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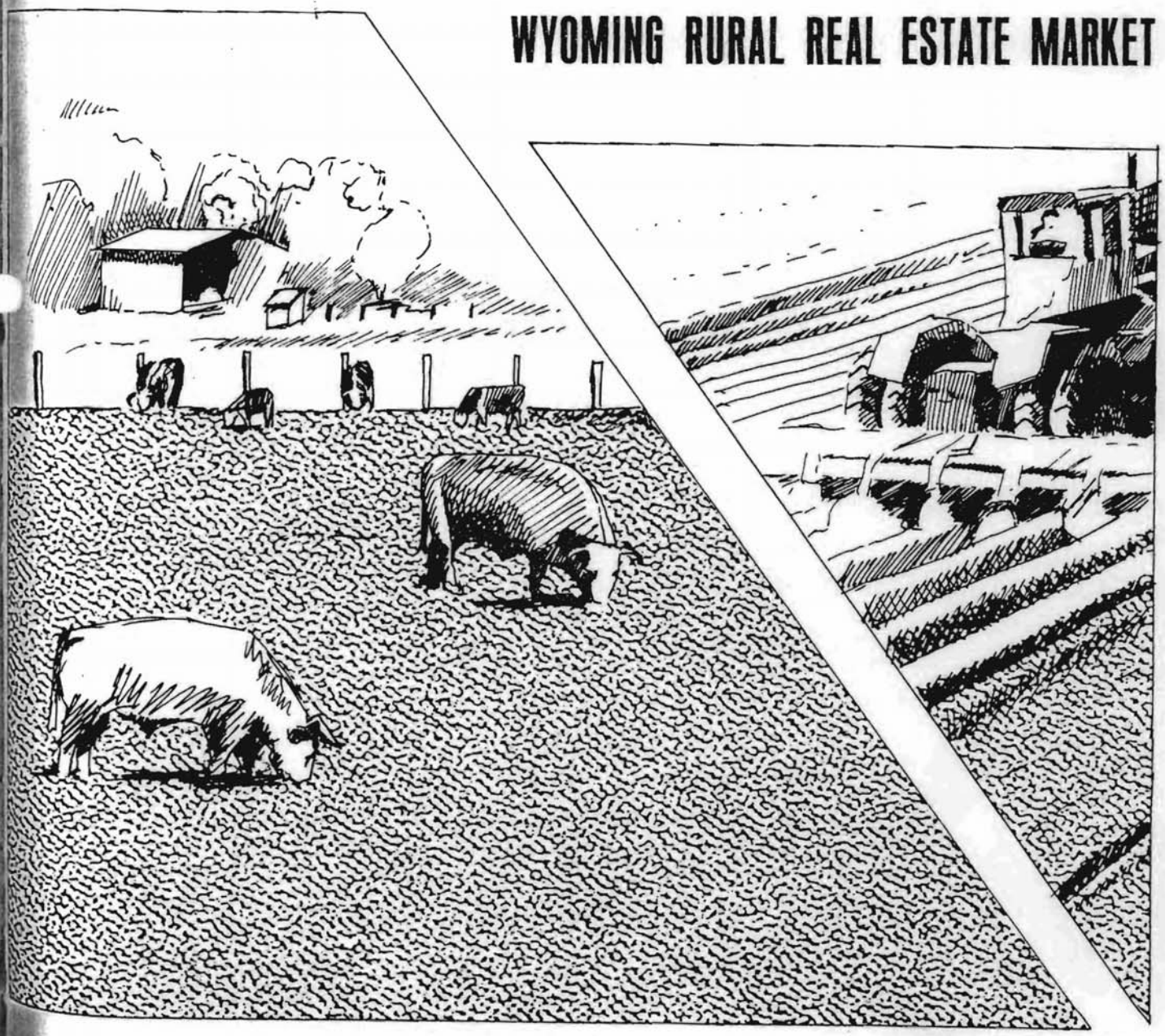
WYOMING RURAL REAL ESTATE MARKET



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THE WYOMING RURAL REAL ESTATE MARKET

Agricultural Experiment Station

University of Wyoming

Laramie, Wyoming

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SUMMARY

The major purpose of this study was to report current market values for various types of agricultural land in Wyoming. Two sources were used to obtain market values of the State's agricultural land. First, estimates of the market value of agricultural land were obtained from a Spring 1977 survey of realtors, lenders and others knowledgeable of the Wyoming agricultural land market. Second, in addition to the survey estimates, an analysis was made of 1975 and 1976 actual sales of Wyoming agricultural land to provide market price information. Market values for ranches on a per animal unit basis and market values on a per acre basis for grazing land, irrigated cropland, and dry cropland were reported from each source for different areas in the state.

The average market value of ranches in Wyoming based on survey estimates was $1,630 per animal unit. The price per animal unit (AU) determined from 103 actual sales averaged $1,687. There was a rather wide range in values reported for some areas. For example, some ranches in Area 1 (Sheridan and Johnson Counties) were reported to be selling for excess of $3,500 per AU, however factors other than the ranch's agricultural production potential led to ranches in Area 1 selling for these higher prices.

Current market values on a per acre basis were obtained for three types of agricultural land: grazing land, irrigated cropland and dry cropland. The estimates of market value for average quality grazing land was $79 per acre ranging from $67 per acre in Area 6 (Big Horn, Fremont, Hot Springs, Park and Washakie Counties) to $114 per acre in Area 1 (Sheridan and Johnson Counties). Prices for grazing land based on actual sales in the state averaged $63 per acre.

The estimated market value of average quality irrigated cropland in the State was $627 per acre compared to an average price of $618 per acre based on actual sales. The market price of irrigated cropland reported for the areas of the state which are the major cash crop producers, Area 3 (Albany, Platte, Goshen and Laramie Counties), and Area 6 (Big Horn, Fremont, Hot Springs, Park and Washakie Counties) were higher than prices reported for the other areas. Estimates for high quality irrigated cropland, generally used in cash crop production, averaged $1,084 per acre in Area 3 and $1,093 per acre in Area 6. Some actual sales of irrigated cropland in these areas ranged from $1,500 to $1,800 per acre.

The majority of Wyoming's dry cropland is located in Area 3 (Albany, Platte, Goshen and Laramie Counties). Market value estimates for average quality dry cropland in Area 3 averaged $202 per acre, and prices reported from 23 actual sales of dry cropland in Area 3 averaged $235 per acre. Prices of the 23 dry cropland sales ranged from $150 to $300 per acre in Area 3.

The variation in market prices among the different areas of the state is attributable to several important factors namely (1) the effects of mineral development in each area; (2) the length of the growing season; (3) the effect of recreational and aesthetic factors; and (4) the quality of the agricultural land in each area. Variations in market prices in different areas of the state are evident when comparing grazing land prices in

Area 1 (Sheridan and Johnson Counties) and Area 4 (Natrona, Carbon and Sweetwater Counties). The average sale price for grazing land in Area 1 was $97 per acre (based on 17 sales), while the average sale price for grazing land in Area 4 was $43 per acre (based on 41 sales).

