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# WYOMING FARM AND RANCH LAND MARKET

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The major purpose of this study is to report market prices for various types of agricultural land in Wyoming. Data were collected on 295 actual land sales occurring in different parts of Wyoming in 1980 and 1981. The Federal Land Bank was the main source of land sales data. Average market prices were reported on a per animal unit (AU) basis for ranches and on a per acre basis for grazing land, irrigated cropland and dry cropland. Average market prices were reported for each of the following six regions in the state:

Region 1 - Johnson and Sheridan
Region 2 - Campbell, Converse, Crook, Niobrara, and Weston
Region 3 - Albany, Goshen, Laramie, and Platte
Region 4 - Carbon, Natrona, and Sweetwater
Region 5 - Lincoln, Sublette, and Uinta

Region 6 - Big Horn, Fremont, Hot Springs, Park, and Washakie The average market price of ranches in Wyoming was \$2426 per AU in 1980-81. Region 1 had the highest average price at \$3011 per AU, while the lowest average price was \$1618 per AU in Region 4. Sale prices ranged from \$900 to \$5700 per AU. On a statewide basis, average prices were found to decline with increasing ranch size and when over 50% of the forage requirements were provided by leased forage.

Average prices for grazing land in Wyoming ranged from a high of \$139 per acre in Region 1 to \$63 per acre in Region 4. The state average was \$87 per acre. Regions 1 through 3 had the highest average prices in the state. Region 1 had the highest average, Region 3 was second (\$131 per acre), and Region 2 was third at \$111 per acre. Prices in these 3 regions of eastern Wyoming were influenced by scenic values and recreation potential near national forests, urban centers, and generally higher carrying capacities than grazing land in the rest of Wyoming. Some of the lowest grazing land prices in Wyoming were found in the Big Horn Basin and central Wyoming where prices ranged from \$35 to \$80 per acre.

The statewide average market price for all irrigated cropland in Wyoming was \$913 per acre in 1980-81. Regions 3 and 6 are the most important cash and feedcrop producing areas in Wyoming. In Region 3, prices for irrigated lands were divided into three classes (Class I through III) based on the percentage of water requirements supplied in normal years. Prices for land with Class I water, the best water supply, averaged \$1496 per acre. Class II lands averaged \$1082 per acre, and \$712 was the average for Class III. Average price per acre in Region 6 was \$895, however, the average price was about \$150 per acre less in Fremont county compared to the Big Horn basin (\$795 versus \$949).

The majority of dry cropland is located in southeastern Wyoming (Region 3). Average price in Region 3 for 1980-81 was \$296 per acre with a range of \$125 to \$440 per acre. Dry cropland sales were confined to Regions 1 through 3 in this study though there are small acreages located in other regions. The state average price was \$313 per acre.

Agricultural land price changes were compared for the 5 year period between 1975-76 and 1980-81. For the entire state, percentage increases in average price were 44% for ranches, 38% for grazing land, and 48% for irrigated cropland. Average prices for dry cropland increased 26% in Region 3. The inflation rate for this period was 58% so that, overall, Wyoming agricultural land did not keep pace with inflation between 1975-76 and 1980-81. However, over the 22 year period from 1960 to 1982, average Wyoming agricultural land prices rose from \$22 to \$170 per acre. This 673% increase averages out to a 9.7% increase per year and substantially exceeds the inflation rate during that period.

During the first quarter of 1982, there has been a general slowdown in sales activity and a leveling off of prices for agricultural land in Wyoming. A combination of high interest rates and low agricultural product prices have caused buyers to withdraw from the market. This has resulted in a "buyers market" for Wyoming agricultural land, especially for irrigated cropland where dollar return is the main influence on land value.

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## WYOMING FARM AND RANCH LAND MARKET

Alan Collins and Andrew Vanvig\*

### INTRODUCTION

The purpose of this study is to provide current market price information concerning Wyoming farm and ranch lands. Data in this study are not intended to show values of specific land parcels. They do show average market values for major types of agricultural land in different areas of the state. This price information provides a benchmark to measure future changes in agricultural land prices and a comparison with price information in a previous study.<sup>1/</sup> The findings of this study should be useful to farmers, ranchers, realtors, prospective investors and others interested in the Wyoming agricultural land market.

