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# Changing Land Ownership Patterns In the Northern Great Plains

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## Abstract

Production agriculture in the 4-state area of southwestern North Dakota, southeastern Montana, northeastern Wyoming and northwestern South Dakota has faced serious economic challenges. In the mid-1990's, a growing number of recreational land buyers purchased land for wildlife habitat and hunting, rather than for farm derived income. A survey of the area was done to determine land ownership characteristics, information about land that was rented and leased out, and attitudes toward key issues facing landowners and farm and ranch operators. The average landowner owned 3,089.4 acres comprised mainly of pastureland/rangeland (2,242.6 acres) and cropland (473.3 acres). Ownership of farmland was primarily from purchases (70.6 percent) and inheritance (26.1 percent). The most popular types of ownership were sole proprietorships (52.1 percent) and family partnerships (31.7 percent). Pastureland/rangeland rented in larger tracts, with 46.8 percent over 640 acres. These contracts were most common in one-year lengths, but the lease tenure was more than 10 years for two-thirds of the respondents. Cropland was generally rented in smaller acreages, and the most common lease length was the 2-3 year category. Rented cropland had the highest rate (66.7 percent) of absentee landowners. Renters strongly agree that absentee landowners are inclined to develop long-term relationships with tenants, and developing these relationships is critical to securing long-term agreements. Absentee landowners indicated that having a good relationship with their tenant (84.6 percent) was very important, as were the tenant conservation practices (61.3 percent) and tenant land-use intentions (51.1 percent).

**Key Words:** Land ownership patterns, lease/rental agreements, absentee ownership, production agriculture

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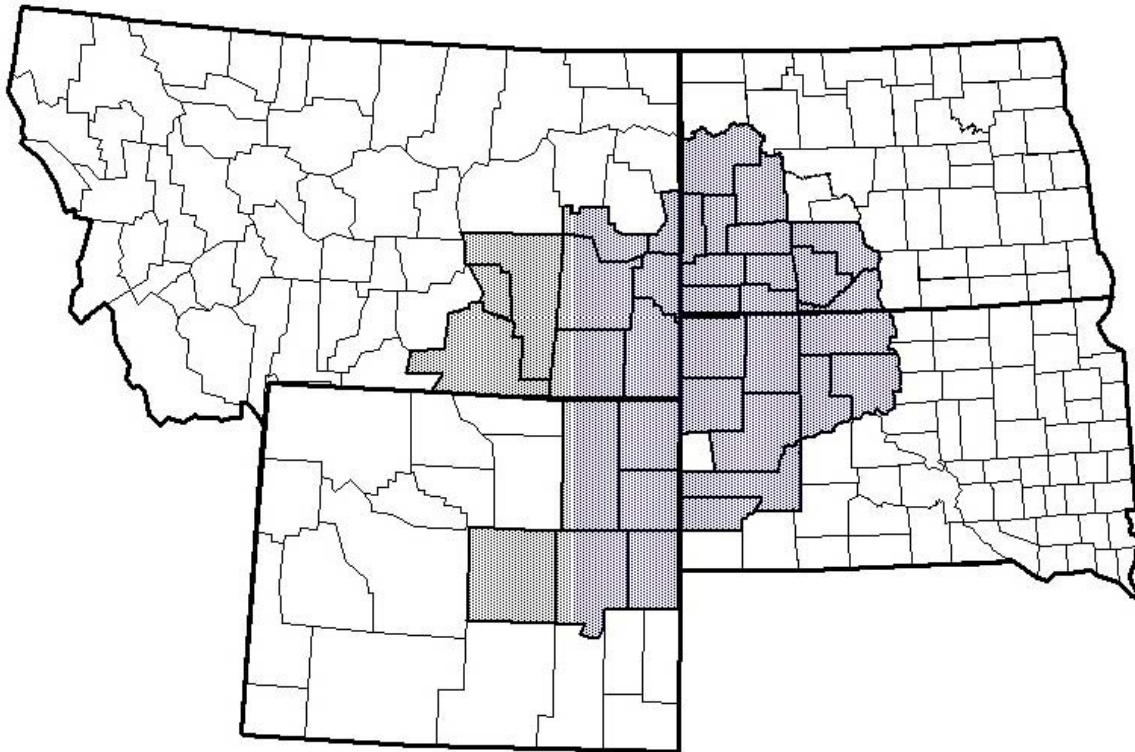
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## Changing Land Ownership Patterns in the Northern Great Plains

Nancy M. Hodur, Dean A. Bangsund, Randal C. Coon, and F. Larry Leistritz\*

Demand for land has increased significantly in recent years. Many factors have led to the rise in popularity of land ownership in the Northern Great Plains, including acquiring of land for hunting and other outdoor recreation activities. Also, increased crop prices have made land more attractive for farm enterprises, and the potential for coal and oil development have further increased the interest in land ownership in this area. Poor returns to investments in stocks and bonds and urban real estate, coupled with low interest rates have led many investors to look at purchasing farm/rural land. More land is being managed by absentee landlords such as non-local landowners, or trusts and estates for heirs of previous landowners. This has resulted in serious economic challenges for agricultural producers in the four-state region of southwestern North Dakota, southeastern Montana, northeastern Wyoming, and northwestern South Dakota (Figure 1).



