



## Pasture Lease Agreements

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Any lease is basically an agreement that gives the use of an asset to a lessee for a specific period of time at a specified rate. A lease does not transfer title of ownership nor an equity interest in the asset.

Labeling a document as a lease does not necessarily mean it is a lease according to the Internal Revenue Service (IRS). This Extension Extra does not address any of the questions concerning the IRS treatment of a lease; if you have such questions, contact your tax management professional. Also, this document does not address any of the questions concerning the legalities of the lease which should be handled by professional legal counsel.

Unlike cash and share rental arrangements for cropland, the terms of pasture rental arrangements can vary substantially. You can consult other publications in this series or go to the publication C271, South Dakota Agricultural Land Market Trends 1991-2006, on the internet at <http://agbiopubs.sdstate.edu/articles/C271.pdf>.

Be cautioned that adjustments should be made to current market rental rates to account for differences in productivity of the land, use of improvements, and other factors of the rental arrangement. Adjustments to reported rental rates are important since the quality of pastureland varies widely. An arrangement used by a farmer for improved pasture likely is not appropriate for a neighbor who has unimproved pasture partially covered in brush and trees. Pasture rental rates and terms thus may vary widely within the same locale yet still be acceptable to both landlord and tenant.

### Variations In Pasture

"Pasture" is a word with many meanings. Total production as well as the seasonal pattern of production depends a great deal on the kinds of grasses and legumes in the pasture. Some South Dakota land is pasture only because it is too rough, rocky, or wet to cultivate. If management in past years has been poor, pastures might produce more weeds and trees than forage.

At the other extreme are fertilized grass-legume pastures on tillable land. Vegetation may include warm and/or cool season grasses, fescues, and legumes and weeds will be controlled and good water will be available. These pastures are highly productive and profitable when used in good livestock programs.

The protein content of different pasture plants varies and is reflected in production gains or milk production. Good grass-legume mixtures produce larger gains and more milk than straight grass pastures, especially during the drier part of the pasture season.

### THE PASTURE RENTAL MARKET

Like other leasing arrangements, the terms of pasture leases reflect local custom, suitability and quality considerations of the parcel, the contributions of one or both parties, and bargaining. Leases are may be oral, may be shorter-term than cropland leases and may seldom involve more than a single pasture season. The most difficult part of pasture leasing is determining a rental rate agreeable to both parties.

## Variations in Rates

During seasons when rainfall is good and grass is abundant, the demand for rental pasture is low and "customary" pasture rents tend to be lower. During dry seasons, the reverse is true. But in general, variations in rent from year to year are small—smaller than the variations in production in most cases.

Farm-to-farm differences in the amount charged for the use of pasture are seldom as great as differences in productivity. Rents also reflect demand; when numbers and prices of consuming livestock are high, rents tend to go up, but again, the changes are comparatively small.

## Different Methods of Quoting Rent

Generally, pasture rents are quoted either on a per-head-per-month basis or on a per-acre basis. You can go to ExEx5019, Determining Pasture Rents (rev 2002). This publication includes a discussion of different methods used to determine rental rates and is on the internet at <http://agbiopubs.sdstate.edu/articles/ExEx5019.pdf>.

## Per head per month

This method is most often used when only a few head of livestock are involved. The rates usually apply to mature cows. In most instances, no differentiation is made between cows with calves, cows in milk but without calves, and dry cows. Likewise, differences in size of mature cows are seldom reflected in rental charges despite the fact that feed consumption increases with size.

When pasture is rented on a per-head-per-month basis, rental rates would be more meaningful if they were expressed in terms of animal units, e.g., \$5.50 per animal unit per month. Animal units (AU) are generally used as a basis to standardize and express stocking rates among different kinds and classes of livestock with similar dietary preferences. By using the animal unit values shown in Table 1, a cow-calf pair would be charged \$7.15 per month ( $\$5.50 \times 1.3$ ), a yearling in the 12- to 17-month age range, \$3.58 ( $\$5.50 \times .65$ ).

Inconsistencies persist among land management agencies and within published literature regarding approaches to quantify AU. For example, some interpretations loosely define an AU as the forage demanded by a mature cow, although this value could vary widely depending upon breed and reproductive status of the cow. Others say that an AU represents the forage demanded by a standard livestock unit weighing 450 kg.

