

AN ABSTRACT OF THE THESIS OF

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IN SIX DIFFERENTIATED AREAS OF SHERMAN COUNTY,

OREGON

Abstract approved:

Dr. Grant E. Blanch

Share-crop leasing of cropland has been an important part of Sherman County's agricultural scene for over 60 years. Very little has been known about the actual types of leases used, their terms, and other related factors. This study was directed toward the investigation of the types of leases used, their terms, and other related factors.

Sherman County varies in rainfall, soils, topography, and other factors affecting land use and productivity from one part to another. Therefore, the county was divided into six areas of similar rainfall, soil type, land use and productivity. These six areas are northwest - area 1; northeast - area 2; middle west - area 3; middle east - area 4; southwest - area 5; and southeast - area 6.

The data for this study was obtained by interviewing 50

ranchers in Sherman County. They were randomly drawn from each of the six areas so as to provide a sample size of approximately 33 percent of the ranches in each area. Two field schedules were employed: one was a general questionnaire pertaining to characteristics of the operation, such as size, crops grown, permanent and seasonal labor force, and whether livestock was a part of the business. The second questionnaire was structured to obtain detailed information on lease agreements for each parcel of land leased.

The information obtained indicates an average size of ranch of 3,527 acres. Of these acres, 61 percent are cropland and 39 percent are range or unuseable lands. On the average, nearly 60 percent of the land operated by each rancher is leased; 39 percent is owned, and two percent is custom farmed.

The 1/3-2/3 crop-share lease (1/3 to the landowner - 2/3 to tenant) was the most common, occurring 68 percent of the time. It was found in all areas, and it occurred the most often in each area. The 40-60 type crop-share lease was the next most common. It occurred 13 percent of the time and was more common in the more productive areas of the northwest and middle west. Seventy-five percent of the 40-60 leases occurred in these two areas. The other types of crop-share leases found were 50-50, 25-75, and 45-55.

There were written leases covering 60 percent of the parcels leased; verbal agreements constituted the lease on 40 percent of the

parcels. Fifty-two percent of the leases were with landlords who were not related to the tenant. Forty-eight percent of the leases were with relatives of which half were father-mother. Written leases were more common with non-related landlords than with related landlords. Eighty-three percent of the 40-60 type leases were with non-related landlords.

The crop spray costs were more likely to be paid by the tenant while the fertilizer costs were more likely to be shared in the same way the crop was divided. The cost of seed was borne by the tenant 94 percent of the time. The landlord paid the real property taxes in 78 percent of the leases, and the tenant paid all or a share of them for the use of the range land in another six percent of the leases. In 77 percent of the leases each party sold his own share of the grain.

Many of the crop-share leases contain most of the essential terms of a good lease as defined in the literature. However, some of the leases could be improved by putting them in writing. This would be beneficial to both the landowner and the tenant because definite terms would be written down.

The tenants also indicated a desire for longer term leases. With farm equipment costs increasing and larger equipment needed, the tenant and his banker may insist on some agreement to insure that there will be land to farm in order to generate income to pay for the more expensive farm equipment needed.

A cost of production study by area is needed before any conclusions can be drawn about fairness of rental terms.

Of the 43 farmers who have leased land, all except one said it has been a satisfactory experience. Fifty-one percent said that they would like to lease more land to increase their farm size. Leasing of farm land in Sherman County has been an important part of the way the land resource has been controlled for use. Indications are that it will continue to be so in the future.

A Study of Crop-Share Leases on Wheat Farms in Six
Differentiated Areas of Sherman County, Oregon

by

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A STUDY OF CROP-SHARE LEASES ON WHEAT FARMS
IN SIX DIFFERENTIATED AREAS
OF SHERMAN COUNTY, OREGON

I. INTRODUCTION

"America was settled by people who wanted independence and freedom. They were hungry for land. Therefore, some of the early land policies tended to limit the size of farms and encouraged farm operators to own their land" (1, p. 205). Ownership is still highly valued, but it is becoming ever more difficult. As a young farmer starts in ranching,^{1/} there are high capital needs for machinery and operating expenses in addition to the land that is required. Very few people can start on the ladder toward ownership except at or near the bottom. Leasing of farm land provides an opportunity to start in ranching without all the resources one may own when at the top of the ladder. It offers an opportunity to combine the tenant's resources with the resources of the landowner^{2/} to benefit both parties.

Sherman County was first settled in 1860 when the emigrants who had gone through with the wagon trains in the 1840's and 1850's returned to open grass land. . . . The great influx of settlers came between 1880 and 1885 when homesteaders from all over the world came to take

^{1/} Farming and ranching are used interchangeably throughout the thesis.

^{2/} The terms landowner and landlord are used interchangeably in this thesis.

up free land. It was settled by no single group; its culture is its own, made by the mingling of many races (25).

Wheat production has been the primary income generating enterprise in Sherman County for many years, and crop-share leasing of farm land has become the main means by which ranchers obtain use of the land on which the wheat is grown.

Much research has been done on wheat production, but very little seems to be known about crop-share leasing arrangements in Sherman County. It is a common comment for Sherman County ranchers to say "my lease is unique, unlike any others." Is this the case, or are there some similarities? From observation, one can see differences in quality of land from one area to another. Are the leases different in these areas? This study will attempt to answer these questions along with others, as they relate to Sherman County.

Objectives of Study

This study was selected because it is a problem identified by Sherman County ranchers and of interest and concern to the author. An in-county educational workshop was held on the subject of leases for ranchers in the spring of 1971. A planning meeting for this workshop identified the lack of knowledge about leasing terms in Sherman County. Since then, other ranchers have inquired about what a typical lease is in Sherman County. Because the author is employed

in Sherman County, this enabled him to be more aware of the county situation and of some of its needs.

The objectives of this study are:

- I. To determine existing crop-share lease terms in six differentiated areas of Sherman County.
- II. To analyze some of the factors that contribute to the variation in crop-share lease terms found to exist in Sherman County.

Description of County

Sherman County is one of the Columbia Basin wheat producing counties. It is located in the west end of the Columbia Basin. It is a high plateau surrounded by the Columbia River on the north, Deschutes River on the west, and the John Day River on the east.

Sherman County's rainfall is nine to thirteen inches per year with 60 percent of the rainfall occurring between November and March. The average annual rainfall at the Sherman Experimental Station at Moro is reported as 11.81 inches per year. Due to the lack of moisture, the summer fallow type of cropping is necessary. This procedure involves planting a crop in a field one year and clean cultivating it the next year to store up moisture. Rainfall varies from one end of the county to the other as well as from one side of the county to the other. This is illustrated by Figure 1. This is one

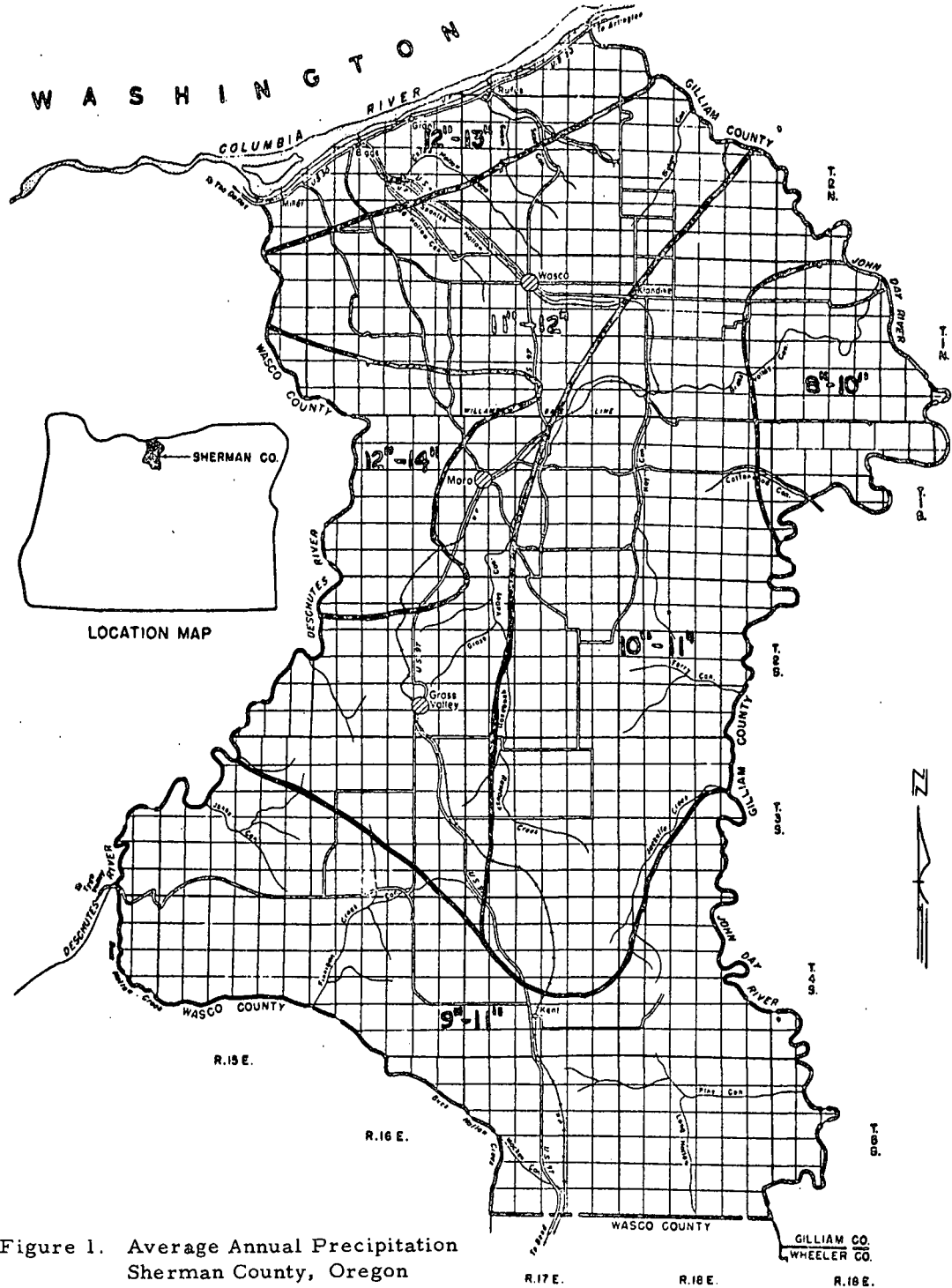
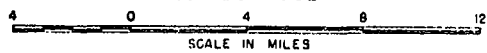


