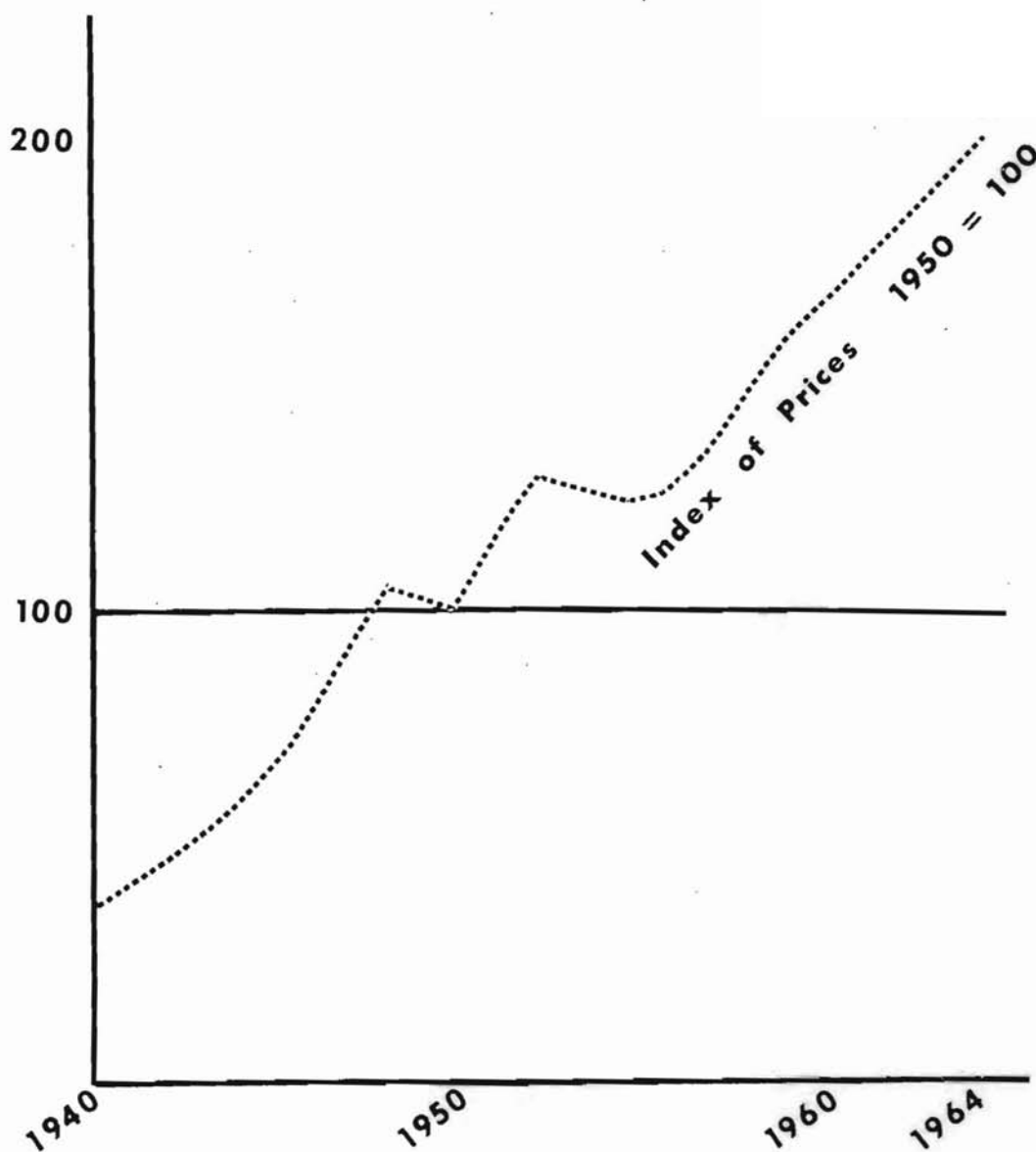


# Wyoming Farm and Ranch Land Prices



Mimeo Circular No. 215

September 1965

WYOMING FARM AND RANCH LAND PRICES

by Richard Clark <sup>1/</sup> and Andrew Vanvig <sup>2/</sup>

<sup>1/</sup> Instructor, Division of Agricultural Economics,

<sup>2/</sup> Professor and Division Head, Division of Agricultural Economics.