### TRENDS IN THE AGRICULTURAL LAND MARKET

The market price of agricultural land has been increasing steadily over the past twenty years. At times, the increases have been much higher than the inflation rate, especially in the mid-1970's. According to U.S. Department of Agriculture reports on <u>Farm Real Estate Market Developments</u>, the average price of U.S. agricultural land was \$116 per acre in 1960. By 1982, this price had risen to \$788 per acre (Figure 1). Agricultural land prices in the U.S. increased by 579% over this 22 year period for an average increase of 9.1% per year. Over the same period, average Wyoming agricultural land prices rose from \$22 to \$170 per acre. This 673% increase averages out to a 9.7% increase per year.

Research Associate, and Professor and Division Head, respectively; Division of Agricultural Economics, University of Wyoming, Laramie, Wyoming. Wyoming Rural Real Estate Market (Stephenson and Vanvig, 1978).





Source: USDA, Farm Real Estate Market Developments, selected issues.

<u>a</u>/ Dollars per acre were recorded on a semi-log scale so that slopes indicate percentage rates of change and vertical distances equal total percentage changes. On an annual basis, agricultural land in Wyoming during this 22 year period has fluctuated from a maximum annual increase of 25% in 1974 to a minimum 3% increase in 1971 (Table 1). Annual increases in land prices have generally been equal to or greater than inflation, but for 3 out of the past 4 years (1979-82) increases in price have been below the inflation rate.

During the first quarter of 1982, there has been a slowdown of sales activity and a leveling off of prices for agricultural land in Wyoming according to realtors throughout the state. Major exceptions to this slowdown are dry cropland in southeastern Wyoming, grazing land in central Wyoming and grazing land (or small ranches) in scenic, mountainous areas. The two major factors causing this slow market and stabilization of prices appear to be continued high interest rates and low agricultural product prices. Overall, Wyoming's ricultural land market in early 1982 would be classified as a "buyers market" because properties are often listed for sale for a considerable time before being sold.

#### PROCEDURE

Wyoming's agricultural land was divided into three categories for this study: grazing land, irrigated cropland and dry cropland. Bonafide actual land sales information was collected in January and February of 1982 for Wyoming farm and ranch sales made during 1980 and 1981. Information on 295 sales was collected from records in Federal Land Bank association branch offices in Wyoming. Other sources of sales information included land appraisers for the Bureau of Land Management (BLM) and the state, farm and ranch realtors, and the Farmer's Home Administration. Price data reported in this study represent an average of sales occurring in 1980 and 1981.

For each land sale, all items were priced out separately and totaled up to

τ.	Percentag	Percentage Increases				
Years	Land Prices	Inflation rate				
1960-69 <sup>c/</sup>	5	2				
1970	5	6				
1971	3	5				
1972	12	3				
1973	14	5				
1974	25	11				
1975	14	10				
1976	17	6				
1977	7	6				
1978	4	7				
1979	13	10				
1980	. 7	15				
1981	7	11				
1982	4	7				

Table 1. Annual percentage increases in Wyoming agricultural land prices  $a^{\prime}$  and the U.S. inflation rate.  $b^{\prime}$ 

<u>a</u>/ Percentage rates of change are for the year ending in March 1 for 1960 to 1975, February 1 for 1976 to 1981 and from February 1, 1981 to April 1, 1982.

b/ Consumer price index using March index to compute percentage changes.

- c/ Percentage figures reported represent the average of annual percentage increases over the 10 year period.
- Sources: U.S. Department of Agriculture, Farm Real Estate Market Developments, selected issues.

U.S. Department of Agriculture, Food Consumption, Prices, and Expenditures, Statistical Bulletin 672.

Wyoming Department of Administration and Fiscal control. Wyoming Data Handbook, 1981.

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equal the sale price by land appraisers. Prices were assigned for: 1) the three types of agricultural land, 2) structural improvements, 3) public grazing permits, and 4) other items included in the land sale.