Figure 1. Average Annual Precipitation
Sherman County, Oregon

OCTOBER 1962



of the reasons that the author divided the county into six areas for this study. Moisture, temperature, wind, and the amount and time when each of these come greatly affect the yields of grain.

Even though Sherman County is a plateau with canyons to each of the rivers along its sides, there are major differences in elevation. Land in the northern part of the county is rolling and starts at an elevation of about 900 feet. This elevation increases to 1850 feet at Moro and to 2720 feet at Kent. As one moves to the south, the rolling hills smooth out. One occasionally sees a prairie combine in the south part of the county in contrast to only hillside machines in the northern part of the county.

Sherman County has three main soil series. They are Walla Walla, Condon, and Ritzville. These are shown on Figure 2. Walla Walla is a deep soil and is located in the northern part of the county. It is the most productive. Walla Walla silt loams occupy more than 35 percent of this soil association.

The Condon soil series is located south of Moro. It occupies about 34 percent of the county. These soils range in depth from one and a half feet to four feet. Barley generally does better on this soil series than wheat.

The Ritzville soil series is located in the eastern part of the county in an area called Starvation Point. The soil depth is 30 to 50 inches and is probably the least productive in the county. It occupies

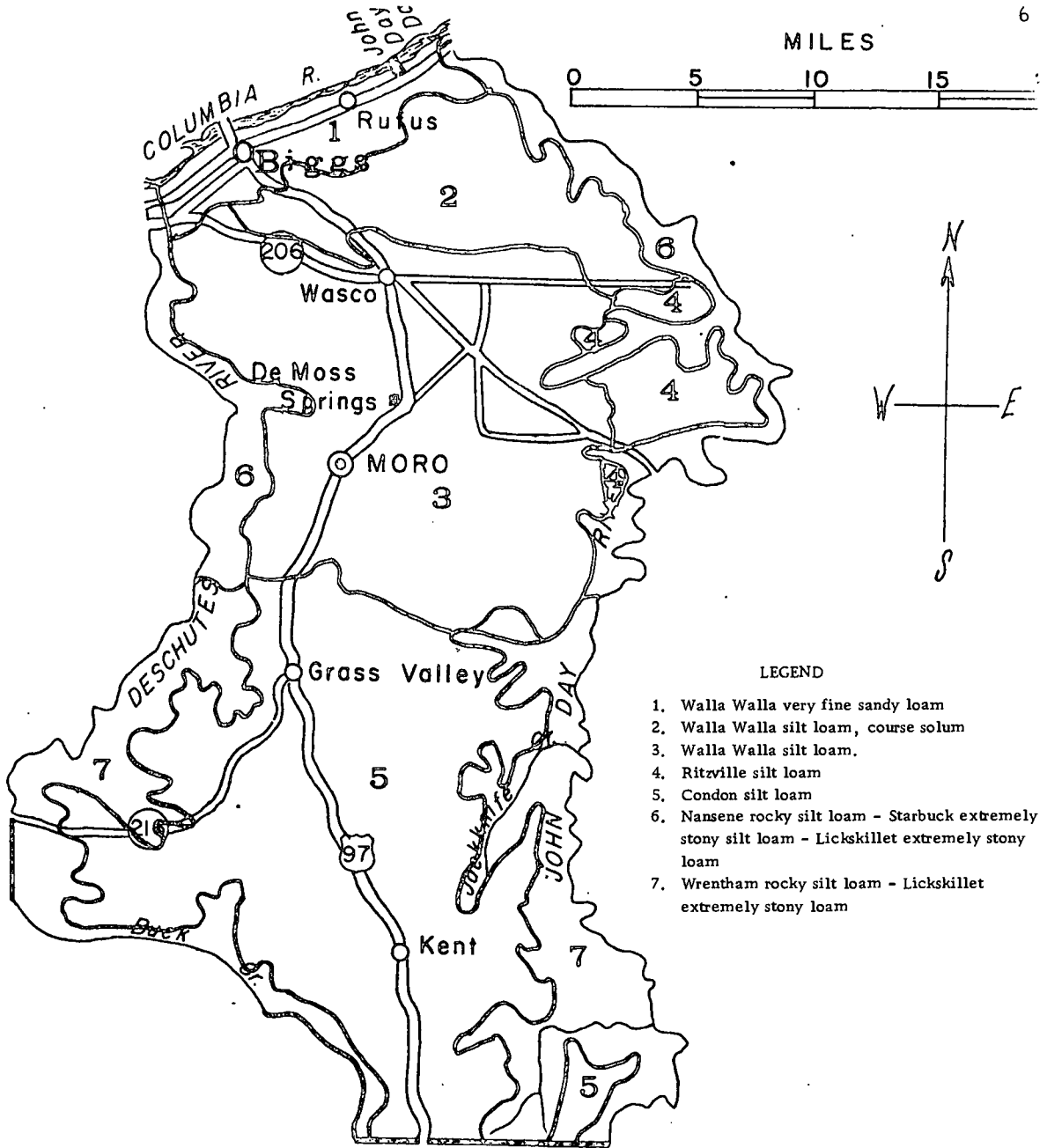


Figure 2. General Soils Map - Sherman County, Oregon

about three percent of the land in the county.

Nitrogen is the main fertilizer element applied to the soils in the county. It is mainly applied on the Walla Walla soil series. The rate of application on any soil will vary from zero on the less productive soils to about 50 pounds on the more productive soils.

The Sherman County Assessor's Office has divided the farm land in the county into seven different classes for advalorem tax purposes. The percent of land in the county in each land class was then calculated. Land use class 10 is best with land use class 16 being the poorest. The results are as follows:

Percent of County Crop Land by Assessor's
Land Quality Classification

Class	10	11	12	13	14	15	16
% tillable land in each class	14.88	5.15	21.34	6.13	11.76	33.48	7.26

Available information does not permit breaking the land class percentages down by areas, but from the above information, it would be probable that the best classes are in the northwest part of the county and some of the poorer classes are in the extreme east or southern part of the county.

Sherman County has a total area of approximately 531,200 acres. The county ranks 28th in size among Oregon's 36 counties. At 55 percent it has the highest percent of tillable land of any county

in the state. This compares with an average of eight percent for the entire State of Oregon. There are approximately 140,000 acres available for raising crops each year on the summer fallow type of cropping. This means that there are a total of 280,000 acres available for cropping. There is a total of 54,908 acres in public ownership in Sherman County. Of this, 41,303 acres are managed by the Bureau of Land Management. Most of this is along the Deschutes and John Day Rivers and is used for range pasture for beef cattle. Sherman County has only about 1500 acres which are irrigated. The water for irrigation is either pumped from one of the rivers or from wells scattered here and there throughout the county. The prospects for a significant increase in irrigated acres does not appear very probable at this time. Good irrigation wells are hard to find, and it is not presently economically feasible to pump water the necessary 800 to 1,000 feet from the Columbia River.

Wheat is the main agricultural crop in Sherman County. Generally around 100,000 acres of wheat are planted each year. Most of this wheat is usually white winter wheat. Around 20,000 to 30,000 acres are usually planted to barley. The wheat is sold largely for export food use, while the barley may be sold for export feed or used as domestic livestock feed.

There are various kinds of livestock in Sherman County; however, the beef-cow-calf operations are most common. A couple of ranchers have hog feeding operations, and one rancher has an

egg-laying operation. These operations are located in the county to use the feed produced there.

The number of farms in Sherman County has decreased with time. The Census of Agriculture points this out. Sherman County, also, according to the Census of Agriculture, ranks first in the state with the highest percent of tenants. Table 1 illustrates this.

In the 1969 census, Sherman County ranked eighth in the state in average size of farm with 2, 232.8 acres per farm. It ranked second in value of land and buildings per farm and 26th in value of land and buildings per acre. The average value of land and buildings per farm was \$217,405 in 1969.

