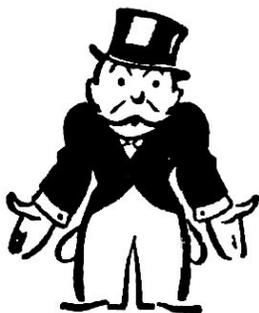


Discovering Value of Your Farm or Business

What is your business worth? Is it worth a million dollars? It may be, but to know you must discover the net worth of your farm or business. That may sound ridiculous, but it is possible. If you own 340 acres and that land is worth \$3,000 per acre, your land assets are worth more than \$1 million. Hopefully, the undiscovered net worth of your operation is at least positive.

A more compelling question is whether your business net worth is growing or shrinking. Hopefully it is growing. But too many farmers have borrowed enough money that the interest payments on that debt don't allow their equity to grow – even when the farm is making all its payments.

There is an easy tool for taking a financial snapshot of your business called a balance sheet. The mere mention of a financial tool, like a balance sheet, can be intimidating. The balance sheet is simply a list of one's assets and liabilities, or debts. The most difficult part of a balance sheet is getting started. Listing current, intermediate, and long-term assets and liabilities each year at the same time, provides the farm business with a record of change over time. It is like taking a photo each year of how your kids change and grow over the years. Well, maybe not quite the same, but you get the picture.



Balance sheets play an important role for helping beginning farmers, farms expanding into new enterprises, and assisting individuals with retirement and estate planning. They impact a business from beginning to end.

The benefit of listing the current and long-term assets and liabilities is in the calculation of the net worth. The net worth is the assets minus the liabilities.

There are some important things to know about building balance sheets. Pick a time of the year that is easy to remember, like January 1. Then make sure that as January 1 approaches you hold true to that date. While that date is easy to remember, another date may serve your business better. Consistency of building a balance sheet at the same time each year is a greater priority than the specific date.

There is more than one way to value your assets. The two most common methods are the market value and the cost value. The market value reflects the value of the assets if sold. The cost value is the value of what has been paid for that asset. These two values can be quite different for assets such as equipment that has been depreciated or replacement heifers that were raised on the farm. Take care to use the same method from year to year.

The market value approach is best if there is a need to understand the solvency of the business. This also plays a greater role in valuing an estate for distribution among the heirs. The cost value on the other hand can provide a greater view of the profitability of the business over time. This method also requires access to better business records for accurately. Both methods are important. Just pick one to get started.

Iowa State University Extension Guide on, "Understanding Net Worth," is a nice summary. Whether you are thinking about beginning to farm, or wondering how to divide up your estate for your kids, balance sheets are a vital part of successful business management. You may even discover your farm is a \$1 million operation.

Source: *Mark Jenner, Ag Business Specialist*

Don't Give Up on the Value of Wheat in Your Farming Operation

Many farmers may have a bitter taste in their mouths after dealing with the winter wheat problems we had this past year. Harvesting trials and tribulations affected by weather, low test weights, vomitoxin, no market for the grain and difficulties in feeding and/or selling it as well as storage problems. Hopefully we will not see these problems again for a long time.

Winter wheat has always been a major part of the overall farming operations on Missouri farms. Growing a high yielding and profitable crop will require planning on the part of the grower every year. The following are some simple steps that may insure your success for the next crop.

Step 1 - Each producer needs to assess their operation and make plans for a successful crop by selecting the best varieties for your area. A review of several years of data will show consistent performers. Yield is important but other factors to consider include stand qualities, hardiness, and drought tolerance, as well as insect and disease resistance. Top performers vary from year to year reflecting changing environment, weather, and planting dates. One variety may do well in one part of the state but not in another because of Missouri's diverse topography. Hughesville, Adrian and Lamar in southwestern Missouri yield leaders produced a mean average of over 75 bushels per acre. Results from the MU Variety Testing trials are available online at varietytesting.missouri.edu.

Step 2 - Fertility management is also an important part in producing the kinds of yields you are looking for in the future. Taking a recent soil test to find out what you are starting with as well as what you need to add as inputs will go a long way in a successful crop. The cheapest and most important of these is lime. If your soil pH range is below 5.5 you will not receive the full benefits of other fertilizers you apply. Wheat being a winter annual grass requires a pH range of 5.5 – 6.0 for maximum growth potential. Check

your Effective neutralizing material (ENM) requirements, found on your soil test, and match them with the local quarries ENM rating to best balance of your soil.

Step 3 - Planting dates, rates, and methods are important factors when seeding wheat. To avoid the Hessian Fly, which is found in Missouri, planting of wheat should be after October 15th to insure a good stand. The Hessian Fly is potentially the most destructive insect in planted wheat. If you plan on planting earlier than this, planning to use it for pasture, bialage, and/ or a cover crop, look for a variety of wheat that is resistant to the Hessian Fly. Planting rates may vary depending on your soil type and location. Just what is the true potential of your soil to produce? Drilling rates of a bushel per acre are common while broadcasting may increase the application rate to one and a half bushel per acres. Good seed to soil contact will increase the potential of seed to survive.



Several farmers have asked if they could plant last year's wheat seed even though it did not pass the test at the mill. Would it grow? Unknown is the germination level of infected wheat seed, but seed test labs can check it or farmers can do their own "flowerpot test" to determine percent germination, or "rag-doll tests" can be run by putting seeds in a wet cloth rolled up and kept at temperature of fields at planting. A farmer planting bad seed solves two problems: It makes use of worthless seed as well as providing soil cover to prevent erosion. There should be no problem in reusing last year's seed for a cover crop if you check it first.