Agricultural land sales used in this study were limited to those over 100 acres to exclude (the majority of) rural home purchases. In addition, sales included in the study were restricted to those where the land was expected to remain in agricultural production. Sales were excluded if the land was obviously bought for residential or commercial development and if land was classified by the Federal Land Bank as having "great" non-agricultural influence. For ranches, only sales over 50 animal units (AU) were included to eliminate smaller sales which tended to be influenced by investors and recreation potential.

To show the variation in land values for different parts of Wyoming, the state was divided into six regions (Figure 2). The only areas of Wyoming excluded from this study were Teton County and Yellowstone National Park. Yellowstone was not included because there is no privately owned agricultural land in the park. Teton County was excluded because only 4% of the county is privately owned. The value of privately owned land in Teton County is largely determined by recreational and development factors with agricultural production potential having little or no influence on market value.

Regions of the state vary with respect to type of agricultural production. Cattle, sheep and hay production are located in all counties, but other types of agricultural enterprises are concentrated in specific regions. The following is a summary of the primary agricultural enterprises according to region:

<u>Region 1</u> - (Johnson and Sheridan) Primary enterprises are beef cattle, sheep and hay.



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- <u>Region 2</u> (Campbell, Converse, Crook, Niobrara and Weston) Primary enterprises are beef cattle, sheep, hay and wheat.
- <u>Region 3</u> (Albany, Goshen, Laramie and Platte) Primary enterprises are beef cattle, sheep, wheat, sugar beets, corn, dry beans, barley, hay and other irrigated crops.
- <u>Region 4</u> (Carbon, Natrona and Sweetwater) Primary enterprises are sheep, beef cattle and hay.
- <u>Region 5</u> (Lincoln, Sublette and Uinta) Primary enterprises are beef cattle, sheep, dairy cattle and hay.
- Region 6 (Big Horn, Fremont, Hot Springs, Park and Washakie) Primary enterprises are beef cattle, sheep, sugar beets, barley, oats, dry beans, hay and other irrigated crops.

The importance of each type of agricultural land varies somewhat among different counties in a given region. For example, Region 3 includes important dryland wheat-producing counties of Goshen and Laramie. Albany County, which is also in Region 3, has very little dryland wheat. The influence of climate, population, recreation potential and minerals vary among and within different regions of the state. Even though these variations are present, the regions identified are relatively homogeneous.

#### MARKET PRICES OF WYOMING AGRICULTURAL LAND

Average market prices reported in this section were for ranches, grazing land, irrigated cropland and dry cropland. Market price for ranches was reported <sup>on</sup> an animal unit basis. For this study, one AU was defined as the feed <sup>requirements</sup> for maintaining a 1000 pound cow for one year.

Market price per AU includes structural improvements (buildings) and the

value of public land leases transferred with deeded land. Market prices reporter in this study on a per acre basis do not include the value of any structural improvements nor leased land associated with the deeded land. These items were priced separately in each sale and deducted before determining the price per deeded acre. Other improvements, such as fences and water developments for grazing land or ditches for gravity irrigated cropland, were included in the market price.

#### Ranch Prices

Average price per AU for the six regions in Wyoming ranged from over \$3000 in Region 3 to just over \$1600 in Region 4 (Table 2). The statewide average price was \$2426 per AU. The highest average price (\$3011 per AU) in Region 3 (southeast Wyoming) was due to various factors. These factors included the overall good quality of grazing land throughout the region (in terms of carrying capacity); the small average size of ranch sales in this region; and nonagricultural influences from the Medicine Bow National Forest and the cities of Cheyenne and Laramie. Region 1 had the second highest average price (\$2853 per AU) and the highest price per AU for any sale included in the study (approximately \$5700) because of the recreational and scenic influences of the Big Horn Mountains.

Region 4 not only had the lowest average price but also the lowest range of high and low prices. Factors behind the low market prices in this region includ a lack of recreational influence on the bulk of grazing land in the region; sale that generally include a large amount of leased public land along with deeded acreage; and a large average size of sales in this region (an average of almost 1500 AU per sale) compared to other regions.