The 1969 census also reported for the first time on farm organizational makeup. There were 150 individual family farms with 353,190 acres; 38 partnerships with 97,818 acres; one corporation with 1850 acres, and five "other" with 7,870 acres. This data was for farms that had sales of farm products of \$2,500 or more in 1969. It included all but 15 of the farms reported in the 1969 census for Sherman County.

Sherman County is sparsely populated with a population of only 2,139 people. This ranks it 34th among the counties in the state, ahead of Gilliam and Wheeler Counties. Moro is the County Seat. Other incorporated towns are Grass Valley, Wasco, and Rufus.

Table 1. U. S. census of agriculture data for Sherman County, Oregon^{a/}

Year of Agricul- ture Census	Number of Farms	Average Number of acres/ farm (all farms)	Average Value <u>Land and Buildings</u> per farm per acre		Number of				Percent		Number of				
					Full Owners <u>c/</u>	Part Owners <u>d/</u>	Mana- gers <u>e/</u>	Ten- ants <u>f/</u>	Tenancy	Tenants Plus Part Owners	Cash Ten- ants <u>g/</u>	Share- Cash Ten- ants <u>h/</u>	Share Tenants and Croppers <u>i/</u>	Other and Unspeci- fied Tenants <u>j/</u>	
1910	466	NA ^{b/}	NA	\$ 26.77	NA	NA	NA	NA	40.1	NA	NA	NA	NA	NA	NA
1920	460	887.0	\$ 44,755.	50.46	144	111	NA	201	43.7	67.8	12	NA	NA	189	
1925	417	1006.2	37,391.	37.16	107	106	6	198	47.5	72.9	5	NA	NA	193	
1930	369	1179.4	40,201.	34.09	86	118	1	164	44.4	76.4	6	NA	NA	158	
1935	367	1194.1	25,384.	21.26	88	113	2	164	44.7	75.5	NA	NA	NA	NA	
1940	343	1348.0	30,633.	22.72	87	115	2	139	40.5	74.1	14	18	100	7	
1945	292	1604.3	51,992.	32.41	93	91	2	106	36.3	67.5	0	3	94	9	
1950	275	1790.2	92,905.	51.36	76	90	2	107	38.9	71.6	2	17	* 86 ** (69) (17)	2	
1954	265	1868.8	116,883.	62.32	65	94	4	102	38.5	74.0	0	20	79 (58) (21)	3	
1959	247	2112.1	156,590.	70.69	53	106	3	85	34.4	77.3	0	21	(47) (12)	1	
1964	221	2351.2	182,687.	78.69	48	99	2	72	32.6	77.4	0	13	(51) (5)	8	
1969	209	2232.8	217,405.	97.36	58	96	NA	55	26.3	72.3	NA	NA	NA	NA	NA

Footnotes for Table 1

- a/ The basic data in this table is taken from the U. S. Census of Agriculture for indicated years.
- b/ NA - means the data was not available.
- c/ Full owners are defined as farm operators who own all the land they operate.
- d/ Part owners are defined as farm operators who own part of the land which they operate and rent and operate additional land.
- e/ Managers are defined as farm operators who operate farms or ranches for the owners, receiving wages or salaries for their services.
- f/ Tenants are defined as operating hired land only.
- g/ Cash tenants pay a cash rental, either per acre or for the whole farm.
- h/ Share-cash tenants pay part of the rent as cash and part of the rent as a share of the crops or livestock production.
- i/ Share tenants pay only a share of either the crop or livestock produced. In the 1950 Census this was broken into two headings: these were Crop-Share Tenants and Croppers , and Livestock-Share Tenants.
- j/ Other and unspecified tenants are those for which a specific classification was not included for them that year.
- * These were Crop-Share Tenants and Croppers.
- ** These were Livestock-Share Tenants.

Grade schools are located in each of the towns plus the community of Kent. The County High School is located at Moro.

The only professional business located in Sherman County is an attorney, who also serves as the District Attorney. Hospitals, doctors, and similar services are secured in The Dalles.

State Highway 97 runs north to south through Sherman County. Traffic on it helps support service businesses along its route. Biggs Junction is located in the northern part of the county at the intersection of state highway 97 with Interstate 80-N. There are several service businesses located there. Figure 2 shows the location of the towns and highways.

Method of Study

A list of all viable farms in Sherman County was compiled. This was done from the author's personal knowledge and with the help of other knowledgeable people.

It was plain to the author from personal experience and from looking at the rainfall map of Sherman County, the soils map, and from talking to ranchers, that there were definite resource differences from one end of Sherman County to the other. To further illustrate this, the Sherman County Assessor used the following wheat yields for the various land classes in figuring the 1973 farm use value of land.

Average Wheat Yields Used in Determining Farm Use Value
For 1973 by Sherman County Assessor

Land Class	10	11	12	13	14	15	16
Wheat Yields (Bu. per Acre)	50	47	43	37	28	24	10

Barley yields are considered to be 116 percent of the wheat yields.

This clearly shows that there is a difference in productive capacity from one class of land to another. Since the same percentage of each class of land is not found in each area of the county, but the better land is concentrated in the northern part, and the poorer land in the southern part of the county, it was felt that the county should be divided into three areas north to south, and then through the middle east to west for the purposes of obtaining a representative sample for this study. The Wasco and Rufus School Districts were put in the northern section, the Moro School District in the middle, and the Grass Valley and Kent School Districts in the southern area. State Highway 97 was used as the division from the southern part of the county to Wasco, and the Wasco-Rufus Highway from Wasco North. This meant six separate areas were differentiated for study purposes. The ranches in each area, generally, were expected to be more homogeneous in terms of yield, types of enterprises, and practices than for the county as a whole. These areas hereafter will be referred to by number. They are Northwest - 1, Northeast - 2,

Middle west - 3, Middle east - 4, Southwest - 5, and Southeast - 6. These six areas are shown on Figure 3.

Dr. Norbert A. Hartmann, Jr., of the Oregon State University Statistics Department, helped in determining sample size and method to use in randomly selecting the farmers to interview in Sherman County. Fifty farmers were selected to be interviewed. This is approximately one third of the total of 153 farms the author determined as being in the county. These fifty interviews were selected so that the same percentage of ranchers were interviewed in each designated area. The number interviewed in each area is as follows: ten in area 1; seven in area 2; four in area 3; nine in area 4; ten in area 5; and ten in area 6. These farmers were randomly selected, and alternates were selected in case the original farmer drawn was not able or willing to be interviewed. The sample randomly selected was evaluated as to size of ranch, location in the county, and other factors for fairness of sample. It was concluded that a representative random sample was drawn. A comparison of the estimated total population and sample population on selected items is shown in Table 2.

A review of the literature was made to determine what research had been done in the area of leases. The author had some questions in mind from the questions that had been asked him by ranchers. The literature revealed other questions that would be appropriate to ask.

