Determining a Relevant Cash Rental Rate

By: Dr. Mark Jenner, Ag Business Specialist

Land values are in the news quite often these days. It is helping landlords and tenants alike review their rental agreements. This is a great thing. There are way too many rental agreements that have not changed for many years even though land values continue to increase.

Cash rental agreements are common and are the simplest sort of agreement. The tenant assumes the majority of the management decisions and the largest share of the risks for failure of the crop or pasture ground that is being rented. The landlord gets the cash rent generally whether there is a failure or not. Fortunately, we have crop insurance and an insurance safety net, even for pastures now.

Three ways to look at the value of cash land rental are 1) landlord’s ownership cost and desired return, 2) tenant’s willingness to pay, and 3) a current market value. It is intuitive for land owners to only look at the landlord method, or for the tenants to look only at the tenant method. It is a good exercise to consider estimating all three methods to gain perspective from all sides.

To estimate the Landlord’s ownership costs and returns, it is important to look at the overhead of land ownership, the value of the land, and a reasonable rate of return on the land. Annual ownership costs include things like real estate tax, insurance, interest, and depreciation on improvements. Not including debt service on the land purchase, these values may average $40 to $60 per year. If land is selling for $3,000 per acre for good cropland this would serve as the value component. The last piece is the return on the land investment. In Southwest Missouri the difference between land values and crop rental rates is 2.5% to 4% of the purchase price. In this example it may be $50 (ownership costs) + $3,000 (value) or $3,050 per acre. Multiplying $3,050 times 3.25% would be right at $100 per acre.

From a tenant’s perspective and willingness to pay, the tenant begins with an estimated average return per acre. This might include the average return for that crop for the tenant for the last 5 years. The average variable costs without labor are subtracted. And also subtracted from the returns are the average fixed costs or overhead costs without a land charge. Finally, the tenant must estimate the profit they anticipate and subtract that. The amount remaining will be what is available for rent. This is similar to the method used by the analysts when they forecast difficult times ahead for tenants meeting their obligations toward high cash rent payments with lower crop prices and revenues.

The most common method MU Extension receives calls about is the market valuation method. Folks call in and ask at what price crop and pasture land is renting. MU Extension has great historical information. It is more difficult to keep track of the most recent land rents and sales. The two references I use most frequently are *Cash Rental Rates For Missouri* and the annual *Missouri Farm Land Values Opinion Survey*. These documents are all on our MU Farm Management website: [agebb.missouri.edu/mgt/](http://agebb.missouri.edu/mgt/). Continued on pg. 2...
Continued from pg. 1….  

For the cash rental rates, both the state wide values (MU) and county values (USDA) are available. An interesting way to use these rental rates is to look at the state level cash rental rates on a $/bu basis. For example, the 2011 Cash Rental Rates in Missouri reports $121.75/acre across the state for corn at a normal yield of 139 bu/acre. This works out to be $0.81/bu. Or, if local corn ground yields 100 bu./acre, a reasonable rental rate may be $81/acre ($0.81/bu x 100 bu/acre = $81/acre). Using the same logic, beans and wheat work out to be $2.51/bu and $1.56/bu, respectively.

The County Rental Rates in Missouri published by USDA can be compared with local land values to determine a percent of rental rate to land value by county. For the Ag News & Views area this ranges from 2.5% to 3.5% of land value for crop land rental and about 1.5% of land value for pasture land rental. Both the percentage of land value factor and the rent per bushel value can be used to tailor general data to best information available locally.

The bottom line in determining land rent rates is that rental rates are really about the market demand for that land, or how badly the neighbors each want it. If 2 or 3 tenants want to rent the same piece of land it is a good position for the landlord to be in, and top dollar may be available. If the opposite is true that none of the neighbors want to rent it, the actual rent that is possible may be below any of these estimates.

Round Bale Feeders Worth the Investment  
Source: Oklahoma State U. Extension

Feeding losses from 15 round bales fed without a hay ring or some means of limiting access would pay for a commercially available round bale feeder.

Feeding losses occur primarily from trampling, refusal, and leaf shatter. Some feeding loss is inevitable but can vary from as little as 2% to more than 50%. A study conducted by the Alabama Agricultural Experiment Station, using equal groups of steers, found that feeding round bales enclosed in panels reduced the amount of hay fed by 36% when compared to feeding round bales without panels.

If a 1200 pound round bale cost $45, wasting 36% is a loss of $16.20 per bale. Or, in other words, these round bales cost $61.20 if fed without using a feeder to limit the loss. The savings in reduced loss from 15 of these bales would pay for a round bale feeder that cost $243.00.

Round bales can be fed without hay rings if unrolled, and limited to the amount the animals can eat in 2 days or less. But, if setting out more than a 2 day supply, which is an advantage of using round bales, then round bale feeders are a wise investment.