**Figure 1. Four-State Land-Ownership Study Area**

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This study was conducted in cooperation with the Hettinger Research and Extension Center and sponsored by the 4-State Ruminant Animal Consortium. The goal of the Consortium is to enhance economic development in the target region by strengthening and capturing value from the ruminant livestock industry. Animal agriculture has been a key component of the four-state area economy, and a key area of research has been how to best allocate resources to maximize income from livestock and crop sales combined. Average net cash income for the 36-county study area rose from \$19,714 in 2002 to \$47,779 in 2007 (USDA 2009). Increased net cash income provides the farmers with more money to purchase land, but the increased profitability also adds to the increased demand for land. All of these factors have created a larger pool of investors wanting to buy land, with many of those being non-locals. Sustainability and growth in production agriculture with this type of demand for land will require creative solutions to bring together land owners and tenants. This study will address land ownership and management for multi-county area in the four-state Northern Great Plains Region.

## **Methods**

The study area was the 4-state Value Added Ruminant Animal Consortium 36-county region in southwest North Dakota, southeast Montana, northeast Wyoming, and northwest South Dakota (Figure 1). This region has relatively similar climate, natural resources, agricultural potential, and socio-economic conditions. Approximately 50 percent of the land in the area is native rangeland used for livestock grazing, with the remaining land used to produce annual crops (Lauenroth, et al. 1994). For a complete discussion of each individual county included in the study, see Nudell et al. (2007). These 37 counties cover 87,683 square miles, and had a 2000 population of 393,056, which grew to 436,158 by 2010 (U.S. Bureau of the Census 2011).

A questionnaire was developed and administered to absentee landowners to gauge land management objectives and strategies. A similar questionnaire was developed for local landowners to identify and contrast similarities and differences between the two groups. Priorities and objectives for the two groups can provide insights into land management and land use which may result in farm-level management changes.

### Survey and Respondent Characteristics

A questionnaire was developed with the focus on identifying the factors that new producers believe are most important in developing a relationship with an absentee landlord. The goal was to obtain 100 useable questionnaires. A mail-out method was selected for administering the survey. Two mailings with an additional postcard reminder were used for this study because in recent surveys it has produced response rates of 30 to 50 percent (Hodur et al. 2000 a, b, c). The sample of landowners was developed from information received from the Farm Service Agency. A total of 750 questionnaires were mailed out with 128 usable questionnaires returned.

A few basic demographic characteristics provide a description of the landowners that participated in this study. Respondent's mean age was 60.6 years old. Respondents ranged in age from 26 to 96 years old, with only 7.1 percent under age 40, and 58.7 percent being 60 years of age or older. With over half of the respondents at or near retirement age, it appears that few young people are starting farming or ranching, or if they are they may not have the resources to

purchase land. Only 8.5 percent of the respondents had incomes below \$25,000, while 19.5 percent had incomes exceeding \$150,000 (Table 1).

**Table 1. Personal Income for the Four-State Land Ownership Survey Respondents, by Income Category, 2010**

Income	Number of Respondents	Percent of Respondents
less than \$25,000	10	8.5
\$25,001 - \$50,000	21	17.8
\$50,001 - \$75,000	26	22.0
\$75,001 - \$100,000	22	18.6
\$100,001 - \$125,000	10	8.5
\$125,001 - \$150,000	6	5.1
more than \$150,000	<u>23</u>	<u>19.5</u>
Total Respondents	118	100.0
No response	<u>10</u>	
TOTAL	128	

Generally, survey respondents were a group of older landowners that were doing well financially, with 51.7 percent having incomes over \$75,000. Full or part-time farming and/or ranching provided employment for 60.7 percent of the respondents (Table 2). Professional workers made up 19.7 percent of the survey respondents, and business owners/self-employed workers accounted for 8.5 percent. Only 8.2 percent of full-time farmers and/or ranchers had spouses who worked off-farm, and even less (6.6 percent) of the part-time farmers and/or ranchers had spouses who worked off-farm.