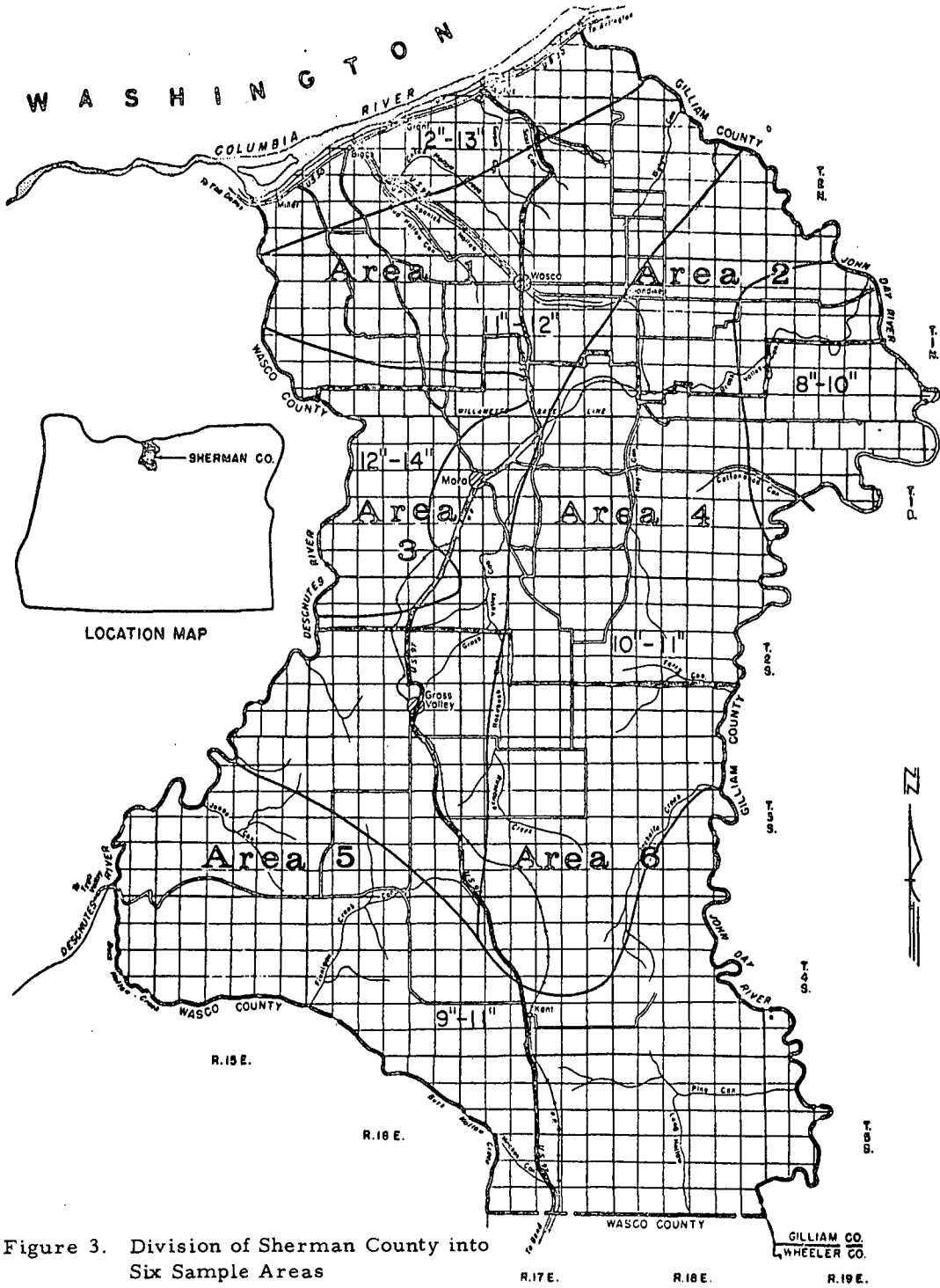


Figure 3. Division of Sherman County into Six Sample Areas

OCTOBER 1962

4 0 4 8 12
SCALE IN MILES

Table 2. Comparison of study sample with total population by areas, Sherman County

Item	Area						Combined
	1	2	3	4	5	6	
	<u>Total Population^{a/}</u>						
Number of farmers	31	22	11	27	30	32	153
Percent	20	14	7	18	20	21	100
Number of farms harvesting over 1200 acres per year	16	6	3	5	4	5	39
Percent	10	4	2	3	3	3	25
Number of farms harvesting 800 to 1200 acres per year	10	11	6	14	13	20	74
Percent	7	7	4	9	9	13	49
Number of farms harvesting less than 800 acres per year	5	5	2	8	13	7	40
Percent	3	3	1	5	8	5	26
Number of farms with livestock	17	9	4	17	24	27	98
Percent	17	9	4	17	25	28	100
	<u>Sample Population^{b/}</u>						
Number of farms in survey	10	7	4	9	10	10	50
Percent	20	14	8	18	20	20	100
Number of farms in survey harvesting over 1200 acres per year	6	2	1	2	2	1	14
Percent	12	4	2	4	4	2	28
Number of farms in survey harvesting 800 to 1200 acres per year	3	2	3	5	4	9	26
Percent	6	4	6	10	8	18	52
Number of farms in survey harvesting less than 800 acres per year	1	3	0	2	4	0	10
Percent	2	6	0	4	8	0	20
Number of farms in survey with livestock	8	2	0	7	7	9	33
Percent	24	6	0	21	21	28	100

^{a/} This data was drawn together with the help of a local committee and the author.

^{b/} Data in the sample population table is taken from the total population table for those farmers randomly selected for this survey.

A preliminary field questionnaire was developed. It was made up of two parts; a general farm questionnaire for all farmers, and a lease or custom farming questionnaire form for each parcel leased or custom farmed. These forms were taken to four ranchers living in different parts of the county, and each was interviewed. This provided the author with an opportunity to see if the two questionnaire forms provided the information needed for the study. The four ranchers had some constructive suggestions. The field schedule was then revised to final form. A letter of introduction was used to introduce the author and explain the research project. This letter, along with each of the revised questionnaires are exhibit A, B, and C, in the Appendix.

A phone call was made to the rancher to set up a time for the interview. The author then went to the ranch and met with the operator. The letter of introduction was presented first in order to explain the research project. The author then interviewed the operator to fill out the general farm questionnaire form. If the operator had any land he was leasing or custom farming, then form two for leasing and custom farming was also filled out.

II. REVIEW OF LITERATURE

The four basic inputs to most businesses are land, labor, capital, and management. Each farming business will vary in the mix of these inputs as it seeks to optimize its opportunities. Here we are concerned with the land input, who controls it, and how it is controlled.

Land, in an economic sense, has been defined as "the sum total of the natural and man-made resources over which possession of the earth's surface gives control" (2, p. 7).

It is because this resource is in limited supply and of different quality that there is a demand for it, and especially for specific parcels of it. Land ownership has always been much preferred to renting (5). To older farmers it has provided security, an investment alternative, and to some degree, status in the community (17). But as farms have become larger, equipment more costly, and as younger farmers without large capital resources enter farming, leasing of farm land has become a necessary and a very realistic alternative to land ownership. It provides a person with resources of labor and management but limited capital, to employ them in some form of arrangement with a person who has the land resource, to achieve better utilization of all resources for both parties. It is important to point out that, by both parties working together, they

are frequently able to reap a greater return than if they employed their limited resources individually.

The reason for rent is because one is dealing with a scarce resource that differs in quality, location, and belongs to someone else who is referred to as the landowner. "History indicates that payments of various types have long been associated with the use of land. In this respect, the origins of contract rent go back almost to the beginning of organized land settlement" (2, p. 152). Economic rent is defined as "the surplus of income above the minimum supply price it takes to bring a factor into production" (2, p. 150-151).

Classical Rent Theory

At the conclusion of the Napoleonic Wars, the British Parliament was considering the controversial Corn Law Question. There were a number of English economists who presented their views in writings about this question. The views expressed by David Ricardo received the most attention. His views are generally accepted as the classical theory of rent. They explain agriculture rent largely in terms of differences of soil fertility (2). Ricardo assumed "a newly settled country with an abundance of rich and fertile land, a very small proportion of which is required to be cultivated for the support of the actual population" (24, p. 34). He then argued that only the most fertile lands would be brought into cultivation and that no cost

or rent would be associated with their use. Rents arise on these lands only when increases in population numbers and in the demand for land make it necessary for society to bring less fertile lands into use" (2, p. 152). Ricardo explained his theory by saying, "If all land had the same properties, if it were unlimited in quantity and uniform in quality, no charge could be made for its use, unless it possessed peculiar advantages of situation" (24, p. 35). It is because land is not uniform in quality, quantity, and location that some of it will come into cultivation before other parts of it will. Ricardo says that as land of a lesser, or what one might refer to as a second quality, is called into production, that rent for the use of land of the first quality will commence. This same procedure will be repeated as one goes to the third, fourth, etc. qualities of land. Ricardo says that the amount of rent is regulated by the differences in the productive powers of each class of land (2). Therefore, the rent on class one land will be the difference in productive power between class one land and class two land. As class three land comes into production, the rent for class two land will be the difference in productive power between class two land and class three land. This rent will also be added to the rent already on class one land. This procedure will be repeated as one moves on to lower class lands.

"Ricardo believed that farm product prices are determined by the production costs associated with the highest-cost portion of the

total supply needed by society. His theory assumes that prices are set by production costs at the intensive and extensive margins of cultivation. He recognized that product price must rise with the outward shift of the extensive margin of cultivation and that these higher prices at the same time raise the intensive margin on the more fertile lands and thus favor their more intensive use" (2, p. 154). To say this another way, Ricardo recognized that as capital was employed in new inputs, the point would be reached where it may be equally advantageous or more advantageous to employ those inputs on the better land rather than on the new poorer land being brought into production. Where the new inputs are employed on the land already in production, it is referred to as intensive use, and where the inputs are employed on new land, it is referred to as extensive use.

Location Affect on Rent

Ricardo's explanation of rent, deals with only one factor - that of differences in quality of land. Johann Heinrich von Thunen, a German landowner and economist, and Sir William Petty, "both observed that when crops produced for a central city market are grown on lands of like fertility, the lands located nearest the city enjoy a definite rent advantage over those located at greater distance. The extent of this rent advantage corresponds with the difference

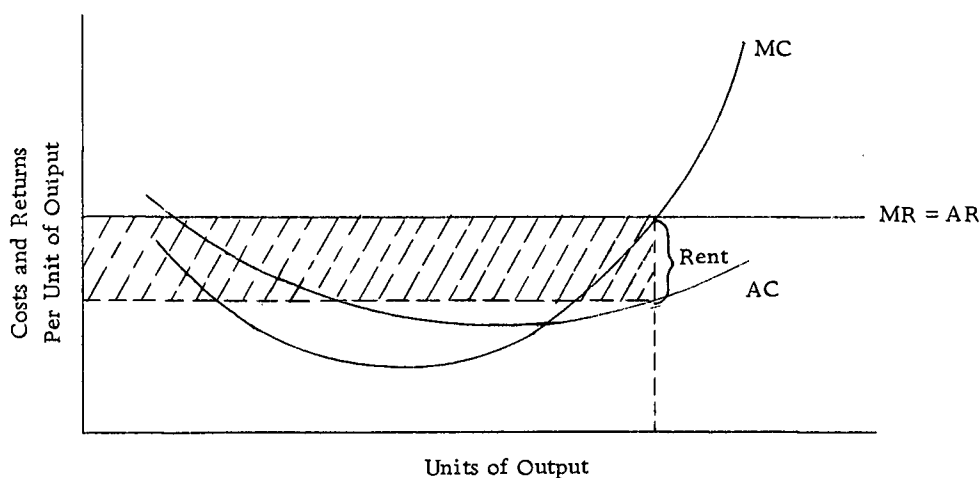
between the transportation costs that arise in the shipment of products from the two areas of market" (2, p. 156).