The estimates of market values reported in this study were compared to a 1963-64 study. Current market values of agricultural land on the average were three to four times higher than those market values reported in 1963-64. From 1951 to 1970 agricultural land values in the U.S. and Wyoming increased from 5 to 7% annually. Since 1972 agricultural land values have increased at a much faster rate. Wyoming agricultural land values increased 14% in both 1972 and 1973. In 1974 Wyoming agricultural land values increased 25% over the previous year. Since 1974 agricultural land values have continued to increase but at a somewhat slower rate. In the year ending March 1, 1977 land values increased 7% in Wyoming. There is evidence that the rate of increase slowed down again during 1977 and for some types of land may have leveled out or even declined in some areas during 1977. A similar pattern of increase in land values has occurred for the U.S. since 1970.

Buyers interested in land appreciation, mineral development, rural homesites, and other types of nonagricultural development are active in the Wyoming agricultural land market. However, the most important groups of buyers of Wyoming agricultural land are farmers and ranchers including those expanding their present operations as well as new farmers and ranchers.

THE WYOMING RURAL REAL ESTATE MARKET

James L. Stephenson and Andrew Vanvig*

INTRODUCTION

The purpose of this study is to supply current information concerning the Wyoming rural real estate market. It is not intended to show values of specific land parcels, but rather to show market values for the major types of agricultural land in different areas of the state. Market values presented in this study provide a useful benchmark against which future movements in agricultural land values may be measured. The findings of this study should be useful to farmers, ranchers, realtors, lenders, prospective investors, and others interested in the Wyoming agricultural land market.

Trends in the Agricultural Land Market

Many factors affect the agricultural land market in Wyoming and in the United States. Increased substitution of capital for labor has made larger acreages more profitable. Therefore, farmers and ranchers have sought to expand their operations in order to take advantage of increasing economies of scale associated with additional capital investments. Pressure from nonagricultural sources has also affected the agricultural land market. Urban development, mineral development, recreational development, and residential development (e.g., second home and summer cabin sites) constitute competitive demands for farm and ranch land which have contributed to price increases.

In 1950 the average value of U.S. agricultural land was $65 per acre. In 1977 the average value of U.S. agricultural land had risen to $456 per acre or a 602% increase in land values over that period (Figure 1). Wyoming agricultural land values rose from an average of $13 per acre to $105 per acre or a 708% increase during the same period (Farm Real Estate Market Developments, USDA).

Agricultural land values in the U.S. and Wyoming rose an average of 5 to 7% each year from 1950 to 1970 (Table 1). Since 1972 agricultural land values have risen at a more rapid rate. The highest annual rate of increase in U.S. and Wyoming rural land values was in 1974 when agricultural land values rose 25% over the previous year.

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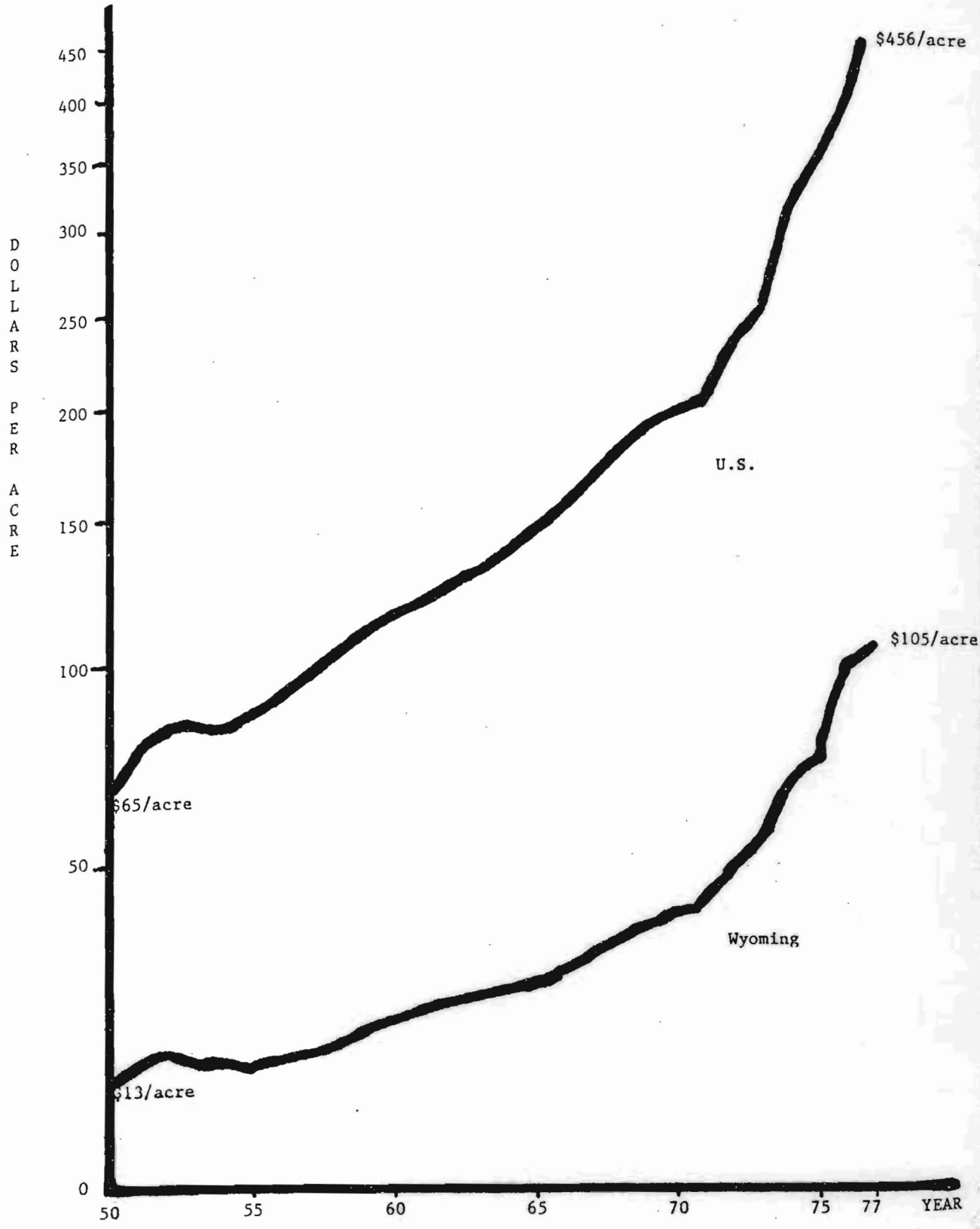
Figure 1. Trends in Wyoming and U.S. farm real estate values 1950 to 1977[a/].



a/ Dollars per acre for each year were recorded on a semi-log scale to allow the percentage changes and the absolute changes to be observed. As a result, equal slopes indicate equal percentage rates of change and equal vertical distances represent equal total percentage changes.

Table 1. Annual percentage increases in Wyoming and U.S. agricultural land values.[a/]

	1951 to 1960[b/]	1961 to 1970[b/]	1971	1972	1973	1974	1975	1976	1977
U.S.	5	6	3	8	13	25	13	14	17
Wyoming	7	6	2	14	14	25	17	17	7

[a/] Percentage rates of change are for the year ending in March 1 for 1951 to 1975 and February 1 for 1976 and 1977.

[b/] Percentage figures reported represent the average of annual percentage increases in U.S. and Wyoming land values over each of the 10 year periods.