TABLE OF CONTENTS

	<u>Page</u>
SUMMARY. . . . .	1
PURPOSE AND METHODS OF PROCEDURE . . . . .	3
CURRENT LAND VALUES. . . . .	5
Grazing Land . . . . .	5
Market Values of Ranches . . . . .	9
Irrigated Cropland. . . . .	11
Dry-Farming Land . . . . .	13
TRENDS IN LAND PRICES. . . . .	14
WHO HANDLED SALES AND WHO PURCHASED LAND. . . . .	17
SALES ACTIVITY AND SALE METHODS . . . . .	17

## WYOMING FARM AND RANCH LAND PRICES

by Richard Clark and Andrew Vanvig

### SUMMARY

The level of land prices in Wyoming was generally higher in late 1963 and early 1964 than in 1962. A high proportion of the land purchases were made by established farmers and ranchers adding to their units. These are two indications obtained from a survey of land values conducted by the Division of Agricultural Economics at the University of Wyoming.

Current values for three types of land: grazing, irrigated cropland, and dry-farming land were studied. Prices were obtained for average, high, and low-quality lands in each land type. Average-quality grazing land varied from \$17 per acre in Area 4 (Carbon, Sweetwater, and Natrona counties), to \$36 in Area 5 (Sublette, Teton, Lincoln, and Uinta counties). Many factors are responsible for this range. In addition to quality, other factors include: demand for land for non-agricultural use such as recreation, amount and quality of rights to leased land that go with the deeded land; and the proportion of deeded to leased land. Average-quality irrigated cropland values varied from \$103 per acre in Area 4 (Carbon, Sweetwater, and Natrona counties), to \$229 in Area 1 (Sheridan and Johnson counties). Availability, quality, and cost of water and location and productivity of the land are major factors influencing the value of irrigated cropland.

The value for average-quality dry farmland in Area 3 (Platte, Goshen, Laramie, and Albany counties), the state's top wheat producing area, was \$75 per acre. In Area 2 (Crook, Campbell, Weston, Converse, and Niobrara counties) the value for average-quality dry farmland was \$48 per acre.

One of the reasons for the lower value in Area 2 is that cropland in this area is often interspersed with grazing land. Wheat-allotment size and productivity of the land are the principal factors affecting the price of dry farmland. Although the figures in the study show results for areas within the State, it must also be pointed out that values for given land parcels within each area will vary nearly as much as values between areas.

Study results indicated that local farmers and ranchers purchased 63 percent of the land that was sold. Farmers and ranchers who did not live in the immediate vicinity of the land purchased another 17 percent. Out-of-state and local investors purchased the remainder. In some areas the percent of land purchased by out-of-state investors was considerably higher than the state average. Land in these areas had high recreational and aesthetic values.

Real-estate brokers handled 52 percent of the sales; sales made directly from seller to buyer totaled 42 percent. Auctions, sealed bids, and estate settlements accounted for the remainder.

One conclusion is that the demand for land appears to be increasing due to established operators adding to their units and investors who expect further appreciation of land prices. This increasing demand tends to influence the price of land upward. Study results also indicated that current land values are not always based on agricultural productivity.

#### PURPOSE AND METHODS OF PROCEDURE

The purpose of this study is to supply current information concerning the Wyoming land market. It is not intended to show the value of a specific land parcel. Rather, it shows general market values at end of 1963 and beginning of 1964 throughout the state as well as factors affecting the land market.

The data were obtained from questionnaires mailed to real-estate brokers, bankers, county agents, county assessors or treasurers, and various farm credit officials in December 1963 and in January 1964. Questions were asked concerning current values for various types of land in Wyoming, what factors affected land prices, how land sales were handled and financed, and other related information. Respondents returned 116 useable questionnaires.

The State was divided into six areas (Figure 1) since there were not enough observations to report land values on a county basis. These areas were established by combining contiguous counties reasonably similar in climate, land quality, and market conditions. Each county in a given area may not have all land types listed for that particular area; therefore, the values reflect prices for the county or counties having the kind of land listed. For example, prices for dry-farming land are listed for Area 3, which includes Albany county. Since that county has practically no dry-farmland, prices for Area 3 dry-farm land pertain to the other three counties.