In the formula for figuring farm use value in Sherman County, the six months average prices for two years are used. The average wheat price and average barley price is then adjusted for the transportation cost to the Portland market. The further south in the county one goes, the greater the cost for transportation. This reflects the actual selling practice of pricing the product and illustrates the location effect on rent and hence land value.

Marginal Productivity Analysis Approach

Another approach to explaining rent theory is the marginal productivity approach. It is assumed that a farmer or businessman will produce to the point where marginal cost is equal to marginal revenue. This means the cost for the last unit produced is equal to the revenue received for that unit. If marginal cost is greater than marginal revenue, one is losing money on the last units produced, and if it is less, he could increase his production and also increase his returns.

When marginal cost is equal to marginal revenue, the difference between average cost and average revenue times the units produced is the rent. The following graph illustrates this:



The rent is the shaded area or the difference between average revenue and average cost times the units of output. With different quality levels of land, with different locations, etc., there will be different marginal revenues, marginal costs, and average cost curves. This approach explains the difference in rents in the "relationship between the marginal costs and returns that arise throughout the production process" (2, p. 159).

One important difference between the marginal-productivity approach and the Ricardian approach to rent theory is the Ricardian approach assumes that rent is price determined and that it arises because of shifts to the use of lands of lower rent producing capacity. The marginal productivity approach treats rent simply as the surplus of income above cost (2).

With these thoughts in mind about what rent is and how different rents on different lands are explained, attention can now be turned to the arrangements or agreements that make it possible for the

tenant to rent some of the rights of land ownership from landowners. It must also be remembered that in the leasing or renting of land a condition is created that has the possibility of being more advantageous to both parties and to society than if they were not able to combine their resources of land, labor, capital, and management.

Characteristics of Good Landlords and Good Tenants

Consideration is given first to some characteristics of good tenants and good landlords. They are the two parties that must come together with the agreement (the lease) to make better use of the resources of land, labor, capital, and management.

F. J. Reiss, Professor of Agricultural Economics at the University of Illinois, lists characteristics of a good landlord and characteristics of a good tenant in a bulletin on "Farm Leases for Illinois." He identifies the following:

Characteristics of a good landlord:

1. Honesty
2. A willingness to cooperate
3. An understanding of farm problems
4. Sufficient capital or credit to provide the improvements needed for a good system of farming
5. Good judgment respecting the relative need for and profitableness of investments in various farm improvements
6. Open-mindedness regarding the acceptance of new practices
7. Pride in good farming
8. Pride in good community
9. Respect for the tenant's right to privacy and freedom

of action within the agreed upon plan for operating the farm

10. Cooperation when quick decisions must be made for the best operation of the farm

Traits of a good tenant:

1. Honesty
2. A thorough knowledge of the proper care of all crops and livestock enterprises to be included in the farm business
3. The ability and energy to do good work in proper season
4. Sufficient equipment and financial backing to operate the farm effectively
5. A favorable attitude toward the adoption of new methods and practices as rapidly as their merits are established
6. Interest in preventing the spread of weeds and introduction of new weeds
7. Pride and interest in farm and community life
8. Willingness to make minor repairs to buildings and farm
9. Willingness to enter into cooperative planning and respect for the specific desires of the landlord (22, p. 56).

In addition to having these desirable traits in himself, it is essential that the tenant's wife be interested in farm life.

Legal Requirement of a Lease

It is important to remember that in renting or leasing one is bringing together the tenant, the landlord and the ranch to be bound by a legal contract called a lease. What are the legal requirements of a lease? This will vary from state to state, but F. J. Reiss lists five. They are:

1. An accurate description of the property leased
2. A definite and agreed term over which the lease extends
3. A definite and agreed price of rental together with designation of the time and place at which payment is to be made
4. The names of the specific lessor (landlord) and lessee (tenant)
5. The signatures of the contracting parties (22, p. 1-2).

Raleigh Barlowe in his book "Land Resource Economics"

lists essentially the same requirements when he says:

It (the lease) should always identify the landlord and the tenant by name, contain an accurate and complete description of the property being leased, indicate the time duration of the leasehold, and specify the amount of contract rent and the time where it shall be paid (2, p. 413).

A. D. Reed and T. H. Snyder, University of California, list essentially the same items. They, however, also include the following facts (21):

1. Consent of the parties
2. Parties competent to enter into contract
3. Consideration
4. Purpose of the contract must be legal

Every time a property is leased or rented, there is a transfer of rights from the landlord to the tenant. As the lessor, the landlord retains his ownership rights while he grants most of his rights of use and possession to the tenant (or lessee) for some given period of time. In return for this delegation of rights, the tenant agrees to a schedule of periodic rental payments and to certain other responsibilities associated with his use and possession of the landlord's property (2, p. 407).

What to Include in a Farm Lease

F. J. Reiss lists four objectives of an adequate farm lease.

They are in addition to the legal requirements (22, p. 2):

1. Arrange for a fair division of the income and expenses between the landlord and tenant.
2. Make possible a profitable system of farming
3. Give as much assurance as possible to a good tenant that his lease will be continued through a period of years
4. Give assurance to the landlord that the value of his property will be preserved

Reed and Snyder say:

Leasing arrangements should be based on conditions such as:

- a mutual feeling of trust
- a satisfactory potential income for tenant and landlord
- a rental rate equitable to both parties
- a written lease using clear, understandable words (21).

The following items should be included in the lease:

- Date of lease
- Names and addresses of all parties concerned
- Description of the property
 - Location as to county and state
 - Legal description
 - Acreage
 - Specification of parcels of land or buildings being retained by the landlord
- Terms of lease
 - Dates of start and termination of the lease
 - Provision of automatic continuation on a year to year basis unless termination notice is given by either party before a specified date
 - Rental rates for each enterprise
 - Expenses to be borne by each party concerned
 - How, when, and where rent is to be paid
 - Management practices to be followed
 - Provision to reimburse tenant at termination of lease for improvements made at his expense and not fully used up
 - Provision for settlement in case of death
 - Provision for arbitration in case of disagreement
- Signature of all parties (21).

Rent Determination

"An equitable rent is usually defined as one where landlord and tenant share the gross income in the same proportion as they contribute to the costs of production" (21). - This is arrived at by "listing the annual contributions of the landlord and tenant, add each list, and determine the proportion which each party contributes to the total production cost" (21). There are two approaches to deciding on the division of the gross receipts after the above steps have been taken.

The first method fixes the share of income to each party and then shifts expenses or capital contributions from one party to the other until each contributes approximately his proportionate share of the total cost. The second method accepts any proportion in which total costs are contributed and divides the income in the same proportion. Either approach to the problem assumes that the landlord and the tenant should share the income from the farm in the same proportion that they contribute to the expense of its operation (22, p. 20-21).

An example of a work sheet than can be used by the parties to a lease is shown in Figure 4. It is important to note that the above method does not determine the exact division of rent, "but provides a guide as to what the rent might be. The exact rent must be determined by bargaining between the parties, considering prevailing local rates" (21). It is important to note here that prevailing local rates or custom often decide the rate. It is suggested that custom along with the above method should be used.

FARM LEASE WORKSHEET FOR RENT DETERMINATION

Item	Quantity	Rate	Total	Tenant	Landlord
<u>Interest on Investment</u>					
Land	_____	_____	\$ _____	\$ _____	\$ _____
Improvements	_____	_____	_____	_____	_____
Machinery, Equipment	_____	_____	_____	_____	_____
Inventory	_____	_____	_____	_____	_____
Operating funds	_____	_____	_____	_____	_____
<u>Depreciation Charges</u>					
Improvements	_____	_____	_____	_____	_____
Machinery, Equipment	_____	_____	_____	_____	_____
<u>Operating Expenses</u>					
Labor hired	_____	_____	_____	_____	_____
Improvement repairs	_____	_____	_____	_____	_____
Machinery repairs	_____	_____	_____	_____	_____
Seed, Spray, Fertilizer supplies	_____	_____	_____	_____	_____
Machine Hire	_____	_____	_____	_____	_____
Fuel, Oil	_____	_____	_____	_____	_____
Property Taxes	_____	_____	_____	_____	_____
Personal Property Taxes	_____	_____	_____	_____	_____
Insurance	_____	_____	_____	_____	_____
Utilities	_____	_____	_____	_____	_____
Miscellaneous - license, etc.	_____	_____	_____	_____	_____
Unpaid Labor, Management	_____	_____	_____	_____	_____
Total Contributions			\$ _____	\$ _____	\$ _____
Percent by each			100%	_____ %	_____ %
<u>Division of</u>					
Crop	_____		_____	_____	_____
Hay	_____		_____	_____	_____
Program payments	_____		_____	_____	_____
Total Percent to Each				_____ %	_____ %

Figure 4. Example of a worksheet for rent determination

It is important that the tenant be adequately rewarded for his labor and capital inputs and the landlord receive a return approximate to the productivity of the farm (12). If this is not done, it may result in the landlord losing a good farmer or the tenant looking elsewhere to employ his resources to obtain a fair return (16).