Table 1. Animal unit values for different kinds of cattle and other livestock.

<i>Class of livestock</i>	<i>Number of animal units</i>
Cows (1,000 pound weight)	1.0
Cow and calf pairs	1.3
Two-year-old steers	.9
Yearling cattle (18-24 mo.)	.8
Yearling cattle (12-17 mo.)	.65
Calves (under 12 mo.)	.5
Bulls (mature)	1.4
Saddle horses (mature)	1.25
Sheep	.2

Information from Pasture Leases, publication EC-623-W, J.H. Atkinson and D.C. Petritz, Extension economists, Department of Agricultural Economics, Purdue University, Cooperative Extension Service with reference cited as Valentine, J.F. and D.F. Burzlaff. Nebraska Handbook of Range Management, E.C. 68-131, University of Nebraska.

To illustrate the different interpretations of an animal unit, Table 2 can be compared to Table 1. While some data is consistent between the tables, there are slight differences for specific classes of livestock.

Landlords and tenants will have to reach an agreement on the definition of animal units if pasture rental rates will be dependent on the number of animal units utilizing the grazing resource, commonly referred to as the stocking rate.

Table 2. Suggested animal unit conversion factors for various classes of cattle.

<i>Class of cattle</i>	<i>Relative animal unit</i>
Mature bull (>24 months)	1.5
Young bull (18-24 months)	1.15
Cow and calf pair	1.35
Mature cow, non-lactating	1.0
Pregnant heifer, non-lactating (>18 months)	1.0
Yearlings (18-24 months)	0.9
Yearlings (15-18 months)	0.8
Yearlings (12-15 months)	0.7
Calves (weaning -12 months)	0.6
Calves (weaning at 8 months)	0.5

Information from <http://rangelandswest.org/az/inventorymonitoring/animalunits.html> with reference to page 279 of Vallentine, J.F. 1990. Grazing Management. Academic Press. San Diego, CA. pp 276-280.

Stocking rate expresses the actual number of animals on a management unit throughout the grazing period. Therefore, stocking rates are the management interface that relates livestock consumption to forage supply. Rental rates generally do not adequately reflect differences in stocking rates or in quality of grass. Livestock owners should keep these factors in mind since variations in either factor can and do affect gains or the amount of milk produced.

When pasture is rented on a per-head-per-month basis, the tenant tends to be interested in getting as much gain per head as possible. Therefore, the tenant may desire to keep the stocking rate low to provide as much grazing as possible per animal unit.

However, there is a stocking level which will give maximum gains per animal. Any reduction in the grazing rate from that optimum level will not result in additional gains per animal (the feed will simply be wasted) and will reduce the potential income to the owner of the pasture without benefiting the livestock owner.

#### **Rent per acre\***

Rent charged on a per-acre basis should reflect productivity. Differences in pasture productivity make it impossible to use quoted per acre rates without knowing a great deal about the particular pasture.

Factors that affect the productivity of pasture include natural soil productivity, kinds of grass and legumes in the stand, amount and kinds of weeds, previous fertility practices, stocking rates, source and quality of water, and condition of fences.

When pasture is rented by the acre for the season, the tenant will be interested in maximum production per acre. He will be inclined to stock a pasture more heavily if he rents by the acre instead of by the head.

From the pasture owner's point of view, the stocking rate can exceed the long-run optimum level for one or more seasons but at the expense of reducing the vigor of the more desirable plants and causing more erosion. If overgrazed long enough, the carrying capacity and productiv-

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\* USDA's Agricultural Marketing Service (AMS) provides a spring report on grazing land rental rates. The "Wyoming, Western Nebraska and Southwestern South Dakota Annual Grazing Fee Report" is released in late March and late April. The report captures a current assessment of market activity. Numbered TO\_LS150, it is online at <http://www.ams.usda.gov/>

ity of the pasture may be seriously damaged. Therefore, the landlord has good reason to be interested in a lease provision which limits the stocking rate to a level which will result in the greatest production over a period of years.

When pasture is rented by the acre, the fences, wells, and power units (windmill or motor) should be in working order at the start of the pasture season. During the season, it usually is the renter's responsibility to provide the labor for maintaining both the fence and the power unit. It is the tenant's job, also, to make sure salt and water are available, to keep a record of numbers, and to look after sick or injured animals. The pasture owner normally supplies materials for repair of fences and major repairs for the well and power unit.