The effects of ranch size and percentage of AUs of forage from leased publi land on the price per AU are shown in Table 3. On a statewide basis, market

	1700 01 001001					
	_	Number of	Average	Average	Range	
Regio	n	sales	size	sales price	Low	High
N		aı	nimal units	dollars pe	r anima	l unit
1	Johnson, Sheridan	14	270	2,853	1,400	5,700
2	Campbell, Converse, Crook, Niobrara, Weston	22	250	2,380	1,400	4,500
- 3 44	Albany, Goshen, Laramie, Platte	9	200	3,011	1,800	4,700
4	Carbon, Natrona, Sweetwater	12	1,470	1,618	900	2,700
5	Lincoln, Sublette, Vinta	10	230	1,838	1,250	3,300
6 UA	Big Horn, Fremont, Hot Springs, Park, Washakie	13	420	2,203	1,000	3,900
state		80	460	2,426	900	5,700

Table 2. Price per animal unit for Wyoming ranches over 50 AU in size, 1980-81 sales.

Table 3. Price per animal unit of Wyoming ranches based on size and percentage of forage provided by public land leases, 1980-81 sales.

	Number of	Average	
and the second se	sales	price	
		dollars per	
Size		animal unit	
50 - 249 AU	46	2,654	
250 - 499 AU	20	2,141	
500 AU and over	14	1,843	
Fire-			
Percentage of			2
Leased Forage			
0 - 25%	50	2,324	
26 - 50%	22	2,329	
and over	8	1,346	
and the second se			

price per AU declines with increases in ranch size. The average sale price for ranches between 50-249 AU was \$2654 per AU. For 250-499 AU, average ranch price was \$2141 per AU and declined to \$1843 per AU for ranch sales over 500 AU in size. The percentage of AU from leased public land in a sale had little effect on price when less than 50% of the total forage came from leased land. When the percentage of AUs from leased land was over 50%, there was a substantial drop in average price from \$2329 per AU to \$1346 per AU. Many sales in the category over 50% leased AU forage had a very high percentage of leased forage, with the average of the 8 sales being 71%.

Tab1

Reg:

The use of forage on public land included in many ranch sales does have a value above the annual lease rate. Based on 1980-81 actual sales of solely federal permits, BLM permits sold for an average price of \$45 per animal unit month (AUM) and U.S. Forest Service permits averaged \$56 per AUM.<sup>2/</sup> Prices ranged from \$40 to \$50 per AUM for BLM permits and from \$35 to \$100 per AUM for U.S. Forest Service permits. All sales were from Regions 4, 5 or 6 where the bulk of federal land is located in Wyoming.

#### Grazing Land Prices

Average price per acre of grazing land for each region followed the same highest to lowest pattern as average prices per AU (Table 4). The only exception was Region 1 which had a higher price (\$139 per acre) than Region 3 (\$131 per acre). Basically, the same influences that affect per AU price affected grazing land prices on a per acre basis.

The average price per acre for the entire state was \$87. Regions

<sup>2/</sup> AUM's are determined differently by federal agencies. The BLM uses the more widely accepted unit of the forage required by a cow for one month while the U.S. Forest Service determines each animal over 6 months of age entering National Forest lands for one month as one AUM and does not count animals under 6 months.

Table 4. Wyoming grazing land prices, 1980-81 sales.

		Number of	Average	Average	Rai	nge
Region	Counties in region	sales	size	price	Low	High
			acres	doll	ars per	acre
1	Johnson, Sheridan	20	2,970	139	60	350
2	Campbell, Converse, Crook, Niobrara, Weston	46	2,850	111	55	430
3	Albany, Coshen, Laramie, Platte	64	870	13]	70	420
4	Carbon, Natrona, Sweetwater	22	16,800	63	30	150
5	Lincoln, Sublette, Uinta	12	640	72	30	200
6	Big Horn, Fremont, Hot Springs, Park, Washakie	73	980	92	30	480
State	<i>abharic</i>	237	2,930	87	30	480

1, 2 and 3 in the east half of Wyoming had the highest average prices because of higher carrying capacities. As Figure 3 shows, higher carrying capacities, along with recreational and urban influences, result in higher grazing land price ranges in eastern Wyoming. Both price and carrying capacity estimates were developed from actual sales of grazing land tracts of more than 320 acres. Some areas of the state are not included because there were not enough sales to provide an estimate of the range of values.