Sharing Crop Expenses

With some crop-share leases, the sharing of some of the expenses in the same proportion as the crop is divided is practical. The reasons for this are discussed by Becker and Castle (5) in their book "Farm Business Management," and in an article by Castle (6) in the Land Economics Journal. They both point out that the owner operator produces to the point where marginal costs equal marginal returns. With a share-crop lease, the tenant receives only a portion of the total crop produced. Therefore, when he is paying for the entire amount of fertilizer or spraying for instance, the point where his marginal cost equals marginal receipts will be reached sooner than if he received all the income for the whole farm. By each party sharing the primary variable expenses, the same way the crop is divided, it will be advantageous for them both to produce to the point where marginal cost equals marginal receipts for the whole farm. This will also encourage the adoption of new practices where

both share in its cost, rather than the tenant having to reflect all the cost in his operating expenses (5, 6).

Rents on Different Enterprises

It is also important to keep the division of the returns on different enterprises the same. This is due to the fact that if there are large differences, the tenant may employ his resources to a greater extent where the returns are greater, letting the enterprise with the lower returns perform at a lower performance level.

Advantages and Disadvantages of Crop-Share Cash Leases

The advantages and disadvantages to the tenant and landlord of a crop-share lease are listed by F. J. Reiss. A crop-share cash lease is where the rent on the cropland is a share of the crop, and there may or may not be an additional cash rent paid for the use of the range land, buildings or other improvements. The advantages and disadvantages are as follows (22, p. 13-14):

Advantages

To the landlord

1. He receives a larger share of the farm profits than under a cash lease because he shares in more of the production and price risks.
2. He has more opportunity to supervise the operation of the farm (than in a cash lease).
3. If certain management and financial contributions are part of the lease, he may be eligible for social security coverage.

4. The crop-share cash lease requires less of his personal supervision than does the livestock-share lease. It also involves less risk than the livestock share lease, especially if the tenant is not experienced in livestock production.

To the tenant

1. His risk is less than when renting for cash, especially when low crop yields or low prices are likely to occur.
2. The amount of capital and cash reserve required by him is less than in the cash lease.
3. If the landlord will provide the necessary improvements, many tenants prefer a crop-share cash lease to a livestock-share lease so that they can get all of the profit from livestock operations and enjoy greater freedom of management.

The disadvantages of the crop-share cash lease are as follows:

To the landlord

1. Both tenant and landlord will find that they must jointly decide upon more adjustments than they would have with a cash lease. Need for adjustments in the lease will arise as new practices are introduced and prices change.
2. It is difficult to develop arrangements under this lease to give the landlord an appropriate return for his investments in improvements. Customary arrangements may not be reliable or satisfactory because of wide variations from farm to farm in the quality and amount of improvements and the size of farm on which they occur.

To the tenant

1. He may find it difficult to get the landlord to furnish improvements needed for livestock production and machinery storage.
2. He may wish to rent additional land and expand operations while the landlord may prefer that he farm less extensively and try to obtain a larger income per acre.

In Illinois, F. J. Reiss found:

...the landlord's participation is usually limited to making decisions about land, seed, and fertilizer use, and to sharing in fertilizer cost, crop expense, and care and maintenance of improvements. The rent is usually a share of the grain produced...plus, in some cases, a supplementary cash rent for land in hay and pasture or farmstead use (22, p. 12).

Bruce Johnson found in Michigan and Illinois that:

...use rights are transferred to tenants essentially free of restrictions imposed by the landlord. Although the tenant may essentially perform the entire managerial function, the use rights he controls are not absolute. First, local custom and good will, although unseen, can be powerful deterrents to any motive a tenant may have for exploitation. Second, as already noted, the predominance of the short-term leasing arrangement also inhibits any adverse activity by the tenant (17, p. 43).

When the crop-share lease is contrasted with the straight cash lease, the basic difference is the:

...attempt to shift part of the risks from tenant to landlord and to relate annual income to the production and price situation... Of course, when production conditions are good and prices are high, the share lease yields a larger income to the landlord than does cash rent (10, p. 12).

Cash vs. Crop-Share Cash Leases

It might be interesting at this point to compare cash and crop-share cash types of leases. It must be kept in mind that leases will vary, but here typical leases are used in each area.

Type of lease	Resources supplied	Risks assumed	Degree of Management
<u>Cash</u>			
Landlord	Taxes, insurance, major bldg. repair, farm and improvements	Fixed rent	None
Tenant	All other expenses	Assumes risk of good or poor prices or yield	All
<u>Crop-Share Cash</u>			
Landlord	Farm and improvements, taxes, insurance, major bldg. repairs, some crop expenses such as fertilizer, etc.	Receive share of crop and sometimes sum for use of pasture and buildings	Sometimes says something
Tenant	Capital, equipment, labor, and all other cash expenses	Receive share of crop	Generally, tenant has freedom to farm in good manner for area

Written Leases

Another question that could be asked is, "Should the lease be in writing?" It is supposed this is really up to the tenant and the landlord, but there are some advantages to a written lease. Oregon Revised Statutes says this:

§2-909 Agreement not in writing, when void.

In the following cases the agreement is void unless the

same or some note or memorandum thereof, expressing the consideration, be in writing and subscribed by the party to be charged, or by his lawfully authorized agent; evidence, therefore, of the agreement shall not be received other than the writing, or secondary evidence of its contents, in the cases prescribed by law:...

(6) an agreement for the leasing for a longer period than one year, or for the sale of real property, or of any interest therein (19, (Chapt. 1) p. 337).

Besides the legal reason to put a lease in writing, there are others. Some of these are listed by F. J. Reiss. They were:

A farm lease is a legal document which transfers certain rights in farm land from the owner to the man who is to operate the land. It should be regarded as a record of understanding between a landowner and his tenant for the operation of a farm or tract, and not as an instrument of economic power to be exercised by one party against the other. Putting agreements in writing should be considered as sound business practice and not as lack of trust or confidence in either party (22, p. 2-3).

Reiss goes on to list some of the advantages of a written lease (22, p. 3).

1. It protects not only the original parties, but their heirs and assignees in case either party should die.
2. It serves as a memorandum to which either landlord or tenant may refer in case of doubt as to the terms of their agreement, and therefore, helps prevent disputes.
3. A written lease can provide for the more important farm practices and business procedures and will thus, in case of dispute, prevent common law, custom, or court decisions from determining the application of practices or procedures unadapted to the farm.
4. It affords a basis for changing minor provisions when conditions arise that make adjustments desirable.
5. It helps give assurance that both parties will consider all phases of the lease before the contract is signed.
6. When details of farm operation are specified in the lease, the document serves as a partial history of the operation of the farm.

7. It makes the term of rental definite and can provide a basis for continuing the terms of the lease beyond one year.
8. It offers an opportunity to provide for a reasonable period of notice to terminate the lease.

In addition to the above, Marshall Haris adds "assist either or both parties in business affairs with third persons, such as bankers and supply dealers" (10, p. 9).

Communication Between Landowner and Tenant

The real heart of any agreement between landowner and tenant is good communication. If there is poor communication, ill will is bound to occur regardless of whether or not the tenant is the best farmer in the area, or if other steps such as a written lease are taken. Both parties to the agreement need to be informed about what is happening with the farm operation. They also need to be aware of changes in agriculture technology so that changes can be made when appropriate.

Length of Time of Lease

The term of the lease agreement is very important. Manning Becker and Emery Castle say "writing leases for a three-to five-year period with a one-year notice for cancellation by either party, would give considerable stability to both owners and tenants without their sacrificing a great deal of flexibility" (5, p. 198). F. J. Reiss says

The lease should be written to give the tenant reasonable assurance of continuation as long as conditions are satisfactory, but to provide a means of terminating the leasing relationship any year it ceases to be satisfactory (22).

Bruce Johnson has this to say:

... it appears that at least the short-run managerial decision-making process is essentially unaffected by a high rate of tenancy. The implications of tenancy on the long-run managerial function are more uncertain. Where the investment planning horizon substantially exceeds the lease contract, the uncertainty may prevent the most efficient resource use (17, p. 43).

Some leases are written for an indefinite period of time. Here is what the Oregon Revised Statutes have to say about termination of the lease:

91.060 Tenancy from year to year

One who enters into the possession of real estate with the consent of the owner, and no certain time is mentioned, but an annual rent is reserved, is considered a tenant from year to year. A notice to terminate a tenancy from year to year is sufficient if it is given 60 days prior to the expiration of the period for which, by the terms of the lease and holiday, rents are to be paid (20, p. 747).

Capital Improvements

There are some situations when major capital investments are needed for improvements on the farm. The landowner may not want to make these improvements, and if they are of the type that cannot be removed if the tenant left, the tenant may not want to risk the

investment. One way to get around this problem is

... for the tenant and landlord to agree on some equitable form of reimbursement to the tenant for the labor and materials he has invested in the improvement. Upon completion of such a reimbursement agreement, the improvement becomes the landlord's property. The landlord then assumes the responsibility for taxes, insurance, and risk of loss on it (22, p. 39).

