

An inventory is a statement showing in detail the value of land, buildings, livestock, equipment, produce, cash on hand and in the bank on the date of inventory, together with the amounts of all notes and bills that others owe to the farmer as well as those that the farmer owes others.

An inventory shows, first, the farmer's total investment, second, his net worth, third, how much his net worth has increased or decreased during the year. The total investment is determined by adding together the values of the various classes of property. On this investment the farm must pay a fair rate of interest before there is any return for labor. It is often desirable to know how much of the total capital is invested in horses, land, buildings, etc., and by a proper grouping of the farm property the annual inventory will furnish the most excellent material for such study. In case there are no debts, the net worth will be the same as the total investment; but on farms where there are debts these must be subtracted from the total investment. By comparing the net worth of the inventory at the beginning of the year and the net worth of that at the end of the year, the farmer can see how much he has gone ahead or dropped behind.

Besides furnishing the farmer and his family a living, the increase or decrease in the net worth is what the farm has given in return for labor and the use of capital. To be able to determine how much one has gained or lost during the year is of great importance, and the value of this information alone will more than repay the farmer for the time spent on the inventory. It is a common mistake for all those who do not take the inventory to look at the amount of available cash as a gauge of their business success. This is a grievous mistake for fluctuations in cash mean practically nothing. A gain of $1,000 in cash at the end of the year may simply mean that some of the property on hand last year has been turned into cash. On the other hand, a decrease of $1,000 may mean that what was cash last year appears now in the form of a new building or some other improvement.

An annual inventory will also be of material assistance in adjusting a loss by fire—should buildings, or contents, be burned.

For Wisconsin the time of taking an inventory will vary between January 1 and April 1, preferably March 1. The exact date will depend on the location of the farm and the type of farming. On a poultry farm the most convenient date is in the fall; whereas on dairy and stock farms where there is likely to be a great deal of feed on hand earlier in the year it might be advisable to postpone this work until later in the winter. For best results the inventories ought to be taken on the same date each year, and, hence, it is advisable to choose a date that is early enough to make it possible to get this work done before field work begins even during years of early spring.
HOW TO MAKE AN INVENTORY.

List and give a valuation of each building. The value to be put upon a building will depend upon its present usefulness, original cost, character of building material used, construction, state of repair, age, location, etc. In case of dwellings and barns, handiness and sanitation are also points which need to be considered. The value must be estimated on the basis of the above factors. Statistics show that buildings will, as a rule, decrease in value at a yearly rate of from two to four per cent of the original cost.

Under this heading enter all items that have to do with the water supply of the farm and that is a part of real estate. Gasoline engines and movable tanks would not be included in this group. Pumps, wells, cement tanks and reservoirs, windmills, etc., should be itemized and given separate values. The values of windmills and pumps must be reduced at the rate of from six to ten per cent yearly, whereas, wells, concrete tanks and reservoirs can be put in the inventory at the same value each year.

After having obtained the value of buildings and the water system, add the two totals together and subtract their sum from the value of the whole farm. The remainder will be the value of the land including fences, woodland and drainage. Land ought to be left at the same value in the inventory from year to year unless there is good reason for some other practice.

Horses and cattle are inventoried individually. In order that they may be recognized when taking the next inventory, they ought to be listed either by name or number. The local selling price of horses and cows will help to determine their value. Age must be considered. Horses usually rise in value until they are about 4 years old and then fluctuate with the seasonal price until they are about 10, and then drop off rather rapidly. The value of milk cows will usually rise and fall in the same manner. Hogs, sheep, poultry, (unless purebred), are usually inventoried at a certain rate per head, this rate being based on market price.

This includes hay, straw, grains, corn, ground feed, binder twine, paints, oils, nails, posts, etc. Most of the purchased supplies are on hand in small quantities and can either be weighed or estimated. With roughage, grains and corn it is different. The amounts on hand of these commodities are found by getting the cubic contents of the bins, mows, and stacks. To find the approximate number of cubic feet in a stack, measure its length, width and "over". To measure the "over", throw the tape over the stack and hold it tight down to the bottom of the stack on both sides. Having the measurement, multiply the length by the width, by the "over" and divide by 4 to get the number of cubic feet. The number of cubic feet to a ton will vary from 350 to 550, depending on the kind of hay and how well it is packed. 500 is ordinarily a safe figure to use. Ear corn will run between 2 3/8 and 2 1/2 cubic feet per bushel, depending somewhat on the size of the ears and the length of the time it has been in the crib. If one wishes to use 2 1/2 cubic feet, the easiest method is to multiply by 4 and divide by 10. A bushel of oats, barley, etc., runs very close to 1 1/2 cubic feet to the bushel. To reduce cubic feet to bushel, therefore, one may either divide by 1 1/2 or else multiply the cubic contents of the bin by 8 and divide by 10. Silage will vary from 20 to 60 pounds to the cubic foot, depending chiefly on the height to which the silage stood in the silo at the time of filling. There is no market price for silage, but for the purpose of the inventory it may be valued at 1/3 the market price of hay.
For best results, list and value each machine and tool by itself. If one does not desire such detail, minor equipment can be listed and valued in smaller groups, as for instance, carpenter's tools, blacksmith's tools and garden tools. But no matter which method is used in inventorying minor equipment, it is always advisable at the time of taking the first inventory to make a complete list of all tools. For later inventories the value of such equipment may be determined by subtracting 10 per cent from the value of the preceding inventories and adding the value of new tools. At just what value to put machinery into an inventory will depend on cost, age, usefulness and efficiency. A binder that cuts 20 acres will last longer than the one cutting 100 acres a year. A machine stored indoors while not used will last longer than the one left outdoors, etc. The inventions of new and more efficient machines may cause sudden drops in the values of the old machinery. As soon as the binder was put on the market the value of the reaper was decreased rapidly. Special crop machinery will decrease in value suddenly in case the growing of that crop is discontinued. As example of this would be the sugar beet equipment in localities where the growing of beets has been discontinued. The average rate at which machinery will decrease is not always of much use, but may serve as guides. The following are some of the annual rates of depreciation for the more common machines:

Hay rakes, grain binders, mowers ........................................ 8%
Drills and seeders, corn planters, corn cultivators, gang plows .. 7%
Hay loaders, manure spreaders ......................................... 12%
Walking plows and heavy harness .................................... 6%
Harrows ................................................................. 9%
Wagons and disks ...................................................... 5%

Cash on hand and in the bank, as well as all notes and bills that the farm business has coming from others, should be determined and inventoried accurately. By depositing in a bank proceeds of all produce and stock sold, and payment of all bills by bank check, the annual "profit or loss" may be more easily ascertained and annual inventories more readily prepared.

Debts. All debts should be included in the inventory. It is advisable to list each mortgage and note and bill separately, and to give the name of the party to whom it is drawn.

The chief aim in taking an inventory should be to make it show the actual conditions of the farm business. In order to make the inventory show this it is necessary to be conservative in all valuations. To be able to place an exact value on the different items of farm property is, of course, difficult, but fortunately this is not absolutely necessary for the accuracy of the inventory as a whole will not vary directly with the correctness of the valuation of any one item. If one acquaints himself with current prices and tries to be fair in his estimate he is not likely to be very far off on the value of any one item, and what mistakes he may make will most likely offset one another. In case of the herd he may rate some of his cows a little high, but he is just as apt to value other cows a little too low, and the chances are that by adding together all of the values his result would be very close to what the herd would sell for.

Subject for February Bulletin: "How to Run a Cow-Testing Association"