UNIVERSITY OF MISSOURI
Extension

2018 Cash Rental Rates in Missouri

The United States Department of Agriculture (USDA) reports that 35 percent of Missouri farmland is rented. That means that about 9.8 million acres of Missouri agricultural land is rented. To help both landowners and farmers, the University of Missouri has periodically surveyed landowners and farmers to detect trends in rental rates. The latest survey was taken in the summer of 2018.

Two hundred and eighty Missourians responded to an online survey[a] with sufficient information to be reported in this guide. They were asked to provide information on cash rental rates for Missouri cropland, pastureland, grain bins, farm buildings and fee hunting. Survey results were for 48,000 acres of cropland, a small fraction of rented agricultural land in Missouri.

The number of responses are reported in the tables below. The number and variability of responses prevents hard conclusions about rental rates across Missouri and those with few responses may not be representative of actual rental rates.

This guide should be used as one piece of information among many factors that affect rental rate negotiations and should not be the sole basis for determining your rent. Factors affecting rental rates include the acres available for rent in a locale, the number of farmers seeking to rent land for cash, productivity of the land, size of the parcel, production costs and market prices.

Table 1 presents a summary of the crop and pasture rental rate survey responses. The survey asked respondents to report the cash rental paid or received in 2017 and 2018, the crops grown in 2018, and the expected yields of that farm. Most farmers reported that they grew both corn and soybeans on the same farm in the same year. For this reason the rental rates are reported as "row-crop" ground and includes those who grew corn and soybeans. The rental rate for row-crop ground in Missouri averaged $146.81 per acre.

Table 1. Cash rent paid for Missouri crop and pasture land in 2018.

	Average ($/acre/year)	Range in rents ($/acre/year)			Normal yield per acre	Number of responses
		Low	Mid[1]	High		
Cropland						
Row-crop[2]	$146.81	$50	$150	$305		202
Wheat-rotation	122.50	65	113	250	67 bushels	16
Irrigated row-crop	196.43	86	198	320	194 bushels corn	17
Cotton	193.33	100	200	265	1,111 pounds	6
Rice	180.00	100	185	250	7,884 pounds	7
Hay	36.88	25	31	65	2.6 tons	6
Pasture and Grazing land						
Good pasture	$40.74	$12	$40	$100	less than 4 acres per cow-calf pair per year	161
Fair pasture	32.15	20	30	60	4 to 7 acres per cow-calf pair per year	19
Timber pasture	28.13	15	25	50	more than 7 acres per cow-calf pair per year	13

[1]*The mid rent in the range has an equal number of responses below and above it.*
[2]*Average corn yield of 160 bushels per acre; average soybean yield of 50 bushels per acre.*

Written by
Raymond Massey, Agricultural Economist, Department of Agricultural and Applied Economics
Hannah McClure, Research Assistant, Department of Agricultural and Applied Economics

[a]The survey instrument can be found at ***http://crops.missouri.edu/economics/2018CashRentalRateSurvey.pdf***

No responses indicated that only wheat was grown on a farm; either corn or soybeans were also grown in rotation with wheat. For this reason, "wheat-rotation" designates responses that contained wheat but also mentioned corn or soybeans grown on the farm. Farmers reported an average wheat-rotation cash rental rate of $122.50 per acre; $24 lower per acre than row-crop land where wheat was not grown.

Irrigated row-crop land was predominately reported as growing corn, but some reported growing soybeans in rotation. The irrigated row-crop rental rate is reported as $196.43; $50 more per acre than dryland row-crop land.

Cotton and rice farmers reported rental rates of $193.33 and $180, respectively.

This survey sought to make a distinction between hay ground (used only for haying) and good pasture/hay ground that may be hayed when appropriate. Farmers reported an average cash rental rate of $36.88 per acre on land that produced an average of 2.6 tons of hay per acre. Good pasture/hay ground had an average rental rate of $40.74 per acre. Fair pasture and timber pasture users reported rental rates of $32.15 and $28.13, respectively.

Previous cash rent surveys reported pasturing cattle by stocking rate. There were few responses in previous years. This year there were fewer responses, and the responses received indicate the questions were not sufficiently clear to obtain reliable results.

Table 2 reports the rental rates for Missouri farm structures. The number of responses were few. The range in rates for both grain bins and machine storage structures indicates that factors other than capacity are also important. Factors such as quality of structure, location, age, alternative uses, etc. need to be taken into account when renting structures.