The amount of reimbursement may be calculated in various ways. Reiss lists the following (22, p. 39-40):

1. The owner pays the outgoing tenant the full price of the improvement less a fair allowance for depreciation and less any government payment the tenant has received for the improvement.
2. The incoming tenant may prefer to buy the outgoing tenant's interest in the improvement instead of paying a higher rent.
3. A practice that is very common in England is to compensate the tenant at the end of the lease for the appraised value of any improvements made by him at his own expense.
4. The tenant and landlord may plan for off-setting contributions that will eliminate cash reimbursement when the lease is terminated.

Improving Lease Terms

How might the lease be improved? Reed and Snyder identify items to consider in improving a lease (21):

- periodically review the leasing arrangements to determine if they are equitable
- provide for automatic renewal unless terminated by either party
- protect yourself and your heirs by having the lease in writing

Raleigh Barlowe believes that:

Generally speaking, most landlords and tenants enter into leasing arrangements with the intent of maintaining a cordial relationship with the other party. This relationship often continues even though there may be some bickering between the two parties and even though tenants frequently complain about their landlords and landlords about their tenants. But definite misunderstandings and conflicts of interest occasionally develop. These conflicts sometimes stem from personality differences. More often, however, they can be attributed to other factors such as:

1. The faulty knowledge or attitudes of either or both parties concerning their rights and obligations under a lease
2. The income problem that arises when one party finds that he must get along on less income than he had anticipated
3. Inequitable rental rates
4. Inadequate provisions for desired property improvements
5. A tenant's lack of security as an operator (2, p. 436).

Summary

Leasing is an important part of American agriculture. In 1947

Earl Heady said:

Nearly one-half of our farms obtain control of part or all of their resources by this means. . . It is a known fact that rental payments are determined by a maze of forces which in addition to competition include custom. . . Obviously, lease terms so determined may have varying effects upon the organization of resources on individual farms (15, p. 659).

Today, leasing is an even more important part of agriculture.

Today's young farmers do not have the same value system that yesterday's farmers had, where ownership of land was an important value. Also, today's farms are getting bigger, capital cost for

equipment is more, and more time is needed to manage the farm and make the correct decisions. Leasing of farm land allows today's farmer to start in farming without all the necessary resources. As pointed out by several authors, there are many items to consider in making a lease. It is important to have a good lease, as this may alleviate problems between tenant and landowner. It is also important for them to realize that they are both putting their resources together so that each might receive a return greater than if they had not been put together. There are suggested ways of deciding how to divide the return between the tenant and the landowner, but in the final analysis, it ends up being bargained by both parties. The landowner must receive a fair return on his investment and the tenant a fair return on his contributions to the business if each party is to be satisfied.

III. RESULTS OF OPERATOR INTERVIEWS

As indicated in Chapter I, fifty farmers were interviewed. One interview record was discarded, because the ranch was atypical in almost every characteristic, but particularly so in size. Furthermore, very little cropland was involved. The remaining forty-nine farmers had 94 different leases.

Description of Sample Farms

The following data in Table 3, from the general farm questionnaire helps describe the farms in each area. An average of all farms in the study is shown in the last column under the heading "Combined."

Table 3 shows the differences in the make-up of an average farm in cropland and rangeland from one area to another. For example, in Area 4, the average farm is 87 percent cropland while in area 5, the average farm is only 39 percent cropland. Rangeland is more important in the southern part of Sherman County. Table 3 shows that areas 5 and 6 have above average numbers of acres of rangeland. This is further verified by the average number of beef cows per farm which are higher in these two areas.

The calves from the combined beef herds were reported as 52 percent being sold as weaner calves, 20 percent being sold as yearlings, and 22 percent being fed out to slaughter weight.

Table 3. Description of farms in study by area.^{a/}

Item	Area ^{b/}						Combined
	1	2	3	4	5	6	
Number of farms in survey	10	7	4	9	10	9	49
Total acres per farm ^{c/}	3524	2572	2683	2917	4627	4033	3527
Cropland acres per farm ^{d/}	2780	2217	2342	1815	1797	2089	2159
Percent	79	86	87	62	39	52	61
Range and unuseable acres acres per farm ^{e/}	749	352	342	1102	2834	1935	1367
Percent	21	14	13	38	61	48	39
Avg. age of all farm operators ^{f/}	48	56	44	48	51	43	48
Number of farms with beef cows	7	4	0	7	8	8	34
Percent of all farms with beef cows	14	8	0	14	16	16	68
Avg. number of beef cows per farm ^{g/}	39	13	0	51	76	56	45

^{a/} The basic data for this study is derived from interviews with 49 randomly sampled farmers in Sherman County, Oregon in 1973. Except as noted, the information in the following tables is from that source.

^{b/} See Map No. 3 for the division of Sherman County into the six areas.

^{c/} The total acres per farm are those acres which the farmer either owns or leases. It does not include any land such as pasture which may be rented for a month or two per year and not a regular part of the total farming operation.

^{d/} Cropland acres are the total acres available for cropping. One would need to divide this figure by two to arrive at the cropping acres per year.

^{e/} The acres of rangeland and unuseable land includes all land that was not cropped. It may or may not be used by livestock.

^{f/} The age of all farm operators was added together and then divided by the total number of farm operators.

^{g/} The average number of beef cows per farm refers to the number of adult cows in the beef herd.

Eighty-four percent of the farmers reported that their livestock enterprise was not a part of any of their leases. However, they may have some agreement for the use of the range, either to use it free of rent or to make some payment for its use.

There was not a large difference in the average age of the farm operators; however, the average age indicated by this survey is close to what it was in the 1964 Census of Agriculture when it was 48.8 years.

It has been observed in recent years that some of the older farmers have been retiring with either their farms being incorporated with their neighbors' farms or with sons or sons-in law taking over.

One of the major items of concern in this survey was the amount of leased land. It is compared with the average number of acres owned in Table 4.

As one can see, more land is leased than is owned. However, seven, or 14 percent of the 49 ranchers own all their land, and 12 ranchers, or 25 percent, lease 100 percent of the land they farm. The remaining 61 percent operate part leased and part owned land. Custom farming is a rather minor practice. Only six parcels are custom farmed among the 49 farmers interviewed.

While the difference is not particularly large, a greater proportion of the land farmed in areas two and three was rented. The lowest proportion of rented land was found in area four.

Table 4. A comparison of the amounts of leased vs. owned land

Item	Area						Combined
	1	2	3	4	5	6	
Owned acres/farm	1384	544	850	1407	1961	1486	1361
Percent	39	21	32	48	42	37	39
Leased acres/farm	1943	1772	1834	1499	2661	2411	2063
Percent	55	69	68	51	58	60	59
Total acres per farm ^{a/}	3524	2572	2683	2917	4627	4033	3527
Number of farms totally owned	1	1	1	2	1	1	7
Percent	10	14	25	22	10	11	14
Number of farms totally leased	2	3	1	4	1	1	12
Percent	20	43	25	45	10	11	25
Number of farms part owned and part leased	7	3	2	3	8	7	30
Percent	70	43	50	33	80	78	61
Number of parcels custom farmed	2	2	0	1	0	1	6
Total number acres custom farmed	2070	2737	0	100	0	1195	5102
Average number of leases per farm (all farms)	2.3	1.9	2.3	1.8	2.2	1.2	1.9

^{a/} The average owned acres plus average leased acres do not equal the average total acres because the custom farmed acres are not included.

Information was gathered on the way the cropland in each area was used. The land use pattern for the years 1972 and 1973 is shown in Table 5.

As one can see from these figures, most of the land is used for the production of wheat. It also shows that farmers, percentage-wise and average acreage-wise, grow more barley in areas four and six. This is the middle east and southeast part of the county. As indicated in Chapter I, the Condon soil series is in this area, and barley production on it is higher than wheat production.

Labor Input

Labor is an important input in any business. Labor input is summarized in Table 6 by the amount and categories of labor as reported by the operators interviewed. Area 3, which has the highest average number of operators employed full-time on their farms, also had no full-time hired men, and ranked second from the lowest in average number of weeks of part-time persons hired. Area 1 has the highest number of full-time hired men per farm. The highest average number of weeks of part-time persons hired per farm in one year was in Area 2.

The above information was then used to measure, in a rough way, the output per man-equivalent. The full-time operator's time, full-time hired man's time, and the seasonal labor figured as a

Table 5. Cropland use. by area - 1972 and 1973

Item	Area													
	1		2		3		4		5		6		Combined	
	1972	1973	1972	1973	1972	1973	1972	1973	1972	1973	1972	1973	1972	1973
Wheat acres ^{a/} per farm	1089	1242	820	979	935	934	565	647	738	679	682	669	795	850
Percent	40	45	40	44	40	40	33	36	43	40	35	35	38	40
Barley acres ^{b/} per farm	136	102	86	117	184	162	198	217	90	122	176	219	142	156
Percent	5	4	4	5	8	7	12	12	5	7	9	11	7	8
Summer fallow ^{c/} acres per farm	1241	1361	1049	1082	1090	1191	896	911	819	901	964	975	1022	1060
Percent	50	50	51	49	47	51	52	50	48	52	49	50	50	50
Set-aside acres ^{d/} per farm	153	22	106	44	111	43	54	43	72	15	143	74	107	39
Percent	5	1	5	2	5	2	3	2	4	1	7	4	5	2

^{a/} Acres of wheat is average total acres planted to all varieties of wheat.