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

Procedure

The heterogeneous nature of land is evident in Wyoming, for it ranges from fertile mountain valleys to barren deserts and from open range to irrigated cropland. The USDA report, Farm Real Estate Market Developments, provides an average market value and an index of the average market values for all Wyoming agricultural land. However, a more detailed summary of land values is necessary to show market value variations among the different types of agricultural land (grazing land, irrigated cropland, and dry cropland) in different areas of the state.

Data

Two different sources were used to obtain market values of agricultural land and those values obtained from both sources are reported separately. First, estimates of the market value of Wyoming agricultural land were obtained from a 1977 survey of realtors, lenders, and others knowledgeable of the Wyoming agricultural land market. There were 91 usable estimates obtained from the survey. Those responding to the survey were asked to estimate current market values for three qualities (high, average and low) of each of the aforementioned types of land (grazing land, irrigated cropland, and dry cropland). Results reported from the 1977 survey estimates are compared to estimates obtained in a study conducted in 1963-64 (Clark and Vanvig).

Second, in addition to the survey estimates, information from 229 Wyoming farm and ranch sales during 1975 and 1976 were collected from the Federal Land Bank and the Farmers Home Administration. Actual sale prices reported in the study are an average of prices from sales occurring in 1975 and 1976.

Study Area

The state was divided into six areas composed of contiguous counties (Figure 2) and market values were reported for each area. One additional area (Area 7) including Teton County and Yellowstone National Park was not included in the study. Yellowstone National Park was not included because there is no privately owned agricultural land in the park, and Teton County was not included because only 4% of the county is privately owned. The value of the privately owned land in Teton County is largely determined by

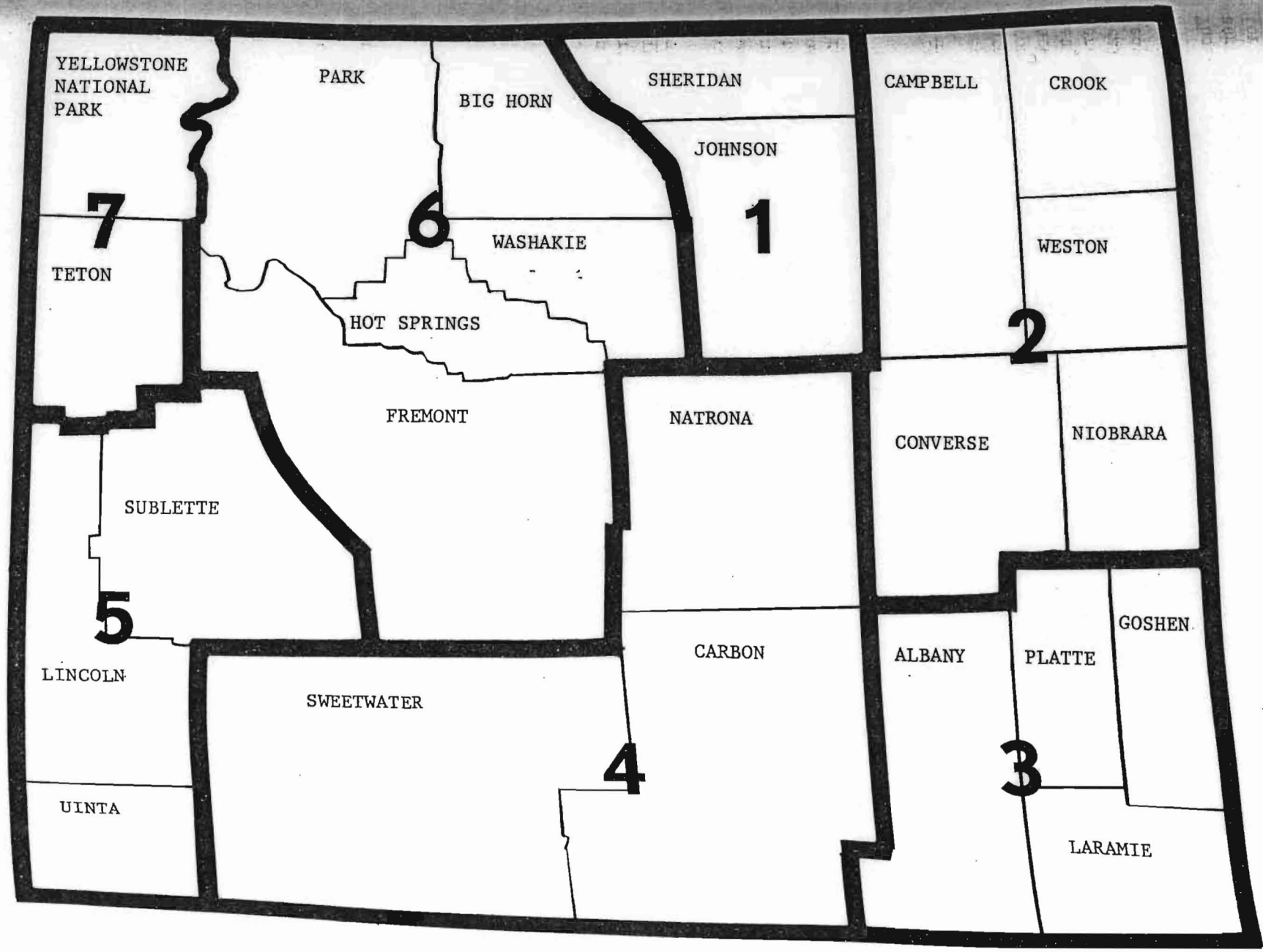


Figure 2. Areas of study.

ecreational and aesthetic factors rather than by agricultural production potential. Therefore, prices of rural land in Teton County are much higher than rural land prices in other counties of the state. The average price of agricultural land in Teton County reported in the 1974 Census of Agriculture was $834 per acre compared to a state average of $83 per acre.

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

Area 1 - Sheridan and Johnson - primary enterprises - beef cattle, sheep and hay;

Area 2 - Campbell, Crook, Weston, Converse and Niobrara - primary enterprises - beef cattle, sheep, hay and wheat;

Area 3 - Albany, Platte, Goshen and Laramie - primary enterprises - beef cattle, sheep, wheat, sugar beets, hay and other irrigated crops;

Area 4 - Natrona, Carbon and Sweetwater - primary enterprises - sheep, beef cattle and hay;

Area 5 - Lincoln, Sublette and Uinta - primary enterprises - beef cattle, sheep, dairy cattle and hay;

Area 6 - Big Horn, Fremont, Hot Springs, Park and Washakie - primary enterprises - beef cattle, sheep, sugar beets, barley, hay and other irrigated crops.

Types of agricultural land and importance of each type of agricultural land vary among different counties in a given area. For example, Area 3 includes Goshen and Laramie Counties which are important dryland wheat producers; however, Albany County, which is also in Area 3, has very little dryland wheat. Furthermore, climate, population, recreation potential, and minerals present may vary among and within the different areas of the state. Even though these variations are present, the areas identified represent relatively homogeneous counties.

CURRENT MARKET VALUE OF WYOMING AGRICULTURAL LAND

Estimates of the market value of Wyoming agricultural land are an average of reported estimates and are not intended to represent the market value of a particular tract of land. Market values per animal unit for ranches, and market values per acre for grazing land, irrigated cropland and dry cropland are reported from the estimates. Survey respondents' estimates of market values reflect average prices adjusted for unique factors affecting specific sales, such as location, aesthetic appeal or improvements.