Table 3 reports the results of previous Missouri cash rent surveys. Previous surveys asked questions specifically for corn ground and soybean ground. This year the two were recognized as growing on the same ground and reported as row-crop ground. The average annual rental rates of corn and soybean for 2010 through 2015 can be compared to the reported 2017 and 2018 row-crop rental rates. Row-crop ground growing corn and soybeans has been between $140 and $146 since 2014. This small variation indicates no clear trend, either up or down, in rental rates. The rental rate for farms that had some ground planted to wheat in 2018 increased from $92 to over $122 per acre. A change in the way the survey asked for farm rental rather than rental on specific crops may have affected the reported rental rate for ground that was planted to wheat in 2018. Hay and pasture ground rental rates increased slightly in all categories.

Table 2. Rental rates for Missouri farm structures in 2018.

Type of structure	Basis of charge	Average charge	Range in charges		Number of responses
			Low	High	
Grain bin	per bushel per month	$0.057	$0.01	$0.10	6
Grain bin	per bushel per year[1]	0.154	0.09	0.21	9
Machine storage building	per square foot per year	0.486	0.25	1.38	6

[1]Per bushel per year combines responses on per bin per year and per bushel per year. The per bin responses were divided by the capacity of the bin to arrive at per bushel per year results.

Table 3. Multiyear comparison of Missouri cash rental rates.

Type of land	Average rates per acre per year					
	2010	2011	2014	2015	2017	2018
Cropland						
Row-crop					$140.55	$146.81
Corn, dryland	$111.99	$121.75	$146.83	$145.50		
Soybeans	105.67	113.88	143.83	148.74		
Wheat-rotation	83.29	68.69	95.25	92.05	127.19	122.50
Irrigated row-crop					199.73	196.43
Cotton					177.00	193.33
Rice					178.57	180.00
Hay	30.95	32.91	30.81	32.33	36.88	36.88
Pasture and Grazing land						
Good pasture	$29.88	$31.43	$35.91	$38.41	$41.20	$40.74
Fair pasture	23.57	24.01	29.98	30.56	30.67	32.15
Timber pasture	15.59	16.63	17.98	17.96	28.13	28.13

Table 4. Hunting leases in Missouri in 2018.

Animals to be hunted	Averages				Number of responses
	Acres per lease	Rent per acre (annual)	Number hunters per lease	Rent per hunter	
Any wildlife	292	$14.88	7	$728.28	9
Range in rates	75 to 1,040	$0.28 to $44.81	2 to 15	$11 to $2,204	
Deer only	177	$12.42	3	$1,161.11	3
Range in rates	80 to 250	$6.25 to $20.00	2 to 3	$250 to $2,500	
Deer and turkey	310	$12.50	14	$561.25	16
Range in rates	40 to 950	$0.40 to $50.00	2 to 10	$25 to $1,583	
Ducks and geese	42	$45.50	3	$375.00	3
Range in rates	20 to 80	$24.00 to $62.50	2 to 8	$200 to $625	

This is the second year the hunting leases rates were requested from Missouri landowners and farmers. Table 4 presents the summary. While the number of responses are few, the results are similar to the 2015 survey. Average hunting lease rates for "any wildlife," "deer and turkey" and "ducks and geese" rose slightly since the 2015 survey. The large range in rental rates indicates several factors must be affecting the value of hunting rights.

Cash rental considerations

In a cash rental agreement, a tenant pays a landowner a fixed amount of money per acre (or other unit of measure) for the use of land and buildings. No share of production or nonmonetary payment is involved. The rates are commonly expressed as annual rates per acre for cropland and pasture. A small number of crop cash rental agreements are adjusted for exceptional yields or prices. Pasture may also be cash rented by charging a fixed rate per animal placed on the pasture for a specific period of time.

Typically, the tenant pays all costs associated with raising crops and livestock on leased land. Landowners normally pay for improvements expected to endure beyond the period of the lease and all expenses related to property ownership.

Storage facilities such as grain bins and equipment storage structures are also rented for cash. Rates are usually based on size or capacity for a specific use and period of time. Grain bins are often rented for a charge per bushel per month or per year. Use of auxiliary equipment and utilities may also affect the rate.