**Table 2. Occupations for the Four-State Land Ownership Survey Respondents, 2010**

Occupation	Number of Respondents	Percent of Respondents
Full-time farming/ranching	48	41.0
Part-time farming/ranching	23	19.7
Professional	16	13.7
Business owner/self employed	10	8.5
Tradesman/wage earner	4	3.4
Other	<u>16</u>	<u>13.7</u>
Total Respondents	117	100.0
No response	<u>11</u>	
TOTAL	128	

Respondents were generally well educated, with 94.4 percent being high school graduates and 44.4 percent holding bachelor's or graduate degrees (Table 3). Also, 12.1 percent had post high school education with vocational/technical or 2-year college degrees. Respondents were asked which of nine different types of information distributed were most useful to them. Printed material (pamphlets, etc.) from Extension Offices was the group rated most helpful with 42 percent rating them somewhat useful and 25.9 percent rated very useful (Table 4). Video internet applications like YouTube and multi-media presentations on CD-Rom were the least useful information sources. Electronic media (newsletters and websites) were not deemed as useful as on-site tours, field days, or extension personnel visits. Responses in Table 4 would tend to indicate the participants in this study preferred information available through traditional sources, rather than through the electronic media.

**Table 3. Levels of Education for the Four-State Land Ownership Survey Respondents, by Income Category, 2010**

Education	Number of Respondents	Percent of Respondents
Some High School	7	5.6
High School Graduate	47	37.9
Voc/Tec/2-yr Degree	15	12.1
Bachelors Degree	38	30.7
Graduate Degree	<u>17</u>	<u>13.7</u>
Total Respondents	124	100.0
No Response	<u>4</u>	
TOTAL	128	

**Table 4. Respondents Perception As to the Value of Information Sources Regarding Land Management, Wildlife Production, and Conservation Practices, Four-State Land Ownership Survey, 2010**

Information Source	Value of Information Source					Total
	not useful	somewhat unuseful	neutral	somewhat useful	very useful	
	-----percent-----					
Pamphlet from Extension Office	9.8	9.8	12.5	42.0	25.9	100.0
Video internet/YouTube	37.7	18.9	25.5	12.3	5.6	100.0
Multi-media on CD-Rom	31.8	19.6	29.9	15.9	2.8	100.0
Electronic newsletter	25.7	6.4	27.5	30.3	10.1	100.0
Extension website	21.5	7.5	29.9	30.8	10.3	100.0
On-site demonstration/tours	17.1	15.2	18.1	39.1	10.5	100.0
Full-day conference/field days	22.7	13.2	31.1	28.3	4.7	100.0
Half-day conference/field days	19.6	12.2	22.4	34.6	11.2	100.0
On-site extension personnel visits	18.3	12.5	31.7	26.9	10.6	100.0

## Results

Land in the study was divided into several land-use categories. Survey respondents were asked the number of acres owned in each of these categories with the pastureland/rangeland category having the greatest number of acres owned (Table 5). Mean acreage for pastureland/rangeland was 2,242.6 acres, followed by 473.2 acres for the cropland category. These categories were followed by 201.9 acres for the cutgrass/hay/alfalfa category, with rather small acreage in the remaining land-use groups. Mean total acreage owned was 3,089.4 acres for the survey respondents. Of the total mean acreage owned, 2,444.5 acres (79.1 percent) were in the land-use categories associated with livestock feed production. Total acreage ownership ranged from 13 acres to 45,000 acres for this group. Table 5 presents the distribution of ownership of land by acreage classes for each land-use category. For all landowners, 27.5 percent owned no cropland, 24.2 percent owned up to 160 acres, 27.5 percent owned between 160 and 640 acres, and 20.8 percent owned more than a 640 acres.

Pastureland/rangeland ownership was distributed with 22.5 percent owning none, but fairly evenly distributed with acreage up to 160 acres (17.5 percent), 160 to 640 acres (14.2 percent), a 640 to 2,000 acres (25.0 percent) and more than 2,000 acres (20.8 percent). Over 48 percent of landowners had no cutgrass/hay/alfalfa with most of the remaining land owned in smaller tracts less than 160 acres (22.5 percent) and between 160 and 640 acres (19.2 percent). High percentages of the land owners had no land for housing development (98.3 percent), land with a second home (96.7 percent), or miscellaneous land uses (93.2 percent). For all landowners responding to the survey, 34.4 percent owned more than 2,000 acres, and 32.0 percent owned between 641 to 2,000 acres.