The maintenance responsibilities usually are not assumed by the renter on a per-head basis; thus, the amount of rent paid during a season may be a little less when pasture is rented by the acre (assuming comparable stocking rate).

#### **COMPUTATION OF RENT**

Local supply and demand conditions play an important role in determining pasture rent. If a large quantity of pasture is for rent in an area and very few producers need pasture, then the rental rate will likely decline in that area.

Pastures must be used where and when grown rather than stored for later use. Since so few alternative uses generally exist for pasture land, the agreed-upon rent must be established by bargaining between the landlord and the tenant. In many cases, especially those involving small acreages, few farmers may be interested in renting, so the person who can utilize the pasture may get a "bargain."

In estimating what he can afford to pay for pasture rent, the tenant needs to consider his profit potential from using the pasture. For example, if a rented pasture will be used to graze steers, the tenant should consider the price for feeder cattle this spring, what the expected selling price will be this fall, and what some of the costs associated with the pasturing program will be, such as supplementary feed, water supply, mineral and salt, medication, implants, and interest on investment in cattle. He should also estimate his labor costs and possible travel costs if his home place is far from the cattle. From these, the maximum amount that he can afford to pay for pas-

ture rent can be estimated. This will be tempered by quality of pasture and location relative to his home farm and water supply.

On the other hand, landlords want to recover some of the costs of owning the pastureland. At a minimum, this might be property taxes and expenses of maintaining fences and water supply. Naturally, they hope to receive some return on their investment in land.

The costs of fertilizer, fence repair and maintenance of water supply may be borne by either the landlord or the tenant. The rent will vary depending upon how these costs are handled.

A satisfactory rental agreement is one in which all parties understand and willingly agree to the terms and conditions. Once such an agreement is reached, it is critical that it be written so that both parties can refer to it and determine their responsibilities.

### ALTERNATIVE LAND USE VALUE

If pasture is on tillable land, landowners should think in terms of what such land might produce in other crops like corn, soybeans, wheat, or hay. If pasture rents are not about equal to the net income that could be realized from other crops, landowners are likely to want to plow up the pasture and plant crops. On non-tillable land, however, the possibility may exist to rent the land for recreational purposes.

Renting land for recreational purposes has become popular in recent years and can be a complex venture. For some landlords, managing and/or leasing land for recreational uses may require additional capital and management resources which may not be available.

### ALTERNATIVE FEED COST FOR LIVESTOCK

Under farm conditions, it is difficult to estimate the production of a pasture and arrive at an "ideal" rental rate. Thus, the formula in Table 4 was devised as a guide to establishing and evaluating pasture rental charges.

This formula takes into account the price of alternative feeds and, through a general evaluation of the condition of the pasture, reflects the kind and condition of the pasture growth. The scarcity of pasture available in a community enters the formula indirectly through the price of hay. The pasture quality factor is determined based on classifications as illustrated in Table 3.

Landlords and tenants are cautioned that these values are subjective and that if adjustments will be made to rental rates based on pasture quality, agreement on the adjustment factors needs to be negotiated and agreed upon.

Table 3. Pasture quality adjustment factors

<i>Pasture condition</i>	<i>Adjustment factor<sup>1</sup></i>
Lush, green, high protein pasture	.30
Excellent grass pasture	.275
Good pasture	.25
Fair pasture	.225
Poor grasses or considerable weed growth	.20

  

<i>Pasture condition</i>	<i>Adjustment factor<sup>2</sup></i>
Lush legume pasture	.22
Excellent meadow (grass/legume)	.20
Very good permanent pasture	.18
Fair to good permanent pasture	.15
Unimproved poor condition	.12

<sup>1</sup> Information from Pasture Leases, publication EC-623-W, J.H. Atkinson and D.C. Petritz, Extension economists, Department of Agricultural Economics, Purdue University, Cooperative Extension Service with factors derived from table on page 11 of EC 627, New Method of Feeding Milk Cows, C.W. Nibler, University of Nebraska.

<sup>2</sup> Information from Maximizing Fall and Winter Grazing of Beef Cows and Stocker Cattle, Bulletin 872-98, Ohio State University Extension.