Market prices determined from actual sales of Wyoming farm and ranches are an average of sales reported, and like the estimates do not represent the market prices of a particular tract of land. The number of acres of grazing land, irrigated cropland and dry cropland being transferred was available from the actual sales. Also, descriptive information related to the number of acres of the different types of land sold, the method of sale (cash, mortgage, or contract), the source of financing, the reasons for the sale and the reasons for the purchase was avail-

able from sale transactions included in the study. One limitation in the use of actual sales is that the sale price of a farm or ranch may be affected, in part, by the extent of improvements and by the number of acres of leased land included in the sale. In addition, there were not enough sales of farm and ranch land reported to show price variations according to quality.

Current Market Values of Wyoming Ranches

Since much of the agricultural land in the state is used for grazing, the identification of the market value of ranches on a per animal unit basis is of major importance to those interested in Wyoming rural real estate. Carrying capacities (acres per animal unit) of ranches vary widely over the state, and therefore values per animal unit (AU) as well as per acre are reported. The reader should also recognize that the estimates on an animal unit basis are influenced by the definitions of an animal unit. For the purpose of this study one AU was defined as the feed requirements of a cow for a year plus a nursing calf for 6 months.

Since over 50% of the land in Wyoming is publicly owned, the market value of Wyoming ranches should be interpreted giving recognition to variations in the amount of deeded land as compared to leased public land.[1/] For instance, a 500 AU ranch with all deeded land would generally sell for more than a 500 AU ranch of similar quality which obtained some portion of its 500 AU carrying capacity from leased public land. However, leased land as a part of a ranch increases the market value per acre of the deeded land though the increase is not as great as it would be with the addition of an equivalent number of acres of deeded land. Typical ranches in western Wyoming include more leased public land than ranches in eastern Wyoming, inasmuch as there are more public lands in the western part of the state.

Grazing Capacity of Wyoming Rangeland

Reporting grazing capacities[2/] (defined in terms of acres per animal unit month, AUM) for grazing land provides a basis for better understanding variations in market values over the state. It is beyond the scope of this study to present a detailed discussion of grazing capacities of rangeland in Wyoming. However, average grazing capacities of private land and Bureau of Land Management controlled land are reported on a county basis (Table 2). Weighted averages for each of the six areas are also shown. Soil Conservation Service and BLM data were the sources of the acres per AUM figures reported.

The usability (e.g., water for livestock) and the availability (e.g., free of snow cover) in part determines the number of months to which a particular grazing capacity may be applicable to a county. In some cases reported AUM grazing capacities only apply to the months during the grazing season.

1/ The surface of Wyoming is 47.0 percent federally owned, 7.0 percent state owned and 46.0 percent privately owned (Wyoming Agriculture) p. 28.

2/ Grazing capacity refers to the number of acres required per AUM for a particular kind of land, and carrying capacity refers to the number of acres required per AU for an entire ranch unit.

Table 2. Acres of grazing land per animal unit month for Wyoming - counties[a/] and areas.

	Private[b/]	BLM[c/]
	(acres per AUM)	
Area 1		
Johnson	4.00	9.14
Sheridan	3.30	7.62
Weighted average[d/]	3.75	8.95
Area 2		
Campbell	3.90	6.20
Crook	2.86	5.96
Converse	3.70	6.04
Niobrara	4.10	5.75
Weston	4.55	6.25
Weighted average	3.83	6.07
Area 3		
Albany	4.48	5.87
Goshen	4.14	4.57
Laramie	3.33	5.19
Platte	3.92	5.93
Weighted average	4.02	5.79
Area 4		
Carbon	5.78	6.46
Natrona	4.54	7.25
Sweetwater	9.79	10.50
Weighted average	6.81	8.86
Area 5		
Lincoln	5.86	7.00
Sublette	3.68	10.80
Uinta	5.48	8.91
Weighted average	5.08	8.51
Area 6		
Big Horn	5.69	12.69
Fremont	6.10	7.18
Hot Springs	4.84	6.50
Park	5.28	8.72
Washakie	5.86	8.12
Weighted average	5.66	8.63
Area 7		
Teton	2.50	1.92

a/ Grazing capacities reported are an average for each county. The actual grazing capacities for a particular parcel of land may be higher or lower than the average.

b/ Compiled from Soil Conservation Service data.

c/ Compiled from the Bureau of Land Management data.

d/ The averages are weighed by the number of acres of private and BLM land in each county.

As a result, AUM grazing capacities can not be multiplied by 12 to obtain the year round grazing capacity in terms of animal units. For example, the grazing capacities reported for western Wyoming, Areas 5 and 7, particularly Lincoln and Teton Counties, are only applicable during the months of summer grazing when the land is free of snow cover. Though actual grazing capacities for a specific tract of land may be higher or lower than the average AUM figures reported, the figures are representative of the quality of grazing land in each county and area.

Areas 1, 2, and 3 in eastern Wyoming require the lowest number of acres per AUM while Areas 4, 5, and 6 require the highest number of acres per AUM. Grazing capacity of private land ranged from 2.86 acres per AUM in Crook County to 9.79 acres per AUM in Sweetwater County. Grazing capacity of BLM land ranged from 5.19 acres per AUM in Laramie County to 12.69 acres per AUM in Big Horn County. Much of the BLM controlled land is residual land not claimed by homesteaders, therefore it generally has a lower grazing capacity than private land.

Ranch Types

Ranches in the state may be classified in general, as mountain valley ranches, plains ranches, or intermountain ranches. Mountain valley ranches are found along and in the mountains throughout the state. Plains ranches are identified as those ranches in the Great Plains portion of Wyoming and thus, are situated in Areas 1, 2, and 3 and in one county of Area 4 (Natrona). The intermountain ranches are in the high intermountain basins of the western two-thirds of the state, and therefore are mainly located in Areas 4 and 6. Also, there are some intermountain ranches in Area 5, but the majority of the ranches in this area are mountain valley ranches.

The three types of ranches differ in the following ways:

(1) the number of months cattle may be grazed;

(2) the proportion of deeded land to leased land;

(3) the effect of recreational and aesthetic factors on the market value;

(4) the number of acres required per AU.

Estimates of market values of the different types of ranches were reported from the survey.

Estimates of the Market Value of Wyoming Ranches

Mountain Valley Ranches

Market values for average quality mountain valley ranches in the state averaged $1,677 per animal unit (AU) ranging from $1,322 per AU for low quality ranches to $2,070 for high quality ranches (Table 3).[3] It should be emphasized that $2,070 per AU represents the average of the estimates for high quality mountain valley ranches.[4] The actual range of estimates

[3] Differences in the market value of ranches of low, average and high quality in part may be attributed to the number of acres of leased public land, and the amount of hay produced.

[4] Throughout the report estimates of market value refer to those values obtained from the survey.

for high quality mountain valley ranches was from $935 per AU to $5,500 per AU. The same procedure was followed to obtain average estimates of low and average quality ranches. The reader should keep this in mind when analyzing the price estimates which are presented throughout the report.

Table 3. Estimates of values per animal unit by area for mountain valley ranches in Wyoming (1977).