**Table 5. Land Owned and Distribution of Acreage, for Survey Respondents, Four-State Land Ownership Study, 2010**

Land-Use	Mean Acres	Distribution of Acreage					Total
		None	Up to 160 Acres	161 to 640 Acres	641 to 2,000 Acres	More Than 2,000 Acres	
		-----percent-----					
Cropland	473.3	27.5	24.2	27.5	16.7	4.1	100.0
CRP	41.3	84.0	7.6	7.6	0.8	--	100.0
Pastureland/ Rangeland	2,242.6	22.5	17.5	14.2	25.0	20.8	100.0
Cutgrass/Hay/ Alfalfa	201.9	48.3	22.5	19.2	9.2	0.8	100.0
Wooded draws/ Wetland	78.9	71.4	20.2	5.1	2.5	0.8	100.0
Housing Development	0.3	98.3	1.7	--	--	--	100.0
Land with second home	1.6	96.7	2.5	0.8	--	--	100.0
Other	57.3	93.2	3.4	1.8	0.8	0.8	100.0
<b>TOTAL ACRES</b>	<b>3,089.4</b>	<b>--</b>	<b>14.7</b>	<b>18.9</b>	<b>32.0</b>	<b>34.4</b>	<b>100.0</b>

Total Respondents = 120

The most recent year landowners acquired land in the study area has predominately been since 2000 (Table 6). Over 40 percent of the people buying land in the region for agriculture purposes had done so since 2000, whereas, those who had purchased agricultural land before 1970 represented 12.8 percent or less of all respondents. Most of the land owned by the survey respondents was purchased (70.6 percent), followed by inherited (26.1 percent), gift (2.2 percent), and other (1.1 percent) (Table 7). For landowners in the study, 57.9 percent purchased all the land they own, 21.4 percent purchased some, and 20.7 percent purchased none. For the people who inherited land, 18.2 percent received all their land by this means, 19.0 percent received some, and 62.8 percent none. Purchased and inherited land accounted for 96.7 percent of the land in the study area was acquired. Most of the land was held in sole proprietorship (32.1 percent) or family partnership (31.7 percent) (Table 8). Of the landowners that had some land in a sole proprietorship, 47.2 percent had all of it in that type of business structure, 11.3 percent had some, and 41.5 percent had none. Owners with family partnerships had 28.5 percent of the land in that type of arrangement only, 7.3 percent had some, and 64.2 percent had none.

**Table 6. Year Land in the Study was Most Recently Acquired, by Land-Use Category, For Survey Respondents, Four-State Land Ownership Study, 2010**

Land-Use	Year Land was Acquired					Total
	Before 1970	1970-1979	1980-1989	1990-1999	2000 and later	
	-----percent-----					
Cropland	11.4	11.4	13.9	21.5	41.8	100.0
CRP	10.0	5.0	25.0	20.0	40.0	100.0
Pastureland/rangeland	9.5	7.2	21.4	21.4	40.5	100.0
Cut grass/hay/alfalfa	12.8	10.6	10.6	25.5	40.5	100.0
Wooded draws/wetland	18.5	--	18.5	25.9	37.1	100.0
Land for Development	50.0	--	--	--	50.0	100.0
Second Home	66.7	--	--	--	33.3	100.0
Other	33.3	--	--	33.3	33.3	100.0

Total Respondents = 108

**Table 7. Method By Which Land Owned in the Study Area was Acquired and Acquisition Distribution for Survey Respondents, Four-State Land Ownership Survey, 2010**

Land Acquired	Mean	Acquisition Distribution			Total
		0%	1-99%	100%	
	-----percent of acres-----				
Purchase	70.6	20.7	21.4	57.9	100.0
Inherit	26.1	62.8	19.0	18.2	100.0
Gift	2.2	95.0	3.3	1.7	100.0
Other	1.1	97.5	1.7	0.8	100.0
	100.0				

Total Respondents = 121

**Table 8. Business Organization and Arrangement Distribution for Survey Respondents Owning or Managing Land in the Study Area, Four-State Land Ownership Survey, 2010**

Business Organization	Mean	Arrangement Distribution			Total
		0%	1-99%	100%	
		-----percent-----			
Sole Ownership	32.1	41.5	11.3	47.2	100.0
Partnership with Family	31.7	64.2	7.3	28.5	100.0
Trust with Family	7.4	91.1	2.4	6.5	100.0
Partnership with Non-family	--	--	--	--	100.0
LLC, LLP, etc.	4.9	94.3	1.7	4.0	100.0
Other	3.9	94.3	4.1	1.6	100.0
	100.0				