Higher priced grazing land in Wyoming was associated with national forests and/or urban centers in Sheridan County, northeastern Wyoming and



southeastern Wyoming. The lowest priced grazing land in 1980-81 was a \$35 to \$80 range which covers most of the Big Horn Basin and central Wyoming (Figure 3). Probably the lowest priced grazing land for the quality (.4 to .6 AUM per acre) was found in Goshen, Platte, Converse, Niobrara and Laramie Counties where prices ranged from \$90 to \$150 per acre.

## Irrigated Cropland Prices

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onal Forests

Average prices ranged from a high of \$1496 per acre for lands with Class I water supply in Region 3 to lows of \$654 per acre in Region 4 and \$671 per acre in Region 5 (Table 5). Wyoming's irrigated cropland sales ranged from \$400 to \$2350 per acre during 1980 and 1981, with an average price per acre for all irrigated cropland of \$913. No distinction was made in this study between different types of irrigation systems (gravity or sprinkler) on irrigated cropland.

Water supply classification is a system used by the Federal Land Bank to classify the water supply available to irrigated land. The highest classification, Class I, provides water supplies sufficient to support maximum production of the most profitable crops by providing effective supplies at least 95% of the time. Examples of Class I supplies include Rock Ranch ditch, Goshen Irrigation District, and most any water right out of the North Platte River. Class II supplies will support production of the most profitable crops but are subject to moderate shortages in normal years because only a 67 to 95% effective supply is provided. Class II supplies include water from Wheatland Reservoir and all reservoirs south of the North Platte River in Coshen and Platte Counties. Class III will not support production of the most profitable crops because only 25 to 66% effective supply is provided which results in material shortages during normal years. Examples include lands irrigated by intermittent creek flows and ground water pumped from areas of declining water tables.

		Number of	Average	Average	R	ange
Region	Counties in region	sales	size	price	Low	High
			acres	dolla	rs per	acre
1	Johnson, Sheridan	9	220	939	600	1,850
2	Campbell, Converse,			•		
	Crook, Niobrara, Weston	10	220	872	400	1,500
3	Albany, Goshen, Laramie, Platte					
	Class I Water Supply	22	120	1,496	900	2,350
	Class II Water Supply	18	240	1,082	500	1,500
	Class III Water Supply	7	220	712	500	1,000
4	Carbon, Natrona,			,		
	Sweetwater	8	350	654	400	1,500
5	Lincoln, Sublette,					
	Vinta	15	300	671	450	1,700
6	Fremont County only	28	180	795	600	1,800
	Hot Springs, Park,					1.5
	Washakie, Big Horn	49	190	949	450	2,200
State		166	210	913	400	2,350

Table 5. Wyoming irrigated cropland prices, 1980-81 sales.

Irrigated cropland sales in Region 3 were subdivided by water supply classification because there were enough sales in each class, and a price difference was very distinct. In Region 6, the overwhelming majority of sales were Class I so there were not enough sales in the other classes to separate by water supply classification.

In Region 6, irrigated cropland sales in Fremont County were found to averag about \$150 per acre less than sales in the Big Horn Basin (\$795 compared to \$949). One of the reasons for this average price difference was that sugar beets are grown in the Big Horn Basin but not in Fremont County. This is because sugar beet plants are located in Worland and Lovell. The greater profitability of producing sugar beets, compared to other cash and feed crops (Agee, 1981), increases the price of irrigated cropland where they are produced and pushes up the average land price. While the average price in the Big Horn Basin was \$949 per acre, prime irrigated cropland producing sugar beets around Worland would sell for \$1200 to \$1800 per acre.

The major cash and feed crop producing areas in Wyoming are in Regions 3 and 6 with hay being the predominant crop. Other cash and feed crops include sugar beets, barley, corn, dry beans, oats and wheat. Irrigated cropland sales in the other 4 regions were hay lands used mainly in ranch operations. With the exception of the scenic and recreation influenced Region 1 prices, irrigated cropland prices in Regions 3 and 6 were found to be the highest in the state because they are the best irrigated crop producing areas.