It is Time for Another Show-Me Market Showdown Game!  
Dr. Mark Jenner, Ag Business Specialist

Beginning March 2, 2015 and running for 10 weeks until Friday, May 8, we are offering another costless, risk-free chance to play the grain markets. We are starting another round of the Show-Me Market Showdown, or “Show-Me Market Showdown II.” This is a free, educational, online grain marketing game for farmers, ag professionals and other interested people. This game is a simulation that will enable players to enhance their grain marketing knowledge and skills. This is a great opportunity for business partners and family members to enter into a friendly competition to see who can do the best, or not.

The game website is linked to real-time market information allowing players to execute virtual market transactions. The website monitors player market positions, executes trades, and summarizes players’ virtual marketing account balances. Although the game is competitive, the main focus of the game is to demonstrate the risks and rewards of alternative marketing strategies and to learn the mechanics of various marketing tools, like futures contracts, options on futures, and forward contracts.

To this end, the University of Missouri Extension will offer players guidance and marketing instruction through weekly educational e-mails and a game blog. The e-mails and blog will provide a valuable means of discussion among the game coordinators and participants.

In addition to being fun and educational, participation in the Show-Me Market Showdown is extremely flexible and risk-free. Players can access the game whenever they have time and wherever they have access to the Internet. While all trades in the game utilize real market quotes, players have no risk of financial loss by participating in the game. Funding for this project is provided by the North Central Risk Management Education Center and the USDA, National Institute of Food and Agriculture. As a result, participation in the game is completely free. The free registration benefit also serves as an illustration of ‘risk and reward.’ There is no monetary risk. However, there is also no monetary reward. The real reward is education and a chance at bragging rights.

Currently the easiest way to register on-line for the Show-Me Market Showdown is to register from the Bates County Extension Website. Once you get to the Bates County Extension home page, the Show-Me Market Showdown registration link is on the Agriculture page, http://extension.missouri.edu/bates/ag.aspx.

If you have any difficulty, contact me, Mark Jenner, University of Missouri, Ag Business Extension Specialist in Bates County, at 660-679-4167, or by email at jennerm@missouri.edu.
Now is the Time to Prune Your Shade Trees
By: Hank Stelzer, University of Missouri, State Extension Forestry Specialist

Now that the leaves have fallen, it’s time to think about pruning your trees. The best time to prune is during the dormant season, from the time of leaf fall in the autumn until they leaf out in the spring. You can do some pruning in the summertime, but there you want to do it very lightly and only for corrective purposes after a storm or something of that nature. Reasons to prune trees include maintaining their health, controlling size or directing growth with corrective pruning, and cleaning up after a wind or ice storm.

Careful consideration should be given before pruning branches more than 2 inches in diameter. It may be best not to prune such a branch unless it presents a hazard by overhanging a driveway or sidewalk, or if it is an obstruction. Pruning large, heavy branches can be dangerous and harm the tree.

When you make the cut you are wounding the tree. The smaller the cut, the faster that tree can heal itself. Avoiding cutting that branch provides safety for you and also prevents possible injury to the tree. The tree will heal faster if you don’t cut flush with the trunk. Instead, cut a few inches out, leaving the donut-shaped opening where the branch joins the trunk. It’s called a branch collar. You want to leave the collar in place. There is a natural zone in there where the tree will wall off any decay that could come in. That way we take advantage of the tree’s ability to heal itself.

When sawing off larger branches, use a three-cut method for pruning. Rather than just cutting through the branch, begin with an undercut on the underside of the branch about an inch out from the branch collar. If you went from the top down, the weight of the branch could peel the bark, making a large wound. So we make that undercut first, then the second cut is from the top just out from that first cut, working all the way through. That way, if the weight does start to peel that bark, you have that undercut to prevent the damage. The third cut, after the branch has been pruned, is a cleanup cut to remove the stump of the branch, called the stob. Cut close to the branch collar but not on it.

The benefit of pruning a tree properly is that you allow that tree to heal itself naturally and fairly fast. Most of the time when we make that cut of an inch diameter, that wound will be healed over in as little as two years, sometimes even in the first year.

For more information, see the MU Extension guide “Pruning and Care of Shade Trees” (G6866), available for free download at extension.missouri.edu/G6866.

Early Spring Care for Fruit Trees
By: John Hobbs, Ag and Rural Development Specialist

Fruit trees are productive additions to the home landscape, both as fruit producers and ornamental blooming trees. But unfortunately spring and early summer is a time when fruit trees need to be protected from several insect and disease problems that can affect them at that time of year. There are two things a home owner can do this time of the year to ensure better quality fruit. Spraying for peach leaf curl with a fungicide and using a dormant oil for insects and some diseases is important controls to enhance fruit quality.