Another factor affecting pasture quality is the type of forage available. Different grasses will produce varying amounts of forage and may reach their peak suitability for grazing at different times during the year. Landlords and tenants may want to consider the type of forages available in reaching a decision on the number of animal units supported for a specified length of grazing period. There is also the obvious—weather will have an impact on estimated available forage.

The price of hay used in the formula in Table 4 can be estimated based on present and past market prices and the rental rate established in advance. Or, mid-month prices over the pasture season can be averaged and the rent determined at the end of the season. A minimum rent could be established and paid in advance with additional rent, if any, paid at the end of the season. This formula gives pasture and livestock owners a starting point in discussing pasture rental rates. Customary rates in the

Table 4. Guide to establishing and evaluating pasture rental charges.<sup>1</sup>

<i>Average animal unit</i>	<i>X</i>	<i>Average price of good hay (per ton) during pasture season</i>	<i>X</i>	<i>Quality factor</i>	<i>=</i>	<i>Rate per head per month<sup>2</sup></i>
1.2 (1200-lb cow)	X	\$40.00 (price of grass hay)	X	.275 (excellent pasture factor)	=	\$13.20
.75 (750-lb steer)	X	\$50.00 (price of alfalfa hay)	X	.275	=	\$10.30
.75	X	\$40.00 (in year of lower hay prices)	X	.225 (fair to good pasture factor)	=	\$6.75

<sup>1</sup> Information from Pasture Leases, publication EC-623-W, J.H. Atkinson and D.C. Petritz, Extension economists, Department of Agricultural Economics, Purdue University, Cooperative Extension Service based on Nelson, T.R. and L. Bitney, Figuring Pasture Rental Rates, FM64-7 (mimeo), Dept. of Agricultural Economics, University of Nebraska.

<sup>2</sup> To determine rate per acre where pasture owner has no responsibility for supervising livestock, multiply the rate per month by the number of months, subtract a per head charge for supervision, and divide the remainder by the number of acres required to carry an animal on this pasture.

community and the relative bargaining position for each party will undoubtedly enter into negotiations and consequently into the final rate agreed upon.

### SHARE OF GAIN

Occasionally, owners of pasture and cattle are interested in working out a share arrangement. Such an arrangement can divide production and price risk between the two parties. Under this arrangement, the contribution of each party is used as a basis for dividing income.

Contributions of the pasture owner almost always include land taxes, interest on the pasture investment, and depreciation and repairs on water systems and fences. They also may include part of the cost of such things as salt, mineral, and labor. Depending on the ownership of the cattle, the pasture owner may also bear some of the risk of cattle death loss.

Contributions of the cattle owner include interest on the cattle investment and any other contributions such as grain, salt, mineral, labor, and risk of death loss.

The income to be divided would be the value of the milk or livestock gains produced from the pasture. The value of livestock gains should be calculated on the basis of the net increase in value. This would require a determination of the value of animals pastured at the beginning and at the end of the pasture season.

For example, a steer calf may weigh 400 lb May 1 and be worth \$70 per cwt for a total value of \$280. On October 1, the weight might be 600 lb worth \$60 per cwt for a total value of \$360. During the 5 months, the value of the steer increased from \$280 to \$360 or \$80 per head. This amount would be divided according to the lease agreement. Agreement should be reached in advance as to whether death losses are to be included in the calculation of weight gain.

With this "share of gain" arrangement, the tenant shifts some of the production and price risk to the landlord. In return, he agrees to allow the landlord to share in unexpected good weight gains and/or prices. Minimum and/or maximum rental payments can be set if desired.

### VARIABLE RENTS

Other leasing arrangements could be developed which would also serve to shift some of the risk and the chance for profit to the landowner. For example, the risk of poor weight gain because of weather could be effectively shifted by charging a fixed amount per pound of gain.

To illustrate how this might work, assume the pasture charge for a yearling steer is \$3.50 per month. For a 5-month grazing season, this would amount to \$3.50 x 5 or \$17.50. During the 150 days on pasture, a 225-lb gain might be a reasonable expectation. The pasture rent would amount to 7.8 cents/lb under these circumstances.

Instead of charging \$3.50 per head per month, the landlord might charge 8 cents/lb of gain. If gain turned out to be unusually good (perhaps 275 lb), he would receive \$22 for the season instead of \$17.50. On the other hand, if grass was short and the gain was 175 pounds, he would receive only \$14. Pasture owners might not be willing to assume this kind of risk unless they expect to receive a little higher rent on the average for doing so.