Total Respondents = 123

### Renter Results

Survey respondents also rented land in the study area. Nearly half (42.1 percent) rented land with a slightly larger number (57.9 percent) not renting land in the study region. The range of rented acres varied from 0 to 3,306 for cropland, 0 to 1,280 for CRP, 0 to 30,000 for pastureland/rangeland, and 0 to 1,000 for cutgrass/hay/alfalfa (Table 9). For people who rented land, cropland was equally distributed (14.9 percent) between up to 160 acres, between 160 and 640 acres, and more than 640 acres, with 55.3 percent renting none. Pastureland/rangeland was rented in larger tracts with 46.8 percent of land owners renting more than 640 acres of this type of land, followed by 19.1 percent renting between 160 and 640 acres, and 12.8 percent renting up to 160 acres. Over 21 percent of this group rented no pastureland/rangeland. Nearly 75 percent of land renters leased no acres of cutgrass/hay/alfalfa, and those who did had smaller tracts with 10.6 percent renting less than 160 acres, and 12.8 percent between 160 and 640 acres. Acres of rented land for pastureland/rangeland was up to 30,000 acres in the study area.

The length of land leases in the study area varied by land-use category. Cropland lease terms included 1 year (35.0 percent), 2-3 years (50.0 percent), and 4 or more years (30.0 percent (Table 10). Pastureland/rangeland leases for 1 year accounted for 44.1 percent of the total, followed by 4 or more years (35.3 percent) and 2-3 years (20.3 percent). Cutgrass/hay/alfalfa land leases had 53.9 percent being for 2-3 years, followed by 23.1 percent for one year, and 23.0 percent for 4 or more years. Data were not sufficient to determine any pattern for rented land in the other land-use categories.

**Table 9. Land Rented by Survey Respondents, by Land-Use Category and Acreage, Four-State Land Ownership Survey, 2010**

Land-Use	Observations	Range of Rented Acres	Acres Rented				TOTAL
			None	up to 160 acres	160 to 640 acres	More than 640 acres	
	-- number--	-- acres --	-----percent-----				
Cropland	47	0-3,306	55.3	14.9	14.9	14.9	100.0
CRP	47	0-1,280	91.5	--	6.4	2.1	100.0
Pastureland/ rangeland	47	0-30,000	21.3	12.8	19.1	46.8	100.0
Cutgrass/Hay/ Alfalfa	47	0-1,000	74.5	10.6	12.8	2.1	100.0
Wooded draws/ Wetland	47	0-40	95.7	4.3	--	--	100.0
Land with out- buildings	47	0-4	97.9	2.1	--	--	100.0
Land with Vacation/ Recreation Housing	47	0	100.0	--	--	--	100.0
Other	45	0-2,110	95.6	2.2	--	2.2	100.0
Total	47	0-30,000					

Table 10 presents data on how long the renter has had the lease agreement. Many of the renters have had long-term relationships with the land owners. For example, 52.6 percent of cropland leases have been for 10 or more years and 36.9 percent have existed for 4-10 years. Cutgrass/hay/alfalfa land has been rented for similar periods; 52.9 percent of the leases are more than 10 years in duration, 30.8 percent were 4-10 years, and 15.3 percent were 1-3 years. Pastureland/rangeland leases tended to be longer with 66.6 percent of them being more than 10 years in length, followed by 27.8 percent for 4-10 years. Only 5.6 percent of this type of lease was 1-3 years old. The long-term tenure of the rental leases for the agriculture and livestock production land would tend to indicate stable relationships between land owner and tenant.

**Table 10. Current Lease Term and Length of On-going Lease, by Land-Use Category, For Land Rented by Survey Respondents, Four-State Land Ownership Survey, 2010**

Land-Use	Current Lease Term				Total Years of Lease			
	1 Year	2-3 Years	4 or More Years	Total	1-3 Years	4-10 Years	More Than 10 Years	Total
	-----percent-----				-----percent-----			
Cropland	35.0	50.0	30.0	100.0	10.5	36.9	52.6	100.0
CRP	--	--	--	--	--	--	--	--
Pastureland/ Rangeland	44.1	20.3	35.3	100.0	5.6	27.8	66.6	100.0
Cutgrass/Hay/ Alfalfa	23.1	53.9	23.0	100.0	15.3	30.8	53.9	100.0
Wooded draws/ Wetland	33.3	--	66.7	100.0	--	--	100.0	100.0
Land without Buildings	--	--	100.0	100.0	--	--	100.0	100.0
Land with Vacation/ Recreation Housing	--	--	--	--	--	--	--	--
Other	--	--	100.0	100.0	--	--	100.0	--

Total Respondents = 51

According to the survey respondents, 38 percent rent land from an absentee landowner. Table 11 presents the portion of land rented from absentee landowners by land-use category. Two-thirds of the respondents who rented cropland indicated that land rented from absentee landlords comprised 76 percent or more of their total rented acres. Over 58 percent of the respondents who rented pastureland/rangeland from absentee landowners, had it comprise 76 percent or more of their rented acres for that land-use type. Survey respondents were given several statements regarding absentee landowners and allowed to indicate how strongly they agree or disagree with each one. Those results are presented in Table 12.