A written lease that describes the terms of the agreement is recommended. Example lease forms for cash rent of cropland and pasture can be found at ***AgLease101.org***. It is common for a cash lease to contain restrictions on use, such as crops grown, required fertility, and maintenance of roadways or fence. Pasture or livestock leases may specify a maximum stocking rate. Storage facilities may specify the type of crop to be stored and payment of utilities. All cash leases should specify the amount of rent due, the time and method of payment, and the duration of the lease. ***AgLease101.org*** contains extensive information on what to consider when leasing land, animals, equipment and buildings.

Higher-yielding land is expected to demand a higher rental rate than lower-yielding land. Figures 1 and 2 indicate that the survey respondents experience this effect for corn (Figure 1) and soybean (Figure 2). The analysis indicates that land expected to yield 140 bushels per acre would rent for $135 per acre while land expected to yield 150 bushels per acre would rent for $144 per acre; an increase of $9 per 10 bushel yield increase. For soybeans, each 10 bushel increase in soybean yield would be expected to raise rent about $30 per acre; from $125 per acre for an expected 40 bushel yield to $155 for a 50 bushel yield.

This year the survey asked in which months cash rental payments were due. Forty-three percent of farmers

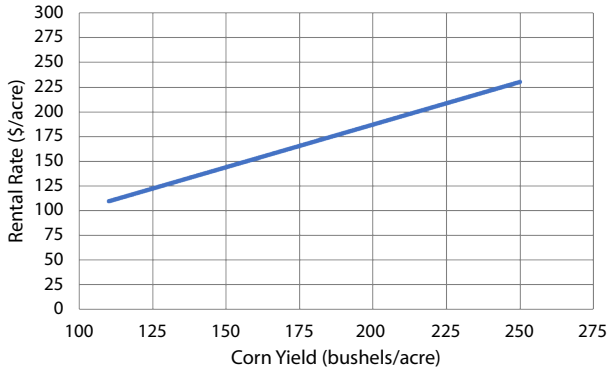

Figure 1. Relationship between average corn yield and land rental rate in 2018.

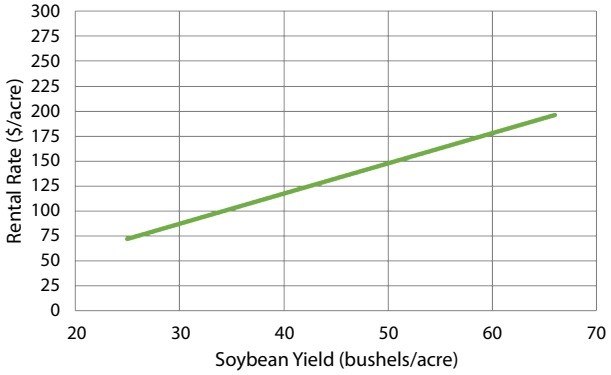

Figure 2. Relationship between average soybean yield and land rental rate in 2018.

indicated that they paid the cash rent in full in a single month; usually either March or December. Another 42 percent of farmers indicated they split cash rent between two months; usually a spring payment in March or April and a fall payment in November or December.

Thirty-eight percent of survey respondents indicated that in addition to cash renting farm land, they still had a share rental agreement on other land. Share rental agreements have been decreasing in use during the past several decades but continue to be an important way to obtain land for farming.

Pros (+) and cons (–) of cash renting

The tenant

+ Is relatively free to make management decisions.
+ Receives all profit resulting from higher yields or higher commodity prices.
+ May enroll in government programs and receive the entire payment.
– Has increased risk, because rent is fixed regardless of production.
– Can have large capital requirements for production expenses.
– Can have rent raised for doing a good job as the landowner sees profit being obtained from the property's use.

The landowner

+ Is assured of a specific level of income.
+ Is not required to commit cash in the production process.
+ Has no worries about storing or marketing crops.
– Does not receive as much money as in a crop share arrangement during good years.
– May worry that the tenant will not maintain the property.
– Has little chance to do income tax management.

Cash rental agreements increase the risk to the tenant. A variable or flexible cash rental agreement based on yield, prices or both can help distribute risk and income between both tenant and landowner. If a variable or flexible cash rental agreement is used, it is suggested that the proposed agreement be reviewed by the USDA Farm Services Agency office for clarification of its impact on program participation and payments.

Additional resources

For information on other types of rental arrangements and lease forms, contact the agricultural business specialist at your local MU Extension center. Additional information and forms are also available from Ag Lease 101, a website of the North Central Farm Management Extension Committee, at ***http://www.aglease101.org***.

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