#### Dr Cropland Prices

Dry cropland acreage is confined to Wyoming's three eastern regions. Though no sales were reported for 1980-81, there are small acreages of dry cropland in Lincoln, Carbon and Natrona Counties. Wheat is the most common crop produced. Some hay is also grown. Region 3 is the state's major wheat producing area.

Average prices for dry cropland ranged from \$300 per acre in Region 3 to \$400 per acre in Region 1 (Table 6). Average price per acre for all dry cropland in Wyoming was \$313. Average prices per acre in the three regions were quite similar, however, one high sale of \$950 per acre pushed the average in Region 1 above the other regions.

		Number	Average	Average	Rang	e
Region	Counties in region	of sales	size	price	Low	High
	• <u> </u>		acres	doll	ars per	acre
1	Johnson, Sheridan	5	290	400	290	950
2	Campbell, Converse, Crook, Niobrara, Weston	21	240	326	150	600
3	Albany, Goshen, Laramie, Platte	31	370	296	125	440
State		57	310	313	125	950

Table 6. Wyoming dry cropland prices, 1980-81 sales.

MARKET PRICE CHANGES FOR WYOMING ACRICULTURAL LAND

Market price increases from 1980 to 1981 on a statewide basis ranged from 7.5% to 15% (Table 7). There were not enough ranch sales over both years for a good indication of price increases on a regional basis. For grazing land, price were stable to upward in Regions 3 and 6 while increases were above the state average in Regions 2 and 4. The important regions for irrigated cropland showed a slight decline (2%) in Region 3 and a 15% increase in Region 6 from 1980 to 1981. Though there was an overall decline in Region 3, Class I irrigated cropland increased 18% from \$1349 to \$1595 per acre. Region 3 had the largest

Table 7. Change in average prices for Wyoming agricultural land and ranches from 1980 to 1981.

	Avera	ge prices	Percentage
	1980	1981	change
Ranches (\$/AU)	2,235	2,477	10.8
Grazing Land (\$/acre)	80	92	15.0
Irrigated Cropland (\$/acre)	880	946	7.5
Dry Cropland (\$/acre)	295	325	10.2

increase in dry cropland prices with 18% (from \$268 to \$318 per acre). Dry cropland prices remained stable in Region 2.

To get an indication of market price changes over a 5 year period prior to 1980-81, average prices in this study were compared to average prices of actual sales in 1975-76 from <u>Wyoming Rural Real Estate Market</u> (Stephenson and Vanvig, 1978). Percentage changes in average price for agricultural land and ranches were reported on a statewide basis and for selected regions where there were enough land sales in each time period to give an accurate indication of price changes. Prices per acre reported in <u>Wyoming Rural Real</u> <u>Estate Market</u> included the value of improvements for the three types of agricultural land. Price changes reported here slightly underestimate actual price changes because value of improvements was not included. Based on 1980-81 actual sales, the average value of improvements per acre in Wyoming was \$8 for grazing land, \$45 for irrigated cropland and \$13 for dry cropland. As<sup>2</sup> a percentage of average price, improvements were 9% of the grazing land price and under 5% of irrigated and dry cropland prices.

Tables 8 and 9 show the increases in ranch prices from 1975-76 to 1980-81 by region, size and percentage of leased forage. Statewide, price per AU increased 44% for an annual average increase (compounded) of 7.5% (Table 8). The largest increase was in Region 6 with a 54% increase for an annual average of 9%. Average prices increased 44% in Region 1 and 31% in Region 2.

Based on size and percent leased forage, prices for ranches over 500 AU and those having 0-25% leased forage increased at about the state average (Table 9). Below-average increases occurred for ranches 250-499 AU in size and for those with over 50% leased forage. Small ranches (50-249 AU) increased at an above- average rate (57%) and ranches with 26-50% leased forage showed the largest increase (70%).

Region	Counties in Region	<u>Average</u> 1975-76	e prices 1980-81	percentage change	average annual increase
		Dolla	ars per	19	percent
1	Johnson, Sheridan	1,982	2,853	44	7.6
2	Campbell, Converse, Crook, Niobrara, Weston	1,813	2,380	31	5.6
6	Big Horn, Fremont, Hot Springs, Park, Washakie	1,433	2,203	54	9.0
State		1,687	2,426	44	7.5

Table 8. Comparison of 1975-76 and 1980-81 actual sales of Wyoming ranches.