Price change risk can be shifted through a flexible rent formula. The following is a description of one method. A base rental rate per acre and a base price (average of October and November) of good to choice steer calves at a stated market are established. Each year the rental rate changes by the same percentage that the price of steer calves change.

More simply, the per acre rent could be calculated as a multiple of steer calf prices. For example, if agreement were reached on a base rent of \$30 per acre with a base calf price of \$60 per cwt, the rent multiple would be .5. If calf prices rose to \$70 the next year during the agreed-upon time period, rent would rise to \$35 per acre. This procedure can be used to adjust the rent for a given reason or to establish a renewal rate for the following year.

Rent can also be adjusted at the end of the season for changes in pasture productivity due to weather conditions. This could be done by changing the rent by the same percentage by which the season's county hay yields changed from the 5- or 10-year average.

### **Put the Agreement in Writing**

Both landlords and tenants are reminded that it is highly desirable to put the terms of a lease agreement in writing. For some types of lease agreements, such as leases for longer than one year, South Dakota Codified Laws specify that the lease be written. Follow the advice of your attorney. Sample lease forms can be found elsewhere in this publication series.

The very process of putting an agreement in writing tends to force the spelling out of details concerning agreements which otherwise might not be discussed or might be understood in only a hazy way. Once these ideas are put down in writing, they serve as a reminder to both parties and as a legal record (if properly executed and signed) of the responsibilities of each party. In case one or both parties to the agreement should die, the written lease provides a basis for understanding and action on the part of heirs and estate administrators.

The following is a checklist of items which might be included in the lease. Items 1-4 and 10-15 are the minimum essentials for a lease agreement. For a lease to meet specific legal requirements, the services of a lawyer may be necessary.

1. Names, addresses, and interests of parties involved.
2. Date lease becomes effective.
3. Date of termination.
4. Legal description of pasture, possibly supplemented by a map.
5. Limitation on number of animals that can be pastured.
6. Details of agreement concerning health requirements.
7. Provisions concerning breachy animals.
8. Agreement concerning identification.
9. Agreement relative to male breeding stock to be pastured and rights of owner of female stock.
10. Stated responsibilities of both parties relative to water, salt, repair of fences, counting cattle, etc.
11. Provision for right of pasture owner to enter pasture.
12. Provisions concerning subleasing.
13. Amount of rent or how it is to be calculated.
14. When rent is to be paid.
15. Provision for settling disagreements.

Leases may be written to terminate after one or more time periods (year, month, season). Provision can be made for re-negotiating the lease during a specified time prior to termination.

Pasture owners may be interested in keeping their pastures free of soil-borne diseases to protect the health of their own cattle and cattle accepted for pasturing. This can be done only if animals known to be sick are kept out. An affidavit or health certificate from a veterinarian should provide acceptable evidence of an animal's state of health and serve as a basis for accepting or rejecting livestock.

Under ordinary conditions, the pasture owner is expected to provide an adequate source of water. This could be in the form of ponds or wells with mills (or motors) and tanks. Cattle owners may wish to do some checking on the dependability and quality of the water supply before completing any rental agreement. A shortage of water can be extremely detrimental to livestock gain and may necessitate hauling water or removal of stock.

The risk of death loss from poisonous plants often increases under drought conditions. Consequently, cattle

owners have reason to be concerned with the presence of poisonous weeds and plants and the efforts of the pasture owner to eliminate them.

Pasture owners who take in livestock for summer pasture should keep livestock owners informed regarding plans to add breeding males in a pasture. Some cattle owners may not want females bred. If plans to include males are changed after the pasture season begins, owners of

female stock may want to reserve the right to remove them without penalty.

Unless a lease specifically provides for it, a pasture owner may technically be prevented from entering his own pasture. It is desirable, therefore, to include a section in the lease which will define the entry rights of the pasture owner.

This publication adapted for South Dakota from Pasture Leases, publication EC-623-W, J.H. Atkinson and D.C. Petritz, Extension economists, Department of Agricultural Economics, Purdue University, Cooperative Extension Service and from Computing a Pasture Rental Rate, File C2-23, D. Hofstrand, and W. Edwards, Ag Decision Maker, Iowa State University, University Extension.

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