



Pasture Lease Arrangements

Jeffrey E. Tranel, Jenny Beiermann, Norman Dalsted, and R. Brent Young¹

October 2016

Land is an expensive resource for agricultural producers. Livestock owners, especially new and beginning producers, may not be able to afford to purchase land. They may not have enough capital, income may be insufficient to meet debt repayment obligations, they may not have the credentials (including equity) to obtain debt, or the risks may be greater than the possible rewards.

Leasing (renting) is one option for gaining control of needed pasture. A lease is a business agreement between the tenant livestock owner and the landowner in which the owner of the pasture land receives a fee for allowing another person's cattle to graze the pasture. The livestock owner uses the pasture and makes general management decisions as if owner of the land. It gives the use of an asset to a lessee for a specific period of time for specific uses at a specified rate. A lease does not transfer title of ownership nor an equity interest in the asset.

Carrying Capacity

It is important for the pasture owner to first determine the amount of forage produced by the pasture and the quantity and quality of forage available to grazing livestock. Pasture productivity depends on type of vegetation, soil

type, condition of the range, and climatic conditions.

Two terms used with pasture leases are carrying capacity and stocking rate. Carrying capacity is the average number of animals that can graze the forage year after year without damaging the vegetation or soil. Stocking rate is the actual number of animals or animal units on a specific range area or field for a specific period of time, usually a grazing season. Carrying capacity does not fluctuate yearly, while stocking rate does fluctuate yearly in response to the amount of forage production based on climatic conditions.

The standard of measurement for carrying capacity is "animal unit month" (or AUM). An AUM is the amount of feed consumed by one animal unit per month. One AUM is considered to be one mature cow which consumes about 22 pounds of forage per day or about two percent of its body weight. AUM equivalencies are dependent on species, weight, and nutritional needs.

Establishing Lease Rates - Per Acre or Per Head

The livestock owner can lease pasture based on acres of pasture or number of animals grazing the

¹ Tranel, Beiermann, and Young are Agricultural and Business Management Economists with Colorado State University Extension and faculty affiliates with the Department of Agricultural and Resource Economics. Dalsted is a Professor and Agricultural and Business Management Economist in Colorado State University's Department of Agricultural and Resource Economics and Extension. Tranel can be contacted at jtranel@colostate.edu.

pasture. Within either approach, the landowner and livestock owner (tenant) should negotiate a rental price “fair” to both.

A “per acre” type lease is based on the landowner’s investment in the pasture. The landowner will want to ensure the pasture is not overgrazed, while the livestock owner will want to maximize use of the available forage. These trade-offs are complicated by the fact that pasture capacities and length of grazing season vary greatly from year to year. Leases of this type may stipulate the maximum number of animals and the dates when animals may be added or removed from the pasture. Further, a longer term lease will provide greater incentive for the tenant to practice responsible range management.

A per acre lease reduces the risk for the landowner since the rental fee is fixed. Such leases increase risks for the livestock owner. If production is less than expected due to drought, flooding, fire, or other reasons, the rent remains the same. The tenant may even have to rent additional grazing or purchase supplements for the animals.

Landowner’s Cost Method: One method for determining a fair pasture rent is the landowner’s cost method. The objective is to establish values for the resources and annual use charges.

- Land: The value of land should be its fair market value for agricultural purposes.
- Return on Land Investment: A percentage of land value indicates the landowner’s return to the current value and also reflects pasture productivity. A percentage rate of five to seven percent is suggested because (1) the current value of the land is determined rather than the purchased price; (2) if the pasture were sold, the net dollars available to the seller would be lower than the current value due to income taxes and sale expenses; and (3) actual returns to land have been in the three to

five percent range as an annual return above all charges, except land.

- Real estate taxes: The actual real estate taxes due annually.
- Land improvements: The average dollars spent annually for land improvements, conservation practices, and maintenance.
- Building facility investment: A fair market value should be placed on fences, wells, ponds, buildings, and handling facilities (such as corrals). Ownership costs should include depreciation, interest, repairs, taxes, and insurance.

Depreciable life for buildings and facilities usually ranges from 15 to 25 years. The current interest costs on the average investment value (one-half the total value) should be used. Facility repairs usually vary from one to three percent of the investment value. A commonly used charge for both taxes and insurance is one-half to one percent.

- Length of lease: Pasture may be rented by the day, month, grazing season, year, or multiple years. A relatively short term may encourage tenants to overstock. Longer term leases may cause the tenant to care for the land as if were owned by the livestock producer.

The lease is a contract that “marries” the parties to both the less desirable and more desirable provisions of the contract. It may be better to include an automatic renewal clause rather than have a lease with a longer term.

- Other: The average dollars spent annually for fertilizer, maintaining the forage resource, and any other applicable costs.