Table 9. Comparison of 1975-76 and 1980-81 actual sales of Wyoming ranches based on ranch size and percentage of leased forage.

х х х	average prices 1975-76 1980-81		percentage change	average annual increase
Size	dollars po	er animal unit		percent
50 - 249 AU	1,690	2,654	57	9.4
250 - 499 AU	1,621	2,141	32	5.7
500 AU and over	1,266	1,843	46	7.8
Percentage of Leased Forage		:		
0 - 25%	1,613	2,324	44	7.6
26 - 50%	1,367	2,329	70	11.2
51% and over	1,038	1,346	30	5.3

The market price of grazing land in Wyoming increased 38% from 1975-76 to 1980-81 at an average annual rate of 6.8% (Table 10). As with price per AU, Region 6 showed the largest increase at 74%. Regions 1 through 4 were all close to the state average increase. There were not enough land sales in Region 5 to indicate average price changes.

Table 10. Comparison of 1975-76 and 1980-81 actual sales of Wyoming grazing land.

Region	Counties in Region	<u>average</u> 1975-76	prices 1980-81	percentage change	average annual increase
		dollars p	er acre		percent
1	Johnson, Sheridan	97	139	43	7.5
2 <sup>7</sup> . IX	Campbell, Converse, Crook, Niobrara, Weston	82	111	35	6.2
3	Albany, Goshen, Laramie, Platte	96	131	36	6.4
4	Carbon, Natrona, Sweetwater	43	63	47	8.0
6	Big Horn, Fremont, Hot Springs, Park, Washakie	53	92	74	11.8
State		63	87	38	6.8

Average price for Wyoming irrigated cropland increased 48% over 5 years at a compounded rate of 8.1% (Table 11). Only Regions 3 and 6 had enough land sales for an accurate indication of average price changes. Increases were 62% in Region 3 and 40% in Region 6. These increases averaged 10.1% and 7% per year, respectively.

The only actual sales for dry cropland reported in 1975-76 were in Region 3. The average price was \$235 per acre. Compared to the 1980-81 average of \$296 per

Region	Counties in Region	<u>average</u> 1975-76	prices 1980-81	percentage change	average annual increase
		dolla	rs per acre		percent
3	Albany, Goshen, Laramie, Platte	699	1,130	62	10.1
6	Big Horn, Fremont, Hot Springs, Park, Washakie	638	895	40	7.0
State		618	913	48	8.1

Table 11. Comparison of 1975-76 and 1980-81 actual sales of Wyoming irrigated cropland.

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acre, average price increased by 26% at an annual rate of 4.7%.

The consumer price index for all goods and services in the U.S. rose 58% between March 1976 and March 1981. No type of agricultural land in Wyoming can top this increase. However, there were regions in Wyoming where agricultural land did keep pace with inflation over this 5 year period. These areas included grazing land and ranches in Region 6 and irrigated cropland Region 3. In general, Wyoming agricultural land price increases did not keep pace with inflation between 1975-76 and 1980-81. Farm Real Estate Market <u>Developments</u> showed a 45% increase for all Wyoming agricultural land between March 1976 and March 1981. This increase is in line with those reported in Tables 8 through 11.

### INFLUENCES ON AGRICULTURAL LAND VALUE

The market value of Wyoming's agricultural land is influenced by many factors including those which influence the value of all land, such as a strong desire by the majority of persons to own land as an investment or because of its income earning capacity. Land ownership is regarded by many as a stable and basic method of holding wealth. Other factors include supply of and demand for land and the current economy. Also, projected inflation rates have an important effect on land prices. At present, high interest rates in the U.S. economy have a negative influence on the price of agricultural land. The high cost of borrowing money reduces the number of buyers in the market and creates a "buyer's market."

The value of agricultural land in Wyoming, as well as in the rest of the U.S., is influenced by the land's productive capacity, agricultural product prices, costs of production and net dollar returns to the land. These influences are greater for irrigated and dry cropland than for grazing land in foming because of more non-agricultural investor-buyers for ranches and grazing land. Grazing land value in Wyoming is only partially influenced by carrying capacity and cattle prices. If a grazing land property is located in scenic area with significant recreation, development or energy development potential, these non-agricultural influences are often greater determinants of Value rather than expected agricultural returns.

