

\$168 per acre) to \$252 (\$120 per ton x 35 percent x 6 tons per acre = \$252 per acre) for hay production.

Rent per head per month

With this method, the livestock owner pays rent according to the number of animals grazed and length of time the pasture is used. This is measured by computing the animal unit months (AUMs). An AUM is the amount of forage required to support a 1,000 pound cow with a calf up to 4 months of age for one month. Table 2 can be used for figuring AUMs. For example, 10 cows (1,000 lbs. each) and calves pastured for three months equals 30 AUMs (10 x 1.0 x 3). Note that forage consumption normally parallels the weight of the animal.

Table 2. Animal unit months by type and weight of animal.

Type of Animal	Weight of Animal	AUM
Cow & calf	1,000 lbs.	1.00
Cow & calf	1,200	1.20
Bull	1,500	1.50
Heifer	600-800	.70
Ewe & lambs	per head	.25
Horse	1,400	1.40

Rent is figured by multiplying a rental rate per AUM by the number of AUMs. A rental rate per AUM can be figured by using the current hay price and the quality rating of the pasture. Four forage quality ratings are shown in Table 3.

Table 3. Pasture quality ratings

	Rating
Lush, green, high protein pasture	= .22
Excellent tallgrass pasture	= .20
Fair to good native shortgrass pasture	= .15
Poor short grasses or weedy pasture	= .12

For example, let's assume the pasture is brome (tall-grass) pasture. Also, assume the average grass hay price during the summer is \$100 per ton. The rental rate per AUM is \$20 (\$100 x .20). If ten, 1,000 pound cows with calf by their side are pastured for three months, 30 AUMs of pasture are used during the summer. The rent is \$600 (30 AUMs x \$20 per AUM) for the summer.

Typical rates per AUM by county and region of the state are shown in *Information File Cash Rental Rates*.

Carrying capacity

This method is based on the carrying capacity of the pasture. The rental rate per AUM is multiplied by the carrying capacity of the pasture in AUMs per acre to estimate a pasture rental rate per acre for the whole grazing season. The rental rate per AUM is computed by either multiplying the hay price during the grazing season by the pasture quality factor (Table 3), or by using a typical rental rate from *Information File Cash Rental Rates*.

For example, a \$100 grass hay price and a tallgrass pasture rating of .20 results in a rental rate per AUM of \$20 (\$100 x .20). A brome grass pasture may produce four AUMs per acre during the grazing season (Table 1). Multiplying the rate per AUM by the AUMs per acre results in a rent of \$80 per acre (\$20 per AUM x 4 AUMs).

Rent per pound of gain

With this method, pasture rent is based on the added weight the livestock gain while they are on pasture. This approach is best suited for stocker and feeder cattle rather than beef cows. To determine the rent payment, it is necessary for the cattle to be weighed or an average weight estimated before they are placed on pasture and after they are taken off pasture. This may not be practical in some situations.

Gain from pasture forage can be valued at about two-thirds to three-fourths the feed costs of gain in a feedlot. In a normal year the value of gain of livestock on pasture is from 50 to 60 cents per pound of gain. Rent is figured by multiplying the value of the gain by the total amount of gain.

For example, assume the average gain per animal is 1.25 pounds per day. The amount of gain for a month is 37.5 pounds (1.25 lbs. x 30 days). If the rental rate is 50 cents per pound of gain, the rental charge for a month is \$18.75 per head (50 cents x 37.5 pounds).

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