

Estimating Cash Rental Rates for Farmland

Tenant operators farm over half the crop land in Iowa. Moreover, nearly 60 percent of the rented land is operated under a cash lease.

Determining a fair rental rate for each farm is critical for sharing returns equitably between tenants and landowners.

The cash rental rates paid for individual tracts of farmland will depend on the productivity of the land, expected crop prices, costs of production, USDA programs and the supply of and demand for rented farmland in the community.

Circumstances such as the following may justify a higher or lower rent in certain cases:

- Small size or unusual shape of fields
- Presence of terraces or creeks that affect the time it takes to plant and harvest
- Difficult or restricted access to fields
- High or low fertility levels or Ph
- Existence of contracts for growing seed or specialty grains
- Above or below average grain prices due to transportation costs, proximity to barge loading facilities or feed demand
- USDA program variables, such as corn base and assigned yields

Several rules of thumb can be used to help estimate a fair rental rate. These rules can provide a range of values for typical situations within which a tenant and landowner can negotiate. These estimates do not consider the value of any buildings or storage that the tenant may use.

CROP LAND

Share of gross income. Some landowners estimate a cash rent as a share of expected gross income, based on the proportion of total costs contributed. Common shares are 35 to 40

percent of the gross income, including USDA payments.

Tenant's residual. Subtract the tenant's production costs, including purchased inputs, machinery and labor, from the gross income expected from the crop to find the amount available for paying rent. Some tenants may justify paying more than this for additional cropland if machinery ownership and labor costs will not increase when additional land is farmed.

Yield potential. Another approach is to multiply the potential yield under average conditions by a fixed rate per bushel. Surveys show that rates for corn have been in the \$.85 to \$.95 per bushel range, while for soybeans rents have averaged from \$2.65 to \$2.90 per bushel in recent years.

Crop-share equivalent. The equivalent rent which would be received under a crop-share agreement can be calculated by subtracting the owner's share of production expenses from the value of the owner's share of the income. Typical agreements are for the owner to receive one-half of the corn or soybean crop and government payments, and pay one-half of the seed, fertilizer, pesticide, drying and storage costs. Local customs may vary, however. Be sure to include the value of any government payments that may be received in your calculation of gross income.

Percent of land value. Multiplying the estimated current market value for the land by an expected rate of return is a very simple method. Surveys show that cash rents for good cropland in Iowa in recent years have averaged about 6 to 8 percent of current land values. However, during periods of rapid changes in land values this method is rather uncertain.

HAY AND PASTURE LAND

Forage value. Estimate the expected pasture or hay production per acre and multiply by 25 percent of the price of grass hay during the grazing season for pasture, or 30 percent for hay if the stand is already established. If the tenant supplies labor and machinery for establishing the crop and pays part of the seed and fertilizer costs, then a rental rate equal to 25 percent of the value of the crop would be more appropriate. Use hay prices corresponding to the type and quality of the stand. Some typical pasture production levels are shown in Table 1.

Per animal unit month. Some pasture is rented on a “per head per month” or animal unit month (AUM) basis. Multiplying the price of hay during the grazing season by the appropriate pasture quality factor (Table 2) is one simple way to estimate a rental value per AUM. Multiply this value by the total number of animal units (Table 3) to get a monthly rental value for all acres.

By carrying capacity. The rate per AUM can be multiplied by the carrying capacity of the pasture in AUM’s per acre (Table 1) to estimate a pasture rental rate per acre for the whole grazing season.

Percent of land value. Follow the same procedure as for cropland, only use 5 to 6 percent of the current market value.

COMPARATIVE RATES

When information is available, a good guide for setting cash rental rates for land is the rate at which similar tracts in the community have been rented. Publication FM-1851, “Cash Rental Rates for Iowa” contains typical cropland, hay and pasture cash rents for most counties in Iowa.

Ψand justice for all

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The data is collected by surveying farmers, landowners, farm managers and lenders. Other sources of information include newspaper ads, bulletin boards and word-of-mouth. These sources may not reflect typical rates, however, or rates appropriate for your own farm.

OTHER CONSIDERATIONS

The dates that rental payments are made also affect rates. For example, a \$120 per acre rent with \$60 due in advance on March 1 may cost the tenant \$3 to \$4 more than an agreement in which all the rent is due on December 1, because of added interest costs.

Storage facilities and buildings are often rented separately from land under a cash rent lease. Alternatively, if the use of facilities is included with the land, their value should be reflected in the rental rate.

Because future yields and prices cannot be predicted with certainty some owners and tenants prefer to use a **flexible cash lease**, in which the final rent is based on the actual yields and/or prices at harvest. See publication FM-1724, “Flexible Farm Lease Agreements,” for more information and examples.

Even though the terms of a cash rent lease may be relatively simple, it is important to have a written lease. A written lease can contain provisions relating to land use, date of payment, renewal and other considerations, and serves as documentation for income and estate tax purposes. Farm lease forms for both cropland and pasture are available from your county Extension office and other sources.

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PASTURE AND HAY CASH RENT WORKSHEET

A. Forage Value

1. Forage production per acre (Table 1) _____ tons
2. Hay price during grazing season \$ _____ /ton
3. Rent per acre (B1 x B2 x 25% for pasture, 30% for hay) \$ _____ /acre

B. Per Animal Unit Month

1. Hay price during grazing season \$ _____ /ton
2. Pasture quality factor (Table 2) _____
3. Rent per animal unit month (AUM) (C1 x C2) \$ _____ /AUM
4. Total animal units (Table 3 factors x no. of animals) _____ units
5. Total rent per month (C3 x C4) \$ _____ /month

C. By Carrying Capacity

Rent per AUM (C 3) _____ x AUM/acre (Table 1) _____ = \$ _____ /acre

D. Percent of Land Value

Current market value of land \$ _____ / acre x _____ % return = \$ _____ /acre

<u>Table 1. Forage Production²</u>	<u>Ton/acre</u>	<u>Hay Equivalent¹</u>	<u>AUM/acre</u>
Bluegrass, unimproved	1.0 – 1.5		3.0
Bluegrass, improved, with legume or N	1.5 – 2.5		4.0
Birdsfoot trefoil and grass	3.0 – 4.0		5.0
Orchard or brome grass, alone	3.0 – 4.0		4.0
Orchard or brome grass, with legume or N	4.0 – 5.0		6.5
Warm season grasses	4.0 – 5.0		4.0
Alfalfa, plus grass	4.0 – 6.0		6.0
Cornstalks	0.5 – 1.0		0.7

<u>Table 2. Pasture Quality Factors</u>	
Lush, green high-protein	.20
Good tallgrasses	.18
Fair to good native pasture, mostly shortgrass	.15
Poor or weedy shortgrass	.12
Cornstalks	.10

<u>Table 3. Animal Unit Equivalents²</u>	
Mature cow	1.0 to 1.4
Bull	1.5
Yearling	0.7 to 0.9
Two-year-old heifer	1.0 to 1.2
Calf	0.4
Ewe	0.25
Horse	1.0

¹Rotational grazing can increase production by about 25 percent.

²For more detailed information see publication Pm-1771, "Guide for Year-Round Forage Supply."