With limitations on land that earns prevented-planting payments, the winter forage can be grazed by livestock, making winter feed. Wheat, rye and oats are popular winter cover crops. They kill easily before planting spring crops, unlike some other covers. Check with USDA NRCS and FSA on those limits on cover crop grazing.

Source: Terry Halleran, Agronomy Specialist

Forage Testing - Good Investment

The weather this year has certainly brought its share of challenges to the farming community. The constant rains have delayed or prevented the timely planting and harvesting of field crops and hay fields alike. Most producers have had a number of acres of hay that either got baled a little too wet or got rained on at some point in the curing process leaving the potential for mold and spoilage issues; Some in low lying areas such as bottom land had water sanding on it for several days at a time. Nearly everyone had some hay land that was well past optimal maturity before the stars aligned to find a window to get it put up in. All of these things are going to add up to quality issues come feeding time this winter.

Forage testing is one of the cheapest and best investments a livestock producer when it comes to nutrition and their herd. The test will cost around \$20.00 and will give you the information needed to develop a supplement to meet the livestock's needs. Like testing anything, useful results only come from a good sampling process. Always use a hay probe to and take a core sample for your test rather than a simple "grab and go" where you pick a handful from a few bales and call it good. The core sample should be taken from the round side of a round bale or the end of a square bale, going straight toward the center so you get a good representation of the entire bale. You will need to probe somewhere between 10 and 20 bales and have a sample that weighs about a pound to get a good representative sample. Sort hay into "lots" by hay type and harvest window and test each individual lot.

When you get the results back from the lab, you will find two columns listed on the results, one labeled "As fed" and one labeled "Dry Matter". The As fed column is exactly that, how the hay was received at the lab and how it will be fed to the livestock. The dry matter column shows values with the samples dried down and all the moisture removed. We generally use the "Dry Matter" column for comparing feed stuffs and developing rations because it takes the moisture factor out of the equation. The "as fed" column is primarily used to look at the moisture in a feedstuff and to determine how much is actually required in a ration. For dry hay samples, the moisture content should be below 20% for proper storage. Haylage on the other hand should be between 45 and 60% moisture for proper fermentation and storage.

Values for several nutrients will be listed under both columns. Generally the first listed is % Crude Protein. Crude Protein is a calculated value based off of how much nitrogen is present in the sample. The amount of nitrogen is multiplied by the conversion factor 6.25 to determine the protein level in the hay tested. Values can range from as low as 3-4 % for wheat

straw or extremely over mature warm season grasses to as high as the mid 20's for leafy immature legumes such as alfalfa. In some instances when hay is baled slightly wet, it will heat up and "caramelize" leading to some of the protein being tied up and unavailable for digestion in the animal. Caramelized hay will have a tobacco like look and a sweet aroma to it and is quite palatable just not all of the protein will be available. For a little extra, you can get an "available protein" test ran as well to see how badly the protein level has been affected. It generally takes the hay heating to above 140° F to cause any problems.

Next you will find values for Acid Detergent Fiber (ADF) and Neutral Detergent Fiber (NDF). Fiber levels are used to determine the digestibility of forages and how much an animal will be able to consume. Legumes will typically have less fiber than grasses. ADF is used mostly to determine the digestibility of the forage; good quality legumes will generally run between the low 20's and mid 30's on a percentage basis where grasses will run between the low 30's and mid 40's. NDF is an indicator of how much an animal will be able to hold in their rumen. NDF levels should range in the 30's and 40's and grasses should be in the 50's and 60's. Levels above 70% are will generally not work well without a great deal of supplement.

Total Digestible Nutrients (TDN) represents the total of all digestible protein, carbohydrates and fats in the sample. TDN is commonly used in beef rations to represent the energy content of the feed. Levels as high as the mid 60's can be seen on early cut alfalfa where late cut grasses can be as low as the high 30's or low 40's. Most classes of livestock require levels above 50% to meet their energy requirements.

Type of cattle	# Dry Matter/ Day	% Crude Protein	% TDN
1200# cow 2 nd period	21	7.1	50
1200# cow 3 rd period	24	7.9	54
1200# cow mod milk	30	9.8	58
1200# cow heavy milk	32	10.5	59
1100# heifer 3 rd period	23	8.9	58
1100# heifer mod milk	27	10.4	62
500# steer 1.5#/d gain	12.6	11.2	64
500# steer 2#/d gain	12.7	12.8	69

Once the test results have been looked at and are understood, the next step is to weigh the information against the requirements of the animal being fed. When thinking of the cow herd, stage in the production cycle and maturity of the cow are the two most important factors to be considered. The desired rate of gain determines the needs of young growing cattle. The above chart shows some nutritional requirement guidelines for several classes of cattle.

Conclusion of this article can be found on page 4.

Forage Testing - Good Investment (conclusion)

Other factors affecting palatability could be an issue this year as well. Hay that was rained on or baled wet may have a good deal of spoilage or waste because of mold and storage losses. It can also get a musty smell leading to some refusal to eat by livestock. Hay fields that were under standing water for extended periods of time might have a foul taste because of dirt and other contaminants left on it after the water subsided and the field was cut.

Fortunately, there are ways around many of the quality issues we will see with hay because of the rain such as supplementation and ammoniation of poor quality feeds and using molasses or other products to sweeten up foul smelling hay. We are also fortunate that the rain has brought with it an abundance of grass growth, stalling the need to feed hay. Cattle prices remain relatively high and grain prices have subsided from the levels seen from a few years ago making it an easier decision to feed your cow herd right to maintain production.

Source: *Andy McCorkle, Livestock Specialist*