Values are shown for three major types of agricultural land: grazing land, irrigated cropland and dry-farming land. Within each of

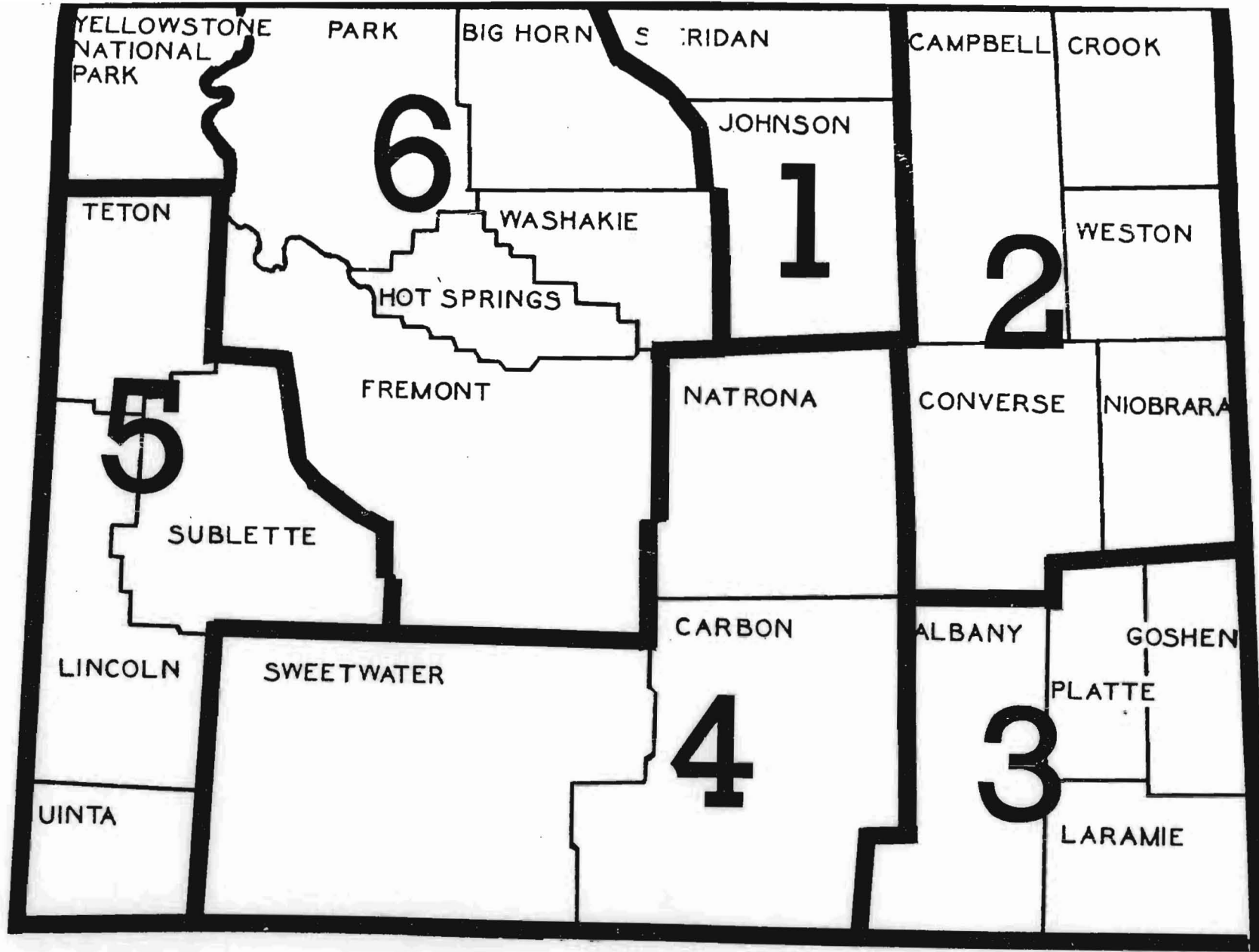


FIGURE 1. AREAS OF STUDY

these land types, values are shown for the average, high, and low-quality lands. These values were determined by taking a simple average of all observations reported in a given area for each type and quality of land. Within a given area and for a given land type, market values for some land parcels will actually be higher than the high shown in this survey, while other land parcels will have actual values lower than the low shown in the range. Many factors, such as water rights, mineral rights, location and non-agricultural uses, affect the market price of different land parcels even though the land itself is of similar type and quality. In reviewing prices reported for grazing land, particularly in western Wyoming, one should keep in mind that carrying capacities of these range lands vary widely. As a result, average price is less meaningful than in areas where lands are more homogeneous.