**Table 11. Percentage of Total Acres Rented from an Absentee Landowner by Land-use Category, Four-State Land Ownership Survey, 2010**

Land-Use	Percentage of Total Acres Rented from Absentee Landowner				Total
	Up to 25%	26-50%	51-75%	Greater than 75%	
	-----percent-----				
	-				
Cropland	11.1	11.1	11.1	66.7	100.0
CRP	--	--	--	--	--
Pastureland/Rangeland	16.7	16.7	8.3	58.3	100.0
Cutgrass/Hay/Alfalfa	66.7	--	--	33.3	100.0
Wooded draws/Wetland	100.0	--	--	--	100.0
Other	--	--	--	--	--

Total Respondents = 50

Salient observations from the respondents agreement to the statements in this table include:

- neutral on whether lease terms are shorter for absentee or local landowners
- absentee landowners want to develop long-term relationships
- do not feel that most land for rent in their local area is owned by absentee landowners
- it is critical to develop long-term relationship with absentee landowners
- evenly divided on whether absentee landowners are more interested in maximizing returns

**Table 12. Respondents that Rented Land from Absentee Landowners Level of Agreement Regarding Statements Concerning Absentee Landowners, Four-State Land Ownership Survey, 2010**

Statement	Level of Agreement					Total
	Strongly Agree	Somewhat Agree	Neutral	Somewhat Disagree	Strongly Disagree	
	-----percent-----					
Lease terms with absentee landowners are shorter than with local landowners	5.3	--	78.9	5.3	10.5	100.0
Absentee landowners prefer to develop long-term relationship with tenants	55.0	20.0	20.0	5.0	--	100.0
There is less certainty regarding long-term availability of land for rent with absentee/non-local landowners	5.3	5.3	31.6	36.8	21.0	100.0
Most of the land for rent in my local area is owned by absentee/non-local landowners	5.2	10.5	42.1	21.1	21.1	100.0
Developing a long-term relationship with absentee/non-local landowners is critical to securing long-term lease agreements	57.9	26.3	15.8	--	--	100.0
Absentee/non-local landowners are more interested in maximizing returns than developing a long-term relationship with a tenant	10.5	31.6	--	47.4	10.5	100.0

Total Respondents = 50

## Landlord Results

Forty percent of the respondents to the survey indicated they leased out land. Cropland acres leased out by landowners ranged up to 2,000 acres, pastureland/rangeland up to 2,800 acres, and cutgrass/hay/alfalfa up to 820 acres (Table 13). Also, wooded draws/wetlands had 683 acres rented and the other category had 2,400 acres rented. For leased land the cropland category had 27.5 percent renting up to 160 acres, 29.4 percent between 160 and 640 acres, and 15.6 percent more than 640 acres. For respondents having land to rent, 27.5 percent had none in this category. Pastureland/rangeland rentals were 17.6 percent up to 160 acres, 21.6 percent from 160 to 640 acres, and 19.6 percent greater than 640 acres. Again, 41.2 percent of landowners having land to rent had none in this category. Cutgrass/hay/alfalfa land rentals were 15.7 percent in the up to 160 acres category, 7.8 percent from 160 to 640 acres, and 2.0 percent more than 640 acres. The largest acreage of rangeland rented was greater than any other individuals land-use category. This would indicate that landowners had land in multiple land-use categories.

**Table 13. Landowners Property Leased, by Land-Use Category and Acreage, Four-State Land Ownership Survey, 2010**

Land-Use	Observations	Range of Leased Acres	Acres Leased			TOTAL	
			None	up to 160 acres	160 to 640 acres		More than 640 acres
	-- number --	-- acres --	-----percent-----				
Cropland	51	0-2,000	27.5	27.5	29.4	15.6	100.0
CRP	51	0-332	88.2	9.8	2.0	--	100.0
Pastureland/ rangeland	51	0-2,800	41.2	17.6	21.6	19.6	100.0
Cutgrass/Hay/ Alfalfa	51	0-820	74.5	15.7	7.8	2.0	100.0
Wooded draws/ Wetland	51	0-683	94.1	3.9	--	2.0	100.0
Other	51	0-2,400	98.0	--	--	2.0	100.0
Total Acres	51	20-4,470					

Table 14 presents the land leased locally by use category. If landlords leased cropland locally, 64.6 percent rented all of it locally and 4.1 percent rented part of it locally. Pastureland/rangeland rented locally was 54.1 percent totally rented locally, and 2.1 percent partially local. Cutgrass/hay/alfalfa rented locally was 20.8 percent all local and 2.1 percent partially local. The cropland land-use category had the highest rate of locally rented land, followed by pastureland/rangeland. This could be explained by the fact that cattle could be moved some distance for grazing.