Livestock Owner's Return Method: A second method for determining a fair pasture rent is the livestock owner's return method. This method is based on the costs incurred by the livestock owner. An enterprise budget is used to determine how much the livestock owner can afford to pay for pasture rent. Sample budgets and a budgeting tool are available on the ABM web site if an individual producer's livestock costs and returns are not known.

The actual lease rate will probably be a negotiated value between the landowner's costs and the livestock owner's ability to pay.

Establishing Lease Rates – Share of Gains

The landowner and livestock owner may be interested in a share arrangement in which the risks and probability of additional profits or losses are divided between the two parties. In such a case, risk can be effectively shifted by basing rent on a fixed amount of weight gain by the animals.

To illustrate this type of lease arrangement, assume pasture rent for a yearling steer is \$9.00 per month. Total lease charges for a 6-month grazing season would be \$54.00 (\$9.00/month X 6 months) per animal. Further, if a 270-pound weight gain would be a reasonable expectation, pasture rent would be \$0.20 per pound of gain (\$54.00/animal / 270 pounds).

If the total weight gain was better than expected, say 360 pounds per animal, the landowner would receive \$72.00 (360 pounds X \$0.20 per pound). Conversely, if the animals gained an average of 180 pounds, the landowner would receive \$36.00 (180 pounds X \$0.20 per pound) per head for the 6-month grazing season.

Establishing Lease Rates – Other Factors

There are other factors that influence the actual, or negotiated, rental rate regardless of which method is used to establish pasture rental rates

Market Rate: Market rate is the price established by the bargaining of the landowner and livestock owner. Estimated livestock inventories, market prices, and weather conditions are needed to estimate and negotiate rental rates.

Location, Water, and Landowner Services: The value of water, pasture location, and landowner services are subjective. However, these items have some value to the livestock owner.

Pasture location is important when caring for the animals. The cost can be computed by estimating the number of trips per season multiplied by the number of miles multiplied by the cost per mile. The number of trips should consider checking the cattle for health, minerals, and water supply as well as hauling or driving the cattle to and from the pasture.

Good quality water in proper locations improves gain. If water supplies go dry in mid-season, provisions must be made for hauling water or removing the animals. Who pays for these types of considerations should be spelled out in the lease agreement.

Landowner services vary from only collecting the rent to taking complete care of the livestock during the pasture season. A common method of charging for these types of services is a percentage of the gross rent.

Length of Lease: The length of lease may be a factor in the negotiated rent. Some lease agreements may be month-to-month, the grazing season, or one year. Other leases may be for multiple years.

Shorter leasing period may encourage tenants to overstock and overgraze a pasture. Tenants with longer term leases will tend to utilize the pasture as if it were owned by the tenant and to properly stock the forage.

Other: Rental rates per acre should reflect pasture productivity. Past stocking rates, weed growth, moisture, etc., all affect pasture

productivity (stocking rates or carrying capacity). Pastures with low productivity rent for less than highly productive pastures.

Conflicts may arise if the livestock owner wants to stock the pasture with the maximum number of head per acre, and the landowner desires a low stocking rate as the rent is a fixed rate per acre. Continuous heavy stocking rates lower the quality of pasture by reducing the stand of grass and allowing weed growth.

Pasture rented on a per-head basis establishes a rate which may not adequately recognize differences in stocking rates. The livestock owner desires low stocking rates (higher gain per head) while the landowner desires higher stocking rates to increase income. Stocking rates and cattle weight may be the most important points for both parties to agree upon and enumerate in the lease.

Whole tract rentals are often part of a farm containing pasture. The rental rate for whole tracts is established by (1) the rate per head times the number of head allowed per tract or (2) the per acre rate times the number of acres in pasture.

Put the Agreement in Writing

It is highly desirable to put the terms of the rental agreement in writing. A written lease agreement enhances understanding and communications between all involved parties, serves as a reminder of the terms agreed to, and provides a valuable

guide for the heirs if either the landowner or tenant dies. Also, a written lease may be required by a creditor, for involvement in government programs, or to purchase crop insurance.

Every lease should include certain items – the names of the parties involved, an accurate description of the property being rented, beginning and ending dates of the agreement, amount of rent being paid and when and how it is to be paid, and the signatures of the parties involved. Other provisions (rights and responsibilities of both parties) should be included in the written lease, including recreational uses of the property.

Labeling a document as a lease does not necessarily mean it is a lease according to the Internal Revenue Service (IRS). Questions concerning IRS treatment of a lease should be addressed by your tax management professional. Also, the legalities of the lease should be addressed by professional legal counsel.

Colorado State University's ABM Team has created and made available to producers and others a spreadsheet template for evaluating the fairness of alternative lease arrangements. Also available on the web site is "Lease Rates for Privately Owned, Non-Irrigated Pasture in 2015 and 2016". The template and other information about crop, pasture, and building lease agreements are available from Colorado State University Extension on the Agricultural and Business Management web site. (www.coopext.colostate.edu/ABM/).