If you have ever seen emerging peach leaves that are puckered, swollen, distorted and reddish-green color, you have seen peach leaf curl. Uncontrolled, this disease can severely weaken trees due to untimely leaf drop when leaves unfurl in the spring. Fortunately, peach leaf curl is not that difficult to control if the spray is applied early enough.

However, by the time you see symptoms, it is much too late. As a matter of fact, fungicides are ineffective if applied after buds begin to swell. Don’t spray when temperatures are below 40 degrees or will fall below freezing before the spray dries. Usually we can wait until early March to spray but an extended warm period in February that encourages early bud swell may require spraying in late February. Though peach leaf curl can be controlled by a single fungicide application either in the fall after leaf drop, it is more commonly controlled in the spring. There are several fungicides labeled for this disease including Bordeaux, liquid lime sulfur, and chlorothalonil. Thoroughly cover the entire tree during application. It is much easier to achieve good spray coverage if the tree is pruned before spraying.

There are a number of dormant sprays used on fruit to control various diseases and insects, but a dormant oil spray is designed to control scale insects. If you have a problem with scale, now is the time to start looking for an opportunity to spray. Normally spray should be applied by early March, especially with peaches and nectarines. Apples are tougher, and application may be delayed up to the green tip stage.

Temperatures need to be at least 40 degrees so spray has a chance to dry before freezing. If the spray does freeze before it dries, plant injury can occur. Applying the spray during the morning will help insure that it dries properly. Thorough coverage of limbs, branches, and twigs is vital for good control. Note that it is much easier to achieve good spray coverage if the tree is pruned before spraying.

For additional information, you can download the MU Extension guide: “Fruit Spray Schedules for the Homeowner” (G06010) at http://extension.missouri.edu/explore/agguides/hort/g06010.htm
Excess Sugar: Not so Sweet for Your Health
By: Dr. Pam Duitsman, Nutrition and Health Education Specialist

As a nation, craving something “sweet” seems to be a food pattern that has gotten out of control. Most of us have a craving for something sweet now and then. However, a little bit of sugar from a morning Danish or latte can have you craving more a few hours later. It’s too easy to continue to reach for a sugary drink or snack to energize us.

Americans consume an average of 22 teaspoons (352 calories) a day of added sugar, according to the National Institutes of Health. In the past, obesity and cavities were the primary concerns. However, recent science links over-consumption of added sugars to high blood pressure, high triglyceride levels, high cholesterol, increased cardiovascular disease, diabetes, liver cirrhosis, dementia, mood swings, rheumatoid arthritis and other chronic health conditions.

FINDING SUGARS

There are two main types of sugar intake: naturally occurring sugars and added sugars.

Natural sugars are found in whole foods such as fruit, vegetables, and milk. All of those can be healthy. For instance, when you eat grapes or an orange, you are consuming a lot of healthful nutrients along with the natural sugars.

The health concern about sugar is focused on the excess added sugar we consume. This is the sugar added through processing or preparation and contained in 75 percent of packaged foods.

Major sources include sugar-sweetened beverages like soda, energy drinks and juices along with candy, cakes, cookies, pies, dairy desserts (ice cream, sweetened yogurt and sweetened milk), condiments and cereals.

By law, The Nutrition Facts Label must list the grams of sugar in each product. Keep in mind that four grams of sugar equals one teaspoon. Plus, there are nearly 20 different names for added sugars on food labels including beet sugar, corn syrup, dextrose, fructose and galactose.

All of this added sugar is capable of creating a sweet craving that can be comparable in magnitude to cravings created by addictive drugs. This helps explain why many people have difficulty controlling their sweet tooth.

To keep children from developing this sugar “dependence” of sorts, keep foods with added sugars to a minimum.

When given a variety of healthy foods like fruits and vegetables early in life, children develop a liking for them. Realize that it may take several exposures to get a child to eat healthier foods, but don’t give up.

**TIPS TO REDUCE SUGAR**

Here are some tips to help reduce the sugar in your diet.

- If trying to avoid added sugar entirely, remember those first 48-72 hours may be difficult. Chewing gum may help.
- Try to stick to a 150 calorie threshold for added-sugar products.
- Choose fruit instead of added-sugar foods when you have a sugar craving.
- Exercise can take your mind off of the craving, and generate natural endorphins that calm the brain.
- Eat regular meals, and if needed, add a healthy snack in between to ward off cravings. Choose protein and fiber-rich snacks.

**MORE INFORMATION**

For more information on nutrition contact Dr. Pam Duitsman, in Greene County, (417) 881-8909 or the regional nutrition office at (417) 886-2059. Information is also available online http://extension.missouri.edu.