**Table 14. Percentage of Land Leased Locally by Land-Use Category, for Landowners in Four-State Land Ownership Survey, 2010**

Land-Use	Amount of Land Leased Locally			
	None	Partial	Totally	Total
	-----Percent-----			
	-			
Cropland	31.3	4.1	64.6	100.0
CRP	97.9	--	2.1	100.0
Pastureland/Rangeland	43.8	2.1	54.1	100.0
Cutgrass/Hay/Alfalfa	77.1	2.1	20.8	100.0
Wooded draws/Wetlands	95.8	--	4.2	100.0
Other	100.0	--	--	100.0

Total Respondents = 51

Lease length for cropland rented locally was mostly for 1 year (48.5 percent), but longer leases like 2-3 years (27.3 percent) and 4 or more years (24.2 percent) were almost evenly split (Table 15). Pastureland/rangeland lease terms were 46.1 percent for 1 year, 23.1 percent for 2-3 years, and 30.8 percent for 4 or more years. Leases for cutgrass/hay/alfalfa were 50.0 percent for 4 or more years, 30.0 percent for 1 year, and 20.0 percent for 2-3 years. The total length of lease for cropland was fairly evenly distributed between 1-3 years (32.3 percent), 4-10 years (38.7 percent) and more than 10 years (29.0 percent). Pastureland/rangeland and cutgrass/hay/alfalfa land use categories were very similar with the majority being a 4-10 year tenure, followed by the more than 10 years, and 1-3 year tenure.

**Table 15. Current Lease Term and Length of On-going Lease, by Land-Use Category, for Land Rented by Survey Respondents, Four-State Land Ownership Survey, 2010**

Land-Use	Current Lease Term				Total Years of Lease			
	1 Year	2-3 Years	4 or More Years	Total	1-3 Years	4-10 Years	More Than 10 Years	Total
	-----percent-----				-----percent-----			
Cropland	48.5	27.3	24.2	100.0	32.3	38.7	29.0	100.0
CRP	50.0	--	50.0	100.0	--	75.0	25.0	--
Pastureland/ Rangeland	46.1	23.1	30.8	100.0	17.4	56.5	26.1	100.0
Cutgrass/Hay/ Alfalfa	30.0	20.0	50.0	100.0	11.1	66.7	22.2	100.0
Wooded draws/ Wetland	--	100.0	--	100.0	100.0	--	--	100.0
Other	--	--	100.0	100.0	--	100.0	--	100.0

Total Respondents = 51

Landowners who rented out land were provided a question allowing them to indicate how important certain criteria were to them when making leasing decisions. Results from this question are summarized in Table 16. Forty-eight percent of respondents felt that receiving the maximum rent was either somewhat important or very important, while 30 percent were neutral on that topic. Having a good relationship with the tenant was very important to 84.6 percent of the survey respondents. Also, a long-term lease with the tenant was very important for 48.1 percent, and somewhat important for 17.3 percent of respondents. A short-term lease to capture increasing rental rates was not important for 33.3 percent, while 31.3 percent of the respondents were neutral to this topic. Landowners were fairly evenly distributed on the subject of helping young farmers get started with 20.8 percent indicating it was not important. A majority of landowners indicated that both tenant land-use intentions and tenant conservation practices were very important, 51.1 percent and 61.3 percent, respectively.

### Key Issues

Five key issues facing farmers and ranchers were identified and respondents were asked to rate the relative importance of each. Results of this question are presented in Table 17. Highlights from this table include:

- Over thirty-two percent of respondents strongly agree that it is difficult to rent or purchase land to make a viable farm enterprise, and 18.2 percent agree. However, 41.3 percent were neutral on this topic.

- Over 36 percent of the survey respondents were neutral on whether land used for wildlife production and recreation reduced land for rent for agriculture production. But, 27.0 percent agreed and 18.8 percent strongly agreed that land for agriculture production had been effected.
- Respondents agreed (23.8 percent) and strongly agreed (40.1 percent) that wildlife production and recreation have caused land prices to appreciate beyond the value for agriculture.
- Thirty-two percent of respondents agreed and 21.3 percent strongly agreed that farming and ranching operations more frequently were renting land than in the past. However, over 39 percent of the respondents were neutral on this topic.
- Over 25 percent of respondents agreed and 37.7 percent strongly agreed that it is too risky to base a farm or ranch only on rented land with short-term leases. On this topic, 27.9 percent were neutral.
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**Table 16. Relative Importance of Leasing Criteria for Landlords, Four-State Land Ownership Survey, 2010**