Area	Counties in area	Quality of ranch		
		Low	Average	High
		(dollars per animal unit)		
1	Sheridan, Johnson	1,443	1,864	2,600
2	Campbell, Crook, Weston, Converse, Niobrara	1,914	2,164	2,529
3	Albany, Platte, Goshen, Laramie	1,550	1,680	1,920
4	Natrona, Carbon, Sweetwater	1,333	1,714	1,867
5	Sublette, Lincoln, Uinta	1,223	1,550	1,944
6	Park, Big Horn, Washakie, Hot Springs, Fremont	997	1,372	1,819
State		1,322	1,677	2,070

The highest market values per AU of mountain valley ranches were reported for Areas 1 and 2. Mountain valley ranches in Area 1, Sheridan and Johnson Counties, are located along and in the Big Horn Mountains. Market values per AU for average quality ranches in Area 1 were reported to be $1,864, ranging from $1,443 per AU for low quality ranches to $2,600 per AU for high quality ranches. Mountain valley ranches in Area 2, northeastern Wyoming, are located along and in the western Black Hills, and in the northern end of the Laramie mountains. Market values per AU for average quality ranches in Area 2 were reported to be $2,164, ranging from $1,914 per AU for low quality ranches to $2,529 per AU for high quality ranches.

Mountain valley ranches in Areas 1 and 2 are particularly attractive to buyers because of recreational and aesthetic factors. Mineral development has also increased values of mountain valley ranches. When ranchers sell their operation for mineral development purposes they often reinvest in other ranch property. This has the effect of bidding up ranch values in other areas. Some investors in ranches in scenic areas buy ranches without necessarily attempting to make the ranch a profitable operation or requiring that ranch income repay the mortgage.

Mountain valley ranch values for Area 6, northwestern Wyoming, were the lowest reported, with values per AU for average quality ranches reported at $1,372, ranging from $997 per AU for low quality ranches to $1,819 per AU for high quality ranches.

Plains Ranches and Intermountain Ranches

Values per AU for plains ranches were highest in Areas 2 and 3 (Table 4). For Area 2, northeastern Wyoming, a value of $1,864 per AU for average quality ranches was reported ranging from $1,446 for low quality ranches to $2,212 for high quality ranches. Market values for plains ranches in Area 3, southeastern Wyoming, ranged from $1,831 per AU for low quality ranches to $2,048 per AU for high quality ranches with an average of $1,913 per AU for average quality ranches. In Areas 2 and 3 there is less federal land available for grazing, therefore ranches in these areas have a high percentage of deeded land.

Table 4. Estimates of values per animal unit by areas for plains ranches and intermountain ranches in Wyoming (1977).

Area	Counties in area	Quality of ranch		
		Low	Average	High
		(dollars per animal unit)		
	PLAINS RANCHES			
1	Sheridan, Johnson	1,057	1,436	1,879
2	Campbell, Crook, Weston, Converse, Niobrara	1,446	1,864	2,212
3	Albany, Platte, Goshen, Laramie	1,831	1,913	2,048
	INTERMOUNTAIN RANCHES			
4	Natrona, Carbon, Sweetwater[a/]	1,250	1,466	1,707
5	Sublette, Lincoln, Uinta	not enough observations		
6	Park, Big Horn, Washakie, Hot Springs, Fremont	783	995	1,269

a/ Estimates of market values reported for Area 4 are an average of both plains and intermountain ranches.

Values reported for intermountain ranches in the western portion of the State were lower than values reported for plains ranches. Most ranches in the western areas include a substantial amount of public land e.g., BLM, Forest permits, or both. In Area 6, northwestern Wyoming, values ranged from $783 per AU for low quality ranches to $1,269 per AU for high quality ranches with estimates for average quality ranches of $995 per AU.

Market values per AU for ranches, from the 1963-64 study, were reported for each area; however, no distinction was made among the three different types of ranches (Table 5). Comparing values in the current study with those in the earlier study, it appears that market values of ranches are three to four times higher than in 1964. For example, in Area 2 market values in 1964 averaged $552 per AU as compared to $1,969 per AU in 1977. In Area 3 market values of ranches averaged $565 per AU in 1964 compared to $1,860 per AU in 1977.

Table 5. Comparison of 1963-64 and 1977 estimates of ranch values in Wyoming.

Area	Counties in area	Market value of ave. quality ranches 1963-64[a/]	Market value of ave. quality ranches 1977: Ave. of est. of all 3 types of ranches of mt. valley, plains, & intermt.	% change 1963-64 to 1977
		(dollars per AU)		
1	Sheridan, Johnson	614	1,650	169
2	Campbell, Crook, Weston, Converse, Niobrara	552	1,969	257
3	Albany, Platte, Goshen, Laramie	565	1,860	229
4	Natrona, Carbon, Sweetwater	441	1,562	254
5	Sublette, Lincoln, Uinta, Teton[b/]	549	1,550	182
6	Park, Big Horn, Washakie, Hot Springs, Fremont	353	1,200	240
State		NA[c/]	1,630	NA

a/ Source of 1963-64 estimates was Clark and Vanvig, Wyoming Farm and Ranch Land Prices, p. 10.
b/ Teton County was included in Area 5 in the 1963-64 study.
c/ NA - not available.

Average Prices of Wyoming Ranches Determined from Actual Sales

Average market prices of ranches based on actual sales during 1975 and 1976 are shown in Table 6. For the state, the average price per AU was $1,687, based on 103 sales. The Federal Land Bank of Omaha reported that prices for ranches in Wyoming increased only 1% from June 1976 to June 1977. Apparently market values of ranches have leveled out in the last year because of depressed cattle prices and rising production costs.

Some sale prices were much higher than the average reported in Table 6. In Area 1 around Sheridan in the Big Horn Mountains ranch sales were reported to be selling from $3,500 to $4,600 per AU. The influence of recreational and aesthetic factors along with pressure from residential development push prices upward in these areas. Some sales of around $4,000 per AU were made in Platte and Goshen Counties. A few sales of mountain valley ranches in other parts of the state also approached these levels.

Actual sale prices and survey estimates of value generally followed the same pattern with the eastern half of the state, Areas 1, 2, and 3, reporting the highest values per AU. The western half of the state, Areas 4, 5, and 6, reported the lowest values per AU. Overall, the average price per animal unit based on actual sales was $1,687 compared to an estimate of $1,630 per animal unit based on survey responses.

Table 6. Price per animal unit for Wyoming ranches based on 1975 and 1976 actual sales.

Area	Counties in area	No. of sales[a/]	1975 & 1976 actual sales	Range	
				Low	High
			(dollars per AU)		
1	Sheridan, Johnson	17	1,982	1,200	4,600
2	Campbell, Crook, Weston, Converse, Niobrara	14	1,813	1,300	2,300
3	Albany, Platte, Goshen, Laramie	17	2,254	780	3,900
4	Natrona, Carbon, Sweetwater	13	1,551	850	4,200
5	Sublette, Lincoln, Uinta	11	1,290	900	2,100
6	Park, Big Horn, Washakie, Hot Springs, Fremont	31	1,433	500	3,000
State		103	1,687	500	4,600

a/ Other sales were reported, however there was insufficient information on carrying capacity to calculate market prices per AU.