The major buyer in Wyoming's agricultural land market in 1980 and 1981 remained the established farmer or rancher expanding their operation (Table 12) With present high interest rates and low agricultural product prices, however, the number of expansion buyers in the market has been reduced. This 15 especially true in the irrigated cropland market where a drop in sales activity and price stabilization during the first quarter of 1982 have been the most pronounced in Wyoming's agricultural land market. As for grazing land, there are many more non-agricultural investment buyers and high equity ex-Pansion buyers in the grazing land and small to medium size ranch market. This keeps demand up and prices rising in some areas.

		the second s
Reason for purchase	Number	Percent
Expansion of present operation	125	53
Establish as a single unit	63	27
Investment	41	17
Other	8	3
Total	237	100

Table 12. Reasons for buying Wyoming farm and ranch land in 1980-81.

Locally, major non-agricultural influences include urban, recreational and mineral lease potential. As indicated earlier, the agricultural land sales included in this study were limited to those that would remain in agricultural production, however, their market prices can still be affected by non-agricultural influences. These would include such influences as potential non-agricultural uses in the future; other uses (hunting and fishing) in conjunction with agricultural production; or extra income generated by land ownership (mineral lease money).

Urban influence occurs around every town and city in Wyoming, but the major areas affected would be Casper, Cheyenne, Evanston, Gillette, Laramie, Sheridan and Rock Springs. Recreational influence occurs in and around all national forest mountain ranges. Any agricultural land can have recreational influences if it has one or more of the following characteristics: trees, a running stream, abundant wildlife or scenic mountain views. These are among the natural amenities non-agricultural investors look for when buying. Mineral lease influence is not as widespread as other non-agricultural influences, but areas affected are Johnson, Campbell and Natrona Counties for oil leases and Uinta and Lincoln Counties for natural gas leases. For coal, the bulk of private agricultural land purchased by coal companies is located in Campbell County.

## AGRICULTURAL LAND FINANCING INFORMATION

The current high interest rates in the U.S. economy have caused the method of financing a land purchase to influence not only who can buy a property but also at what price. They also influence how fast a property will sell. Data from actual sales collected throughout Wyoming show the large majority of sales required financing (Table 13). Only 15% of buyers could pay cash when purchasing farm or ranch land. The major sources of farm and ranch land loans were sellers and the Federal Land Bank.

Table 13. Methods used by buyers to purchase farm and ranch land in Wyoming, 256 observations.

How Purchased		Percent	
Cash	а. 1	15	
Financed 1	by:		
	Seller	39	
	Federal Land Bank	20	
1.4	Combination of Sources <sup>4/</sup>	12	
	Wyoming Farm Loan Board	5	
100	Farmers Home Administration	4	
	Commercial Bank	4	
	Insurance Company	1	
Total		100	
COLUMN T			

Buyer borrowed from 2 or more sources of loans listed above.

Seller financing was the most common method of purchasing Wyoming farm and <sup>ranch</sup> land. Financing terms arranged between the buyer and seller varied

with every sale. There were no standard terms as would be found with institutional lenders like the Federal Land Bank. Average interest rate charged by sellers in 1980-81 was just over 10%. Individual rates ranged from 5 to 17%, and average interest rates for each quarter from January 1980 to December 1981 were around 10% with no trend up or down. This 10% rate is lower than the current Federal Land Bank interest rate of 13% (effective rate, including all loan costs, is over 14%). Seller loans averaged 15 years in length with a common range of 10 to 20 years. Sellers accepted an average 25% of the total purchase price as a down payment when they financed a sale compared to an average 27% in all sales that included a down payment. These averages excluded expansion sales where no down payment is made because the buyer uses equity in his or her present property to secure a loan.

There is disagreement among realtors as to whether seller financing terms can influence the price of agricultural land in a sale. Seller financing is a very important key to selling land promptly in a "buyers market" and would be considered vital to selling a large ranch or farm in Wyoming given the current agricultural land market situation.

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