#### CURRENT LAND VALUES

Reported land values represent current market prices and in general are higher -- particularly for cattle ranches -- than current cattle and crop prices would justify in terms of normal earning capacity. Prices have been bid up in part by people expecting land prices to continue to rise, and therefore buy land as an inflation hedge.

#### Grazing land

Many factors affect the value of grazing land. Quality as measured by carrying capacity is one of the more important factors. Table 1 shows that the acres per animal-unit-month of grazing and the length of the grazing season vary considerably by areas. In Area 1 for example, only 2.4 acres of average-quality land are required to graze one animal



unit for one month. At the other extreme is Area 4, where on the desert 8.0 acres, or even more, are required for an animal-unit-month of grazing. Average length of grazing season varied from 10.8 months in Area 2 (actually, animals are grazed the year around in parts of Areas 2 and 3) to 5.5 months in Area 6. Grazing-land quality also varies considerably within some areas. This is especially true in areas with both mountain pastures and lower elevation grazing areas.

Table 1. Average Acres per Animal-Unit-Month of Grazing and Length of Grazing Season as Reported by Respondents

Area	County	Acres per A.U.M.	Ave. grazing season in months
1	Sheridan & Johnson	2.4	9.5
2	Crook, Campbell, Weston, Converse & Niobrara	2.5	10.8
3	Platte, Goshen, Laramie, & Albany	2.7	9.2
4	Carbon, Sweetwater & Natrona	8.0 (Desert) 1.5 (Mountains)	5.0 6.0
5	Sublette, Teton, Lincoln & Uinta	3.5	5.7
6	Park, Big Horn, Washakie, Hot Springs & Fremont	4.1	5.5

The amount of deeded land compared with leased land on a given ranch may also affect the price of deeded land. The percent of deeded land in each area reported follows: Area 3, 81 percent; Area 1, 75 percent; Area 2, 72 percent; Area 5, 52 percent, and Areas 4 and 6, 47 percent. Some ranches in southern and southwestern Wyoming have as little as 20 percent deeded land. These percentages are based on acreages, rather

than on carrying capacity, although leased land generally has a lower carrying capacity. In Areas 4, 5, and 6 the actual percent deeded may be less than the figures show, since some respondents may have omitted the acreage represented by forest permits.

When a ranch is sold, rights to leased land are usually transferred. Other than private leases, a sale may involve forest permits, Bureau of Land Management permits, and/or state leases. Since forest permits are occasionally sold outright, their current value was estimated. Forest-permit holders are allowed to graze a prescribed number of livestock for a given length of time each summer at a prescribed fee per head per month. In determining permits a cow and calf (under 6 months), a yearling, a bull, or a dry cow are each assumed to equal one head of livestock. The average reported market value of forest permits in Wyoming, based on a 4-month grazing season, was \$104 per head. This market value will vary from area to area depending on length of the permit grazing season, quality of grazing available, and competition for such permits.

A per-acre basis is probably the most common method used to value a ranch's grazing land. Table 2 shows the values for grazing land for each of the six areas. The figures listed represent simple averages of reported values for average, high, and low-quality lands in each area. The wide range (\$5 - \$28) in Area 4 reflects the difference in quality of grazing land. The low value reflects the Red Desert land. Considerably more land is required to carry an animal unit for a month in the desert than in most other areas. Water for livestock is also a problem on the desert. The higher value reflects

the mountain valley and foothills grazing lands in the southern and eastern parts of Area 4.

