



# Conservation Discussions

By Bryon Kirwan, Central National Agriculture Economist

## Pasture Rent What's Fair? How to Calculate Options

You have livestock and have been looking for additional pasture to rent. You have found some acreage that may fit your needs. How do you approach the landowner with an offer for rent? How do you calculate what a fair offer may be? Could there be more than one value? This discussion paper is an attempt to outline and frame discussions for both landowners and producers.

A good rental arrangement is one where the parties all willingly agree on the terms. Ideally, lease terms are agreed to in writing so there is no confusion or dispute later regarding any of the terms. Renting pasture is not the same as renting hayland. There are decidedly different variables that enter into that calculation; hayland rental is a variant of cropland rental. Renting hayland will not be covered in this conservation discussion. Additionally, in the West, there are specific range/pasture leases to public lands, often under the auspices of the Bureau of Land Management (BLM). Those rental variations are not addressed in this paper.

Before entering any of the discussion of how to calculate specific values, key questions must be answered as to the productivity of the pasture, presence of trees or brush, condition of fencing, availability of water, and if ability to rotate pastures exists. Deficiency in one or more of these key variables will have a direct effect on the value and desirability of pasture in rental discussions. Also, who is responsible for maintaining, repairing, or improving the pastures, fences, and facilities? Will there be limits on stocking densities? These factors, and others will also affect rental discussions.

### Select Methods to Calculate Rent

**Market Rates/Rent per Acre:** This method may be preferable to all parties in areas where there is enough pasture for rent that transaction values are transparent and known. This method provides a relatively open forum to make decisions on the value of the pasture.

As preferable as this method may be, its adoption is often limited by the lack of information of rates being charged, or lack of pasture actually being rented. The Extension Service in some states publishes survey information on pasture rental in addition to their farmland survey information. An example is found here: <https://www.extension.iastate.edu/agdm/wholefarm/pdf/c2-10.pdf>

Another source of information to begin rental discussions can be referenced from the National Agriculture Statistics Service (NASS). They publish a collection of surveys regarding farmland and pasture rental rates. For 2021, NASS reported a national average of \$13.00 (range from \$1.60 to \$59) per acre for pasture rent, but values will vary greatly by state. You can find NASS pasture cash rent data by state here: <https://quickstats.nass.usda.gov/results/58B27A06-F574-315B-A854-9BF568F17652#7878272B-A9F3-3BC2-960D-5F03B7DF4826>

**Return on Investment:** This is a straightforward calculation that revolves around the market value of the *pastureland* (not the whole farm). This value is usually easier to determine than the market rates for pasture rental. For example, a pasture with a \$3400 per acre value that rents for 3.5% of market value would rent for \$119.00 per acre.

$$\begin{aligned} \text{Pasture Value} \times \text{Return (\%)} &= \text{Rent per acre} \\ \$3400 \times .035 &= \$119/\text{per acre} \end{aligned}$$

Questions for those utilizing this calculation revolve around the appropriate percentage of market value that should be used in the calculation. These values are subject to local customs and interpretation. Also considered in these valuations regarding the expected return are the values/returns of alternative land use for comparable land.

**Forage Value:** This method looks at the value of the forage that is typically produced by the pasture in question. Highly fertilized and maintained, productive pastures would be worth more than pastures that are not highly productive in these calculations.

A decision on the percentage of the production to calculate the rent on will need to be made. If 100% is used, there may be no advantage to the individual wanting to rent the pasture over the cost of purchased feed. If 0% is used, there is not an incentive for the landowner to want to rent the pasture.

Other critical pieces of information in this calculation are the productivity of the pasture, and the value of comparable hay. In this example, assume the improved bluegrass pasture produces 2.5 Tons/Acre annually, and that grass hay is worth \$100/Ton.

$$\begin{aligned} \text{Production} \times \text{Value (price)} \times \text{Percentage Rent} &= \text{Rent per acre} \\ 2.5 \times \$100 \times .30 &= \$75.00/\text{per acre} \end{aligned}$$

The percentage of the value of the production selected will fluctuate depending upon local factors and the amount of improvement that is provided by the renter. The more improvement that is added by the renter, the lower the expected rental percentage payment would be.

**AUM Value:** Some leases (especially in the West) are determined on an Animal Unit Month (AUM) basis. An AUM is defined as the amount of forage or feed required to sustain a 1,000-pound cow with calf at her side for 30 days. There are tables and guides that present the estimated AUM's for different classes and ages of livestock to be able to establish the AUM amounts. (such as [https://extension.usu.edu/rangelands/ou-files/Determine\\_Stocking\\_rate.pdf](https://extension.usu.edu/rangelands/ou-files/Determine_Stocking_rate.pdf) or [https://www.nrcs.usda.gov/Internet/FSE\\_DOCUMENTS/nrcs144p2\\_054048.pdf](https://www.nrcs.usda.gov/Internet/FSE_DOCUMENTS/nrcs144p2_054048.pdf) )

Calculating rent based on AUM's requires the knowledge of the number of AUM's, the price of hay, and a factor for the quality of pasture. Quality factors range from .12 for unimproved pasture to .22 for lush legume pastures. For example, if you have a 1000 pound cow with calf on a good pasture and hay is worth \$80/ton, the charge per head per month would be \$12/AUM.

$$\begin{aligned} \text{AUM} \times \text{Hay Price (ton)} \times \text{Pasture Factor} \\ 1 \times \$80 \times .15 &= \$12 \end{aligned}$$

## Summary

These discussions do not reflect all of the possible methods to determine pasture rent; but rather some of the more common methods. There are pasture rent variations that reflect different levels of risk and share of gain. These calculations look at the pounds of gain and the value of that gain while the animals were on pasture.

There is no end to the methods two willing parties can incorporate to come to agreement on a lease. Again, at the end of the discussion, what is most important is that there is agreement between the parties as to the terms, and the terms should be written down so there is no misunderstanding later. Sample leases are widely available as to common terms.

### References:

*Determining Pasture Rental Rates*, North Dakota State University <https://www.ag.ndsu.edu/publications/livestock/determining-pasture-rental-rates>

*Computing a Pasture Rental Rate*, Iowa State University Extension Service <https://www.extension.iastate.edu/agdm/wholefarm/html/c2-23.html>

*Establishing a Fair Pasture Rental Rate*, The Ohio State University Extension Service <https://ohioline.osu.edu/factsheet/FR-8>

*Calculating Fair Pasture Rental Rates*, Oregon State University Extension Service <https://extension.oregonstate.edu/crop-production/pastures-forages/calculating-fair-pasture-rental-rates-0>

*Renting Pasture Land in Mississippi*, Mississippi State University Extension Service [http://www.ext.msstate.edu/sites/default/files/newsletter/forage-news/2015/201501\\_0.pdf](http://www.ext.msstate.edu/sites/default/files/newsletter/forage-news/2015/201501_0.pdf)

*The Contributions Approach to Establishing Equitable Pasture Lease Agreements*, University of Tennessee Extension Service <https://ag.tennessee.edu/arec/Documents/publications/LegacyPB1816D.pdf>

*Texas Grazing Lease Checklist*, Texas A&M Extension Service <https://agrilifeextension.tamu.edu/library/agricultural-law/texas-grazing-lease-checklist/>