Market Value Per Acre of Wyoming Agricultural Land

While the value per AU is more meaningful in comparing market values of different ranches, value per acre is a useful measure of the market value of individual classes of land (grazing land, irrigated cropland, dry cropland). Market values from the survey estimates and prices from the actual sales are reported in this section for the aforementioned types of land. It should be emphasized that prices reported in this section represent larger tracts, 100 acres and over, and that the prices of smaller tracts of comparable quality are generally higher.

Grazing Land Market Values

Grazing land in Wyoming varies in quality from desert to mountain pasture. Beef cattle and sheep are the most common types of livestock on Wyoming grazing land. Many of Wyoming ranchers depend on federal and state land to supplement their grazing requirements, however transfers of federal and state leased lands not connected to deeded land are not common. Therefore, market prices reported represent average values of deeded land. However, if rights to leased public land are transferred in a sale the market value of the deeded land will be higher than the market value of deeded land of comparable size and quality without the accompanying leased public land.

Estimates of Grazing Land Values

The state average market value for average quality grazing land was reported at $79 per acre (Table 7). Estimates of grazing land values per acre were highest in Areas 1 and 5. In Area 1, Sheridan and Johnson Counties, average

quality land was reported to be selling for $114 per acre, ranging from $74 per acre for low quality land to $154 per acre for high quality grazing land. In Area 5, southwestern Wyoming, average quality land sold for $98 per acre, ranging from $85 per acre for low quality land to $149 per acre for high quality land. Grazing land prices in both Areas 1 and 5 are in part affected by recreational and aesthetic factors.

Table 7. Estimates of values per acre of grazing land in Wyoming (1977).

Area	Counties in area	Quality of land		
		Low	Average	High
		(dollars per acre)		
1	Sheridan, Johnson	74	114	154
2	Campbell, Crook, Weston, Converse, Niobrara	52	76	100
3	Albany, Platte, Goshen, Laramie	67	80	103
4	Natrona, Carbon, Sweetwater	46	68	94
5	Sublette, Lincoln, Uinta	85	98	149
	Park, Big Horn, Washakie, Hot Springs, Fremont	48	67	116
State		71	79	115

Areas 4 and 6 reported the lowest values per acre for grazing land, with values averaging $68 per acre in Area 4, south central Wyoming, and $67 per acre in Area 6, northwestern Wyoming, for average quality grazing land. Average values may be inflated for portions of Area 4, particularly the Red Desert, because of the influence of higher quality land located in the mountains and foothills of southeastern Carbon County.

Comparing the results of the Clark and Vanvig study of 1963-64 with the present study's results gives an indication of the increase in grazing land values occurring from 1963-64 to 1977 (Table 8). In general, grazing land values in 1977 were three to four times what they were in 1963-64, with largest percentage increases in Areas 1 and 4.

Average Prices of Grazing Land Determined from Actual Sales

Prices per acre obtained from actual sales often represent the price obtained from farm or ranch sales which include more than one type of land; e.g., a ranch of 5000 acres may include 4500 acres of grazing land and 500 acres of irrigated hayland. When a sale is mainly irrigated cropland or dry cropland, the number of acres sold may not represent a whole farm unit. In such cases, the buyer is often a neighboring farmer or rancher who is adding a tract of land to increase the size of his unit.

Based on records from 204 actual sales, prices of grazing land during 1975-76 averaged $63 per acre (Table 9).

Grazing land sales were approaching prices of $350 per acre for smaller tracts of land (100 to 200 acres) in Sheridan County. Some of the larger acreages of grazing land, 3,000 acres, were selling for $200 per acre in Sheridan County. Again the influence from recreation and residential development inflate prices in this area.

Table 8. Comparison of 1963-64 and 1977 estimates of grazing land values in Wyoming.

Area	Counties in area	Market value for ave. quality land		Percentage change 1963-64 to 1977
		1963-64[a/]	1977	
		(dollars per acre)		
1	Sheridan, Johnson	26	114	338
2	Campbell, Crook, Weston, Converse, Niobrara	22	76	245
3	Albany, Platte, Goshen, Laramie	24	80	233
4	Natrona, Carbon, Sweetwater	17	68	300
5	Sublette, Lincoln, Uinta, Teton[b/]	36	98	172
6	Park, Big Horn, Washakie, Hot Springs, Fremont	21	67	219

a/ Source of 1963-64 estimates was Clark and Vanvig, Wyoming Farm and Ranch Land Prices, p. 8.

b/ Teton County was included in Area 5 in the 1963-64 study.

Table 9. Grazing land prices - 1975 and 1976 actual sales in Wyoming.

Area	Counties in area	No. of sales of grazing land	Actual sales grazing land	Range	
				Low	High
			(dollars per acre)		
1	Sheridan, Johnson	17	97	40	350
2	Campbell, Crook, Weston, Converse, Niobrara	24	82	45	170
3	Albany, Platte, Goshen, Laramie	47	96	30	270
4	Natrona, Carbon, Sweetwater	41	43	15	250
5	Sublette, Lincoln, Uinta	9	87	30	300
6	Park, Big Horn, Washakie, Hot Springs, Fremont	65	53	10	150
State		203	63	10	350

Irrigated Cropland Market Values

The predominant crop produced on Wyoming irrigated cropland is hay, including alfalfa and grass hay. In addition several other important cash and feed crops are produced: sugar beets, barley, corn, dry beans, oats and wheat. Market values reported for irrigated cropland vary widely, depending on soil type, water rights, type of irrigation system used, location and length of growing season.[5/]

Estimates of Irrigated Land Values

Area 3, particularly Goshen, Platte, and Laramie Counties, and Area 6, which includes the Big Horn Basin, have the largest concentration of high quality irrigable land in the state. In Area 3 an average value of $776 per acre was reported for average quality irrigated cropland (Table 10). Also in Area 3, values of $544 per acre and $1,084 per acre were reported for low and high quality land, respectively. In Area 6 an average value of $700 per acre was reported for average quality irrigated cropland, and ranged from $486 per acre for low quality land to $1,093 per acre for high quality land. In general, the estimates of the market value of high quality land represent land used in cash crop production whereas the low and average quality values are more representative of irrigated cropland used in hay production on ranches.

Irrigated cropland values reported for Sheridan and Johnson Counties, Area 1, reflect, in part, the influence of recreational and aesthetic factors associated with agricultural land near the Big Horn Mountains.

Irrigated cropland values in Areas 2, 4, and 5 are generally lower than in the aforementioned areas. Lower values in those areas are due largely to differences in crops than can be produced, which in turn are influenced by such factors as soil type, length of growing season, water availability, and proximity to markets. Values reported for these areas generally reflect irrigated cropland as a part of a ranch rather than irrigated land used in cash crop production. The shorter growing season, particularly in Areas 4 and 5, south central and southwestern Wyoming, limits the crops that can be grown successfully. In all areas, supply and cost of irrigation water, and soil quality, as well as commodity prices, are important determinants of irrigated cropland values.

Irrigated cropland values increased substantially in all areas from 1963-64 to 1977 (Table 11). The highest percentage increase in irrigated cropland values from 1963-64 to 1977 was in Area 4. This was associated with the increased population and the resulting pressure from residential demand brought on by mineral development. Areas 3 and 6 also showed substantial increases in irrigated cropland values. Since irrigated cropland in Area 3 and in Area 6 is suitable for sugar beet production, the increase in value was due, in part, to the relatively high sugar beet prices in 1973 and 1974, leading to an increased demand for irrigated cropland in these areas.