Table 2. Market Values Per Acre Reported for Grazing Land

Area	County	Quality of land		
		Average (\$)	Low (\$)	High (\$)
1	Sheridan & Johnson	26	18	41
2	Crook, Campbell, Weston, Converse, & Niobrara	22	15	31
3	Platte, Goshen, Laramie, & Albany	24	17	35
4	Carbon, Sweetwater, & Natrona	17	5	28
5	Sublette, Teton, Lincoln, & Uinta	36	24	57
6	Park, Big Horn, Washakie, Hot Springs & Fremont	21	14	34

Grazing-land values reported for Area 5 are considerably higher than for the other areas. The value of \$36 per acre for average grazing land is about \$10 higher than for the second highest area. Values for low and high-quality grazing land in Area 5 are also higher than in all other areas, primarily because Area 5 has greater amounts of irrigated pasture land on river bottoms. Values are also high because much of Area 5's deeded grazing land lies in high foothills and low mountain range with good carrying capacity. The percentage of deeded-land in Area 5 is relatively small, which may also inflate deeded-land values. Although the value of high-quality grazing land in Area 5 is above the other areas,

values reported for tracts in Area 5 near Jackson in Teton county are considerably higher than the high quoted. Teton and Sublette counties are recreational areas, a factor tending to pull land prices higher than in areas depending mainly on ranching.

Average values for grazing land among other areas did not differ greatly. Values differ widely within areas, however, due largely to location and quality.

#### Market Values of Ranches

Reporting grazing-land prices on a per-acre basis has limitations because of wide variations in carrying capacity of grazing land as well as wide differences in amounts of hayland required to support livestock in different parts of the State. An attempt was therefore made to determine current market values of ranches per animal unit. Such values provide a more meaningful basis for comparing real-estate investments on ranches in various parts of Wyoming. This procedure has limitations, also, because ranches vary widely in proportion of deeded vs. leased land, cost and stability of leases held, amount of winter feeding required, and other factors. Nevertheless, respondents were asked for this information; their estimates of current market values on a per-animal-unit basis are reported in Table 3.

Market values of average-quality ranches in Area 1 totaled \$614 per animal unit for real estate only (land, buildings, fences). These values were on the average the highest for any area (Table 3). Ranches in western Sheridan and Johnson counties near the Big Horn Mountains, because of their attractive locations, draw many out-of-state investors as well as local buyers. This situation creates a strong demand for

good-quality ranches.

Table 3. Market Values Per Animal Unit Reported for Cattle Ranches by Areas

Area	County	Quality of land		
		Average (\$)	Low (\$)	High (\$)
1	Sheridan & Johnson	614	467	961
2	Crook, Campbell, Weston, Converse & Niobrara	552	415	699
3	Platte, Goshen, Laramie & Albany	565	394	796
4	Carbon, Sweetwater & Natrona	441	325	655
5	Sublette, Teton, Lincoln & Uinta	549	475	822
6	Park, Big Horn, Washakie, Hot Springs & Fremont	353	263	479

Ranches in Area 2 are largely plains-type grass ranches except for the area around the Black Hills, where winter hay feeding is required. Prices reported for ranches in this area averaged \$552 for land and improvements on a per-animal-unit basis. Values averaged \$415 per animal unit for low-quality ranches and \$699 per animal unit for high-quality ranches.

Area 3's ranches are also plains type except for Albany County and western Laramie and Platte counties, where mountain valley and foothills-type ranches are found. Current market prices in this area averaged \$565 per animal unit and were somewhat higher than ranches in Area 2. Owners of all grass ranches in eastern Wyoming in both Areas 2 and 3 generally have higher investments per head than do owners of higher

elevation ranches in the same general area with meadow hayland which require winter feeding.

On the average, ranches in Areas 4 and 6 had lower market values than ranches in the other areas. Reported prices averaged \$353 per animal unit in Area 6 and \$441 in Area 4. Ranches along the North Platte River in Carbon County, however, are valued among the highest in the state. They bring up the average for Area 4 compared with Area 6. Many ranches in these areas, particularly in Area 4, are desert type with only 20 to 40 percent deeded land. They therefore carry lower values. The degree of lease stability on these ranches affects their value. Area 6 also has mountain-valley and foothills-type ranches.

Because ranches in Area 5 are largely mountain valley and foothill type, livestock there require considerable winter feeding. The average market value reported in this area was \$549 per animal unit. Ranches in Teton County near Jackson are valued among the highest in the state because of recreational attractions and dude-ranching possibilities.

#### Irrigated Cropland

Reported values of irrigated cropland varied widely, (Table 4). Average-quality irrigated cropland varied from \$103 per acre in Area 4 to \$229 in Area 1. These values generally are based on whole farms rather than just on irrigated acres. Good-quality irrigated land in Areas 1, 3, and 6 would bring \$300 per irrigated acre while top-quality irrigated land would go as high as \$400 to \$450 per irrigated acre.