Leasing criteria	Level of Importance				
	not important	somewhat unimportant	neutral	somewhat important	very important
Receive maximum rent	10.0	12.0	30.0	26.0	22.0
Good relationship with tenant	1.9	1.9	--	11.6	84.6
Long-term lease with tenant	11.5	9.6	13.5	17.3	48.1
Short-term lease to capture increasing rental rates	33.3	16.7	31.3	10.4	8.3
Help young farmer get started	20.8	12.5	25.0	16.7	25.0
Tenants land-use intentions	4.2	--	14.9	29.8	51.1
Tenants conservation practices	2.0	2.0	14.3	20.4	61.3

Total Respondents = 50

**Table 17. Respondents Level of Agreement with Land-Use Issues Facing Farmers and Ranchers, Four-State Land Ownership Survey, 2010**

Issue	Agreement with Issue				
	strongly disagree	disagree	neutral	agree	strongly agree
	-----percent-----				
It is difficult to find land to rent or purchase to make a viable farm enterprise	5.0	3.3	41.3	18.2	32.2
Land used for wildlife production and recreation has reduced land for rent for agriculture production	11.5	6.6	36.1	27.0	18.8
Land used for wildlife production and recreation has caused land prices to appreciate beyond the value for agriculture	8.2	7.4	20.5	23.8	40.1
Farming and ranching operations more frequently use rented land than in the past	1.6	5.8	39.3	32.0	21.3
It is too risky to base a farm or ranch operation on rented land with short-term leases	2.5	6.5	27.9	25.4	37.7

Total Respondents = 122

## Conclusions

Alternate land uses currently competing for farmland with farmers and ranchers include wildlife and recreation and energy development. A four-state study area including southwest North Dakota, southeast Montana, northeast Wyoming and northwest South Dakota, was selected for an analysis of land ownership. A survey of landowners in that area was conducted to determine land ownership characteristics, information about rented and leased land, and attitudes toward key issues facing landowners and farm and ranch operators.

Survey respondents owned and average 3,089.4 acres, comprised primarily of pastureland/rangeland (2,242.6 acres), followed by cropland (473.3 acres) and cutgrass/hay/alfalfa (201.9 acres). Over 40 percent of all pastureland/rangeland, cropland, and cutgrass/hay/alfalfa had been purchased since 2000. Ownership of land has been primarily the result of purchases (70.6 percent), followed by inheritance (26.1 percent). The majority of land is held in a sole proprietorship (52.1 percent) arrangement and 31.7 percent is held in a partnership with family members.

Farmers and ranchers who leased land rented larger tracts of pastureland/rangeland than other land-use types. Tracts over 640 acres made up 46.8 percent of that type of rented land, but cropland tract size rentals were equally distributed between up to 160 acres, 160 to 640 acres, and more than 640 acres (14.9 percent for each). Most current pastureland/rangeland rental contracts were for 1 year (44.1 percent), but the tenure of the majority (66.6 percent) of leases had been for more than 10 years. Half of the cropland was rented for 2-3 years, and these leases also have had a long tenure with 52.6 percent exceeding 10 years. Rental terms for cutgrass/hay/alfalfa were similar to cropland, with 53.9 percent with 2-3 year contracts and 53.9 percent of these contracts had a tenure greater than 10 years. Cropland was most frequently rented (66.7 percent) from an absentee landowner for all land-use types. Renters strongly agreed that absentee landowners want to develop long-term relationships with tenants, and that relationships are critical to securing long-term lease agreements. Absentee landowners rented 64.6 percent of their cropland and 54.1 percent of their pastureland/rangeland locally. Absentee landowners rented most of their cropland (48.5 percent) and rangeland/pastureland (46.1 percent) on 1 year leases. Half of the cutgrass/hay/alfalfa land was leased for 4 or more years. These three land-use types had the largest share of their land rented for a 4-10 year tenure. Absentee landowners felt that having a good relationship with their tenant (84.6 percent) was very important, as were the tenants conservation practices (61.3 percent) and tenants land-use intentions (51.1 percent).

This study was initiated at a time when land use for wildlife and recreation was potentially becoming a substantial competitor for land for production agriculture. Absentee landowners were on the rise and some land was purchased for recreational activities. Farmers and ranchers believe this has caused the cost of buying or renting land to increase beyond what it would have been had those lands remained in agricultural production. A high portion of the absentee owner's land has been rented locally. Many of the renters have been able to develop good relationships with the landowners, and even though they are renting for short-term periods, they have been able to maintain the lease over long periods of time. Since this study was initiated higher crop prices and widespread enthusiasm for energy development have again affected land ownership pattern in the region. How all of these external factors affect production agriculture in this region remains yet to be seen.

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