5/ No distinction was made between irrigated land with sprinkler type irrigation systems and with gravity type irrigation systems.

Table 10. Estimates of value per acre of irrigated cropland in Wyoming (1977).

Area	Counties in area	Quality of land		
		Low	Average	High
		(dollars per acre)		
1	Sheridan, Johnson	513	750	963
2	Campbell, Crook, Weston, Converse, Niobrara[a/]	241	386	519
3	Albany, Platte, Goshen, Laramie	544	776	1,084
4	Natrona, Carbon, Sweetwater	325	507	678
5	Sublette, Lincoln, Uinta	379	461	558
6	Park, Big Horn, Washakie, Hot Springs, Fremont	486	700	1,093
State		439	627	890

a/ There are few acres of irrigated cropland in this area. Values reported from the estimates represent irrigated cropland used for feed production on a ranch rather than land used in cash crop production.

Table 11. Comparison of 1963-64 and 1977 estimates of irrigated cropland values in Wyoming.

Area	Counties in area	Average market value for average quality land		Percentage change
		1963-64[a/]	1977	1963-64 to 1977
		(dollars per acre)		
1	Sheridan, Johnson	229	750	228
2	Campbell, Crook, Weston, Converse, Niobrara	116	386	233
3	Albany, Platte, Goshen, Laramie	178	776	336
4	Natrona, Carbon, Sweetwater	103	507	392
5	Sublette, Lincoln, Uinta, Teton[b/]	112	401	312
6	Park, Big Horn, Washakie, Hot Springs, Fremont	161	700	345

a/ Source of 1963-64 estimates was Clark and Vanvig, Wyoming Farm and Ranch Land Prices, p. 12.

b/ Teton County was included in the 1963-64 study.

Average Prices of Irrigated Land Determined from Actual Sales

Average values per acre for irrigated cropland based on actual sales (Table 12) were highest in Area 1 ($1,148 per acre). High values in Area 1 are due partly to the active real estate market in Sheridan County, in which a strong demand for relatively small, irrigated tracts for homesites tends to inflate land values. Sheridan and Johnson Counties border the east slope of the Big Horn Mountains; hence, these areas attract nonfarm investors.

Table 12. Irrigated land prices - 1975 and 1976 actual sales in Wyoming.

Area	Counties in area	Irrigated cropland			
		Number of observations	Average price	Range	
				Low	High
			(dollars per acre)		
1	Sheridan, Johnson	18	1,148	400	3,000
2	Campbell, Crook, Weston, Converse, Niobrara	6	410	200	1,000
3	Albany, Platte, Goshen, Laramie	40	699	200	1,700
4	Natrona, Carbon, Sweetwater	25	474	125	1,600
5	Sublette, Lincoln, Uinta	11	471	220	1,500
6	Park, Big Horn, Washakie, Hot Springs, Fremont	99	638	200	1,800
State		195	618	125	3,000

The highest prices reported from sales of irrigated land were in or near the Big Horn Mountains west of Sheridan. Prices of $2,000 to $3,000 per acre were reported in this area for the smaller tracts. Lands selling for prices in this range usually became a part-time operation or were added to an existing operation. Prices for high quality irrigated land in the major cash crop areas of the state, northwestern Wyoming (the Big Horn Basin) and southeastern Wyoming (Goshen, Platte and Laramie Counties) sales ranged from $1,500 to $1,800 per acre. Irrigated land in the Kendrick project west of Casper along the North Platte, which is generally sold in small tracts, and operated as a part-time farm (or in some cases as a part of a larger operation) was selling for $550 to $1,000 per acre. Land in the Kendrick project which was sold for residential development brought even higher prices.

Dry Cropland Market Values

Most of the dry cropland in Wyoming is situated in the eastern portion of the state. A small amount is found in Lincoln County. Wheat is the most common crop produced on dry cropland, with the major wheat producing area located in southeastern Wyoming. The typical cropping system in this area is a wheat-fallow rotation. Since dry cropland is generally in northeastern and southeastern Wyoming values for Areas 2 and 3 are the only ones reported.

Estimates of Dry Cropland Values

In Area 3, southeastern Wyoming, where dryland farming is most prevalent, values reported averaged $202 per acre, and ranged from $151 per acre for low quality land to $257 per acre for high quality land (Table 13). Prices reported for Area 2, northeastern Wyoming, which is also an important wheat producing area, averaged slightly lower than in Area 3. In Area 2 values ranged from $144 for low quality land to $240 for high quality land and averaged $197 per acre for average quality land. In Area 2, dry cropland is usually interspersed with grazing land, thus reducing the market value.

A comparison of values of dry cropland with those recorded in the 1963-64 study shows that current values are about three times what they were in 1963-64 in Area 3 and nearly four times what they were in 1963-64 in Area 2. The higher increase in Area 2 reflects in part the influence of coal development in northeastern Wyoming on agricultural land prices.

Average Prices of Dry Cropland Determined from Actual Sales

The majority of dry cropland sales reported were in Area 3 (Table 13). This is to be expected, since dry cropland is concentrated in the eastern portion of the state. Prices from sales in Area 3 average $235 per acre. Prices of the 23 sales reported ranged from $150 to $300 per acre for this area. There were not enough sales reported to accurately evaluate prices of dry cropland in other areas.

Low wheat prices in the last 3 years, coupled with rapidly escalating production costs, have put wheat farmers in a severe financial squeeze. This has caused dry cropland values to level out and in some areas to even decline. On the other hand, the pressure to expand the size of farm operations is perhaps stronger in wheat areas than in other types of agriculture, since with the use of large 4-wheel drive tractors and the use of custom harvesters, a wheat farmer can handle a much larger acreage than was true 10 to 15 years ago. This has kept dry cropland values from declining even though wheat prices declined by nearly one-half from 1973-74 levels.

DESCRIPTIVE INFORMATION RELATED TO THE RURAL REAL ESTATE MARKET IN WYOMING

Market values discussed thus far only provide part of the picture of the agricultural land market in Wyoming. This section will examine the factors affecting rural real estate values and provide a descriptive analysis of actual sales transactions.

Factors Affecting Wyoming Rural Real Estate Values

Those responding to the land value survey were asked to report the factors they felt were affecting the market value of Wyoming farm and ranch land (Table 14). Most of the factors mentioned cause land values to increase. However, agricultural commodity prices, which for many Wyoming agricultural products have been falling over the last 3 years, may have resulted in a slower rate of increase in agricultural land values.

Table 13. Market value of dry cropland in Wyoming - estimates and actual sales.

Area	Counties in area	Estimates of market value: 1963-64 Average quality land[a]	1977 Quality of land: Low	Average	High	% change in average quality land from 1963-64 to 1977	Actual sales (1975 and 1976): Average sale price	No. of sales of dry cropland
		(dollars per acre)					(dollars per acre)	
1	Sheridan, Johnson	NOT AVAILABLE						
2	Campbell, Crook, Weston, Converse, Niobrara	48	144	197	240	310	NA	NA
3	Albany, Platte, Goshen, Laramie	75	151	202	257	169	235	23
4	Natrona, Carbon, Sweetwater	NOT AVAILABLE						
5	Sublette, Lincoln, Uinta, Teton[b]	NOT AVAILABLE						
6	Park, Big Horn, Washakie, Hot Springs, Fremont	NOT AVAILABLE						

[a] Source of 1963-64 estimates was Clark and Vanvig, Wyoming Farm and Ranch Land Prices, p. 14.