Table 4. Market Values Per Acre Reported for Irrigated Cropland

Area	County	Quality of land		
		Average (\$)	Low (\$)	High (\$)
1	Sheridan & Johnson	229	155	435
2	Crook, Campbell, Weston, Converse & Niobrara	116	59	137
3	Platte, Goshen, Laramie & Albany	178	100	268
4	Carbon, Sweetwater & Natrona	103	65	160
5	Sublette, Teton, Lincoln, & Uinta	112	90	212
6	Park, Big Horn, Washakie, Hot Springs & Fremont	161	101	247

High values in Area 1 are due partly to the active real-estate market in Sheridan County. A strong demand for small, irrigated home-site tracts also tends to inflate irrigated-land values. Sheridan and Johnson counties border the east slope of the Big Horn Mountains, hence the area attracts outside investors. This fact may also influence land prices.

Area 6, which contains the Big Horn Basin, and Area 3, which includes the Torrington area, are probably the state's best cash-crop irrigated areas. Similar quality of irrigated land in these two areas is indicated by similar values. Area 3 values, however, are generally slightly higher than those in Area 6. The length of growing season and the frost-free period generally favor Area 3. Over all, Area 6 probably has a better water supply. Sugar-beet allotment is another factor which can

strongly influence irrigated-cropland values.

Irrigated-cropland values in other areas are generally lower than in the three areas already discussed. Lower values are due mainly to differences in the crops that can be produced and crop production is influenced by soils, length of growing season, and water availability. The shorter growing season in Areas 4 and 5 limits particularly the crops that can be grown successfully. In all areas the supply, quality, and cost of water are important determinants of irrigated-land values.

#### Dry-farming Land

Most of Wyoming's dry-farm land is situated in the eastern part, although some is found in Lincoln County in Area 5. Small tracts are situated in other parts of western Wyoming.

Area 3 in southeastern Wyoming is the major wheat-producing section. Values reported for dry-farm land in Area 3 averaged \$75 per acre and ranged from \$48 per acre for low quality to \$108 per acre for high-quality land (Table 5). Exceptionally good land with a good wheat allotment may sell for as high as \$125 to \$150 per acre.

Area 2 in northeastern Wyoming also produces large amounts of wheat but not as much as Area 3. In Area 2 dry-farming land is usually interspersed with grazing land, and the lower reported prices reflect tracts containing both farm and rangeland. In Area 5, which includes Lincoln County, dry-farm land produces mainly feed crops and some wheat. Values in Area 5 ranged from a low of \$75 per acre to a high of \$117.



Table 5. Market Values Reported Per Acre on Dry Farmland

Area	County	Quality of land		
		Average	Low	High
		(\$)	(\$)	(\$)
1	Sheridan & Johnson	54	37	70
2	Crook, Campbell, Weston, Converse & Niobrara	48	31	61
3	Platte, Goshen, Laramie, & Albany	75	48	108
4	Carbon, Sweetwater & Natrona	No prices reported		
5	Sublette, Teton, Lincoln, & Uinta	100	75	117
6	Park, Big Horn, Washakie, Hot Springs & Fremont	25	15	41

TRENDS IN LAND PRICES

Table 6 shows the percent of respondents reporting higher, lower, or little change in land prices since 1962. These estimates are made for each type of land by respondents in the area.

Table 6. Respondents' Estimates of Land-Price Trends Between 1962 & 1963

Land type	Area						State average
	1	2	3	4	5	6	
(Percent of respondents reporting)							
Grazing land	%	%	%	%	%	%	%
Little change	13	52	52	62	33	74	50
Higher	80	48	41	31	67	26	46
Lower	7	--	7	7	--	--	4
Irrigated Cropland							
Little change	50	41	40	69	50	60	52
Higher	50	47	56	23	50	36	44
Lower	--	12	4	8	--	4	4
Dry-farming land							
Little change	75	65	42	43	75	80	57
Higher	25	35	29	43	25	20	32
Lower	--	--	29	14	--	--	11