[b] Teton County was included in Area 5 in the 1963-64 study.

Table 14. Factors affecting Wyoming farm and ranch land values.

	Farm		Ranch	
	No.	%	No.	%
Agriculturally Related Factors				
Water Availability	21	14	17	12
Agricultural Productivity	16	11	11	8
Agricultural Commodity Prices	13	9	16	11
Expansion of Farm or Ranch	7	5	2	1
Subtotal	57	39	46	32
Nonagriculturally Related Factors				
Mineral Development	11	8	15	11
Commercial Development	12	8	6	4
Recreation	7	5	15	11
Rural Home Sites	8	5	1	1
Subtotal	38	26	37	26
Agricultural and Nonagricultural Factors				
Investment[a/]	22	15	30	21
Location	10	7	7	5
Supply of Land	5	3	4	3
Improvements	4	3	3	2
Other	10	7	15	11
Subtotal	51	35	59	42
Total	146	100	142	100

a/ Investment factors refer to those purchases of agricultural land made by farmers, ranchers or those not associated with agriculture where speculation on land appreciation as a result of residential, recreational, agricultural, mineral, or some other type of development is the primary reason for purchase.

Agriculturally related factors were suggested as relevant factors affecting farm values in 39% of the responses, and 32% of the response suggested that agriculturally related factors were relevant factors affecting ranch values. Nonagriculturally related factors were mentioned in 26% of the responses as affecting farm values and in 26% of the responses as affecting ranch values. Other factors mentioned related both to agricultural and nonagricultural factors. Nonagricultural factors play a part in deter-

mining farm and ranch land values in Wyoming, but indications from the survey are that farmers and ranchers seeking land for agricultural production are the most important forces operating in the Wyoming agricultural land market.

Descriptive Analysis of Actual Sales Transactions

Number of Acres Sold

According to the 1974 Census of Agriculture (Preliminary Report) the average size of a Wyoming farm or ranch was 4,131 acres. The average number of acres transferred per sale included in this study was 2,105 acres (Table 15).[6] Comparing the average number of acres of farm and ranch land sold, with the average size of a Wyoming farm or ranch, suggests that tracts of agricultural land in Wyoming are often purchased to add to an existing unit rather than to be operated as a single unit.

Financing

Mortgage (47%) and installment land contracts (38%) were the most common types of financing arrangements followed in the sales reported (Table 16). Cash sales accounted for 15% of the sales analyzed.

When land was sold on an installment contract the seller most often provided the source of financing (Table 17). The Federal Land Bank was most commonly used where the land sale was financed with a real estate mortgage. Twenty-four sales used two sources of financing. The Federal Land Bank and the Farmers Home Administration were the most common lending institutions to jointly participate in farm and ranch real estate financing.

Sale Characteristics

Retirement of the operator was given as the reason for selling in 39% of the sales reported (Table 18). Moving to another farm or ranch (22%) and leaving farming or ranching for another job (16%) were also important reasons for selling. Sales in which the operator selling moved to another farm or ranch included both active farmers or ranchers selling only a part of their operation as well as those who sold their whole unit and bought another unit elsewhere. Death and estate settlement were given as the reasons for sale in 8% of the sales reporting. Other reasons for sale included: family breakups, illness and forced sales due to debt.

From Table 19 it appears that farmers and ranchers were involved in the majority of the land purchases.[7] Expansion of an existing operation was the reason given for 47% of the purchases (Table 19). In 31% of the land transactions the farms or ranches purchased were to be operated as a single unit, however in some instances they were to be operated as a part-time farm or ranch. National statistics point out that farmers are most often the buyers of agricultural land. The USDA Farm Real Estate Market Developments revealed that for the year ending March 1, 1977, 64% of all U.S. farm real estate buyers were active farmers.

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[6] Only those sales over 100 acres were included in the study. The largest sale was 51,451 acres in Area 6.

[7] Agricultural land sales where mineral development or residential development was the major determinant of value were excluded from this study.

Table 15. Average number of acres sold in Wyoming by category of land during 1975 and 1976.[a/]

Area	Counties in area	No. of sales	Ave. no. of acres transferred for all reported sales	Ave. no. of acres transferred/sale of		
				Dry cropland	Irrigated Cropland	Grazing Land
1	Sheridan, Johnson	20	1,412	NA[b/]	123	1,118
2	Campbell, Crook, Weston, Converse, Niobrara	20	3,839	265	360	2,346
3	Albany, Platte, Goshen, Laramie	61	1,435	261	171	1,436
4	Natrona, Carbon, Sweetwater	29	5,617	NA	376	3,500
5	Sublette, Lincoln, Uinta	16	637	700	247	452
6	Park, Big Horn, Washakie, Hot Springs, Fremont	83	1,501	NA	157	1,446
State		229	2,105	276	190	1,878

[a/] All sales reported did not include each type of land. Thus, the average number of acres transferred for all reported sales does not equal the sum of the average number of acres of grazing land, irrigated land and dry cropland.

[b/] NA - not available.

Table 16. Method of financing used in 1975 and 1976 sales of Wyoming farm and ranch land.

Method	Number	Percent
Mortgage	95	47
Contract	77	38
Cash	31	15
Total	203	100

Table 17. Source of financing used in 1975 and 1976 sales of Wyoming farm and ranch land.

Source	Number	Percent
Seller Financed	57	37
Federal Land Bank	47	31
Sales Using Two Sources of Financing[a/]	24	16
Farmers Home Administration	12	8
Insurance Company	7	5
Commercial Bank	6	4
Total	153	100[b/]

a/ Represent FHA & Seller; FLB & FHA; FLB and other sources.
b/ Percentages do not total to 100 due to rounding.

Table 18. Reasons given for the sale of Wyoming farm and ranch land - 1975 and 1976.

Reason	Number	Percent
Retired	30	39
Moved to another farm	17	22
Left farming for another job	12	16
Death	6	8
Other	11	14
Total	76	100[a/]

a/ Percentages do not total to 100 due to rounding.

Table 19. Reasons for purchase of Wyoming farm and ranch land - 1975 and 1976 sales.

Reason for Purchase	Number	Percent
Expand present operation	107	47
Operate as single unit	72	31
Investment	39	17
Other	11	5
Total	229	100

Farms and ranches purchased as an investment accounted for 17% of the 229 transactions.[8/] Other reasons for purchase, including buying agricultural land for home and commercial development sites, were given in 5% of the sales.

Buyers of the agricultural land reported in Table 20 were established farmers (49%), new faremrs (23%), and investors (29%).

Table 20. Characteristics of buyers of Wyoming farm and ranch land - 1975 and 1976 sales.

Characteristics	Number	Percent
Established farmer	41	49
New farmer	19	23
Non-farm investor, in-state	15	18
Non-farm investor, out-of-state	9	11
Total	84	100[a/]

a/ Percentages do not total to 100 due to rounding.

8/ See note a/ on Table 14.

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