Respondents' answers indicated a general rise in grazing-land prices for all areas. A higher percentage of respondents in Areas 1 and 5 reported increases in grazing-land values than was true for the other areas. The increase in Area 5 is probably due to recently emerging recreational and aesthetic-value demands for land. The active land market in Area 1 has influenced land prices upward in that area. Many other factors cause land values to increase. Reasons given by respondents for increases in market value of various land types are listed in Table 7. "More demand for land" was the reason they gave most often for increased values of grazing land. Although this reason does not indicate why values increased, it does point out that more people are attempting to purchase land. The other reasons listed in Table 7 for increases also tend to cause "increased demand", but these reasons are more specific as to the nature of the demand. Only four percent of the respondents felt prices for grazing land had declined in 1963. Reasons given by respondents for the decreases are also listed in Table 7. "Lower cattle prices" was the only reason they gave for lower prices on grazing land.

Statewide, fifty-two percent of the respondents felt irrigated-cropland prices had changed little. This figure compares with 50 percent who believed that there was little change in grazing-land values. On a statewide basis it appears that values for irrigated cropland were higher in 1963 than in 1962. An "increased demand for land" was also the most frequently listed reason for the increase in irrigated-cropland values. "Local farmers expanding the size of their operations" also

Table 7. Factors Influencing Market Values of Land

	No. of times listed for:		
	Grazing land	Irrigated cropland	Dry-farming land
<b>Reason for increase:</b>			
1. More demand for land	14	9	6
2. Out-of-area buyers are paying good prices	5	2	1
3. Local farmers and/or ranchers are expanding size of units	1	4	2
4. People seem to have more money	3	3	1
5. Influence of investors other than farmers, ranchers	3	1	1
6. Little land is on the market	3	1	1
7. Inflation is pushing up land prices	1	3	1
8. Good crops in previous year	-	3	-
9. Recreational and aesthetic value of land	2	-	-
<b>Reason for decrease:</b>			
1. Uncertainty of wheat program	-	-	5
2. Lower cattle prices	3	1	1

appears to have had an upward influence on irrigated-land prices. Other reasons listed for an increase appear in Table 7. Only 4 percent of the respondents felt that irrigated-land prices had fallen during 1963.

About one-third of the respondents indicated that the price for dry-farming land trended upward. Again, "more demand for land" was the reason they gave most often for an increase. "Local farmers expanding the size of their units" was the only other reason given by more than one respondent. Respondents generally felt that prices for dry-farming land had risen or changed little. Respondents in heavy wheat-producing areas, however, were about equally divided between those indicating an increase and those indicating a decrease. "Uncertainty due to the wheat program" was the reason given by those who believed that dry-farming land prices

had decreased. Statewide, 11 percent stated that the price for dry-farming land had dropped, compared with 4 percent who indicated the value of grazing land and irrigated cropland had fallen. Over all, 57 percent reported little or no change in dry-farming land values.

#### WHO HANDLED SALES AND WHO PURCHASED LAND?

One survey question was "Who handled land sales?" For the state as a whole, reports indicate that 52 percent of the sales were handled by brokers, 42 percent were made privately (seller direct to buyer), 4 percent were auction sales, and 2 percent were made through sealed bids and settlement of estates. Most area results are similar to state averages. Reports from Area 2, however, indicate that 15 percent of the transactions in that area were auction sales.

Other questions inquired as to who purchased the land. Respondents reported that local farmers and ranchers purchased 63 percent, non-local farmers and ranchers purchased 17 percent, out-of-state investors obtained 13 percent, and local investors purchased 7 percent. Out-of-state investors bought 41 percent of the land in Area 4 and 20 percent in Area 1. New farmers and ranchers bought 28 percent of the land in Area 6. None of the other area results varied from state averages.

#### SALES ACTIVITY AND SALE METHODS

Questions concerning sales activity and sale methods were directed to those who handled sales. For 1962, 26 brokers reported 140 sales, an average of 5.4 each. The same 26 brokers reported 113 sales for 1963, a decrease of about 20 percent. Broker's answers and respondent comments indicate a decline in land-market activity for 1963.

Of the land transactions reported about 50 percent of the sales involved contracts for deed, 35 percent involved a conventional mortgage, and 15 percent were for cash. The most common amount of down payment for contracts for deed was 29 percent. The statewide average term of contracts for deed was 15 years while the most common term for mortgages financed by insurance companies was 20 years.