^{b/} Acres of barley is average total acres planted to all varieties of barley.

^{c/} Summer fallow acres are those acres not cropped in order to store up soil moisture for the next year's crop.

^{d/} Set-aside acres are those not harvested because of the federal agriculture program or those acres which were once cropped, but are now in permanent grass.

Table 6. Summary of labor utilized by area.

Item	Area						Combined
	1	2	3	4	5	6	
Avg. no. of operators employed full-time on their farms ^{a/b/}	1.4	1.5	1.8	1.3	1.0	1.2	1.3
Average no. of full-time hired men/farm ^{c/}	1.0	0.8	0.0	0.2	0.4	0.1	0.4
Avg. no. of weeks of part-time persons hired/farm in one year ^{d/}	13.0	19.0	9.8	6.2	16.4	8.6	11.7

^{a/} There were three part-time farmers in Area 2, and one part-time farmer in Area 5. Data for these farmers was removed before the above data was tabulated.

^{b/} The total full-time farm operators was summed by area. Then the number of farms in that area was divided into the sum. Partnerships and father and son businesses are considered as having multiple operators.

^{c/} The total full-time hired men was summed for each area. The number of farms in that area was divided into the sum.

^{d/} The sum of the weeks of paid seasonal labor was divided by the number of farms in the area. Part-time unpaid family labor was not included.

fraction of a year were divided into acres and number of beef cows. The resulting product is the amount of land and number of beef cows cared for per man-year of labor input. The information is presented, by category and areas, in Table 7.

Table 7. Units of land and beef cows cared for per man equivalent. ^{a/}

Item	Area						Combined
	1	2	3	4	5	6	
Avg. total acres/ man-equivalent	1312	1585	1499	1799	2888	2579	1950
Avg. crop acres/ man-equivalent	1022	1362	1261	1130	1110	1393	1194
Avg. range acres/ man-equivalent	293	221	237	670	1780	1182	756
Avg. no. of beef cows per man- equivalent	14	10	0	32	50	38	28

^{a/} A man-equivalent is one full-time worker for one year. Seasonal labor in weeks, divided by 52, converts to man-equivalents. Those farms having part-time operators were left out of this table.

There is not much difference in the average number of crop acres per man-equivalent by area. The real difference comes in the number of rangeland acres per man-equivalent. The more productive land areas of 1, 2, and 3 have much less rangeland per man-equivalent than areas 4, 5, and 6 which, generally, are not as productive.

The number of beef cows per man-equivalent also follows this same trend, with the most beef cows being in areas 4, 5, and 6.

As may be noted, only beef cows are discussed as a livestock enterprise in Sherman County. There are other kinds of livestock, such as chickens, hogs, horses, and sheep. However, these are found only on a few farms, while the cow-calf operation is typical of most of the farms.

Again, it must be remembered that Sherman County is in a summer fallow area, and only half the crop acres are cropped each year.

Distance to Parcels Farmed

The question, "What is the approximate distance in miles to each parcel farmed?" was asked in the interview. It can be time consuming and costly to move equipment. With much of the new equipment, this time is being reduced, but it still costs money to move from one area to another. The responses to the above question are summarized in Table 8.

Ranchers travel farther to the farthest parcel from the ranch headquarters in Areas 1, 5, and 6. Farmers in Areas 1 and 2 have more parcels away from the ranch headquarters than any of the other areas.

Table 8. Distance of leased parcels from ranch headquarters.^{a/}

Item	Area						Combined
	1	2	3	4	5	6	
Avg. no. of parcels away from ranch headquarters ^{b/}	2.3	2.4	1.8	1.2	0.8	1.0	1.5
Avg. miles to all parcels farmed away from ranch headquarters ^{c/}	9	6	6	9	23	14	10
Avg. miles to farthest parcel farmed ^{d/}	11	6	7	7	12	12	10

^{a/} Range parcels as well as cropland parcels were included in this table. Rangeland parcels were more prevalent in areas 5 and 6 than the other areas.

^{b/} Only parcels of land not connected to the ranch headquarters were counted as parcels being away from the ranch headquarters.

^{c/} Distances to all parcels away from the ranch headquarters were added together and divided by the total number of parcels away from the ranch headquarters.

^{d/} The distance to the farthest parcel was the only one used in this computation regardless of the number of parcels away from the ranch headquarters.

Increasing Farm Size

The ranchers were asked some attitude questions. The first was "Do you desire to farm additional acreage?" The answers are shown in Table 9.

Table 9. Farmers' response to whether they desired to farm additional land.

Answer	Area						Combined
	1	2	3	4	5	6	
	<u>Frequency of observation</u>						
Yes	8	2	4	5	5	6	30
No	2	5	0	4	5	3	19
	<u>Percent</u>						
Yes	17	4	8	10	10	12	61
No	4	10	0	9	10	6	39

Sixty-one percent of the farmers would like to farm additional land. The majority of the ranchers in four areas out of the six indicated a desire to farm additional land. The ranchers in area 5 were evenly divided and the majority of ranchers in area 2 did not desire to farm additional land. Such factors as the farmer's age, labor availability, etc. were expressed by farmers who responded that they did not desire to farm additional acreage.

The ranchers were next asked the questions, "How many more

acres could you farm with present equipment? How many more acres could you farm with present labor?" This assumes that half the acreage figure given would be in summer fallow. Their replies are shown in Table 10.

Table 10. Additional acres farmers reported they could farm.^{a/}

Item	Area						Combined
	1	2	3	4	5	6	
No. of additional acres that could be farmed with present equipment	724	841	1105	702	680	1033	830
No. of additional acres that could be farmed with present labor	664	91	600	247	290	400	375
No. of additional acres farmer would like to lease	660	213	895	644	278	822	564

^{a/}The acreage figures reported are average cropland acres. Divide by two to find the number of acres cropped each year, since Sherman County has the summer fallow type of farming.

Labor is more of a limiting input to production than farm equipment is. In fact, ranchers could farm twice as many acres with present equipment than they could with present labor.

Some said they would like to lease additional ground. The average for each area and the acreage for the total county is shown in Table 10.

The average number of additional acres a rancher would like

to lease in Sherman County falls between the average for the county in number of acres the ranchers could farm with present equipment and the number of acres the ranchers could farm with present labor. It is also important to point out that this figure is a positive figure of just under one section of land in size. This suggests ranchers as a whole are looking for land to expand their operations. From the author's personal contact with the ranchers he knows this to be the actual desire of many ranchers in the county.

Farmers were asked if they desire to purchase additional land at present day prices. Their responses are presented in Table 11. There were 51 percent who answered with a yes and 49 percent said no. It is interesting to note that in areas 1, 2, 4, 5, and 6 the responses are just about equally divided between yes and no. It is in area 3 where all four farms surveyed responded with a yes to the question.

The question "Would you rather lease or buy to increase your farm size?" is also asked. Here, 51 percent responded with a lease answer, and 49 percent responded with a buy answer. The data is shown in Table 11.

The majority of the farmers surveyed indicated a desire to farm additional land. The majority of farmers indicated that they would like to lease this additional land. The average number of additional acres farmers would like to lease is 564 acres. They

indicated that they could farm an additional 830 acres with present farm equipment and an additional 375 acres with present labor. If ranchers are able to increase their farm size this will mean more efficient utilization of the basic inputs (land, labor, capital and management) to farming. Since the majority of farmers would like to farm more land, this may increase the competition for available land.

Factors such as age, financial condition, labor availability, and present equipment situation are some of the factors that affected the ranchers' answers to whether or not they wanted to farm additional land. Some of these factors may change with time, and the rancher may change his answer, but these were the answers given when the ranchers were interviewed this summer.

Table 11. Farmers' attitudes toward buying or leasing farm land.

Item	Area						Combined
	1	2	3	4	5	6	
	<u>Percent</u>						
Farmers' responses to buying land at present day prices							
Yes	10	6	8	8	11	8	51
No	10	9	0	10	10	10	49
Farmers' responses to leasing or buying to increase farm size							
Lease	10	8	2	8	10	13	51
Buy	11	6	6	10	10	6	49

IV. ANALYSIS OF LEASES AND TERMS

This chapter deals mainly with the results of the questionnaire on leasing. The basic types of leases are presented as well as some of the specific terms that were found.

Basic Types of Leases

As shown by Table 1, in Chapter I, tenancy has been an important part of Sherman County's agricultural scene for over 60 years. Tenants who pay a cash sum either per acre or for the total ranch have been a very small percent of the total tenancy picture. In fact, there are none listed in the Census of Agriculture since 1950. The most important tenancy arrangement in Sherman County has been to pay rent in the form of a part of the crop and/or the livestock. This survey found this to be true. No cash leases for cropland were found in this survey. Leases on rangeland varied from cash, paying for some of the expenses such as taxes for its use, sharing the calf crop from a certain number of cows, to no payment for its use. When no payment for the use of the rangeland was recorded, there was always cropland along with the rangeland.

The most common term of crop-share lease found was the 1/3-2/3 term. This is where the landlord gets a one-third share of the crop produced, and the tenant gets a two-thirds share. This

term of lease appeared in 68 percent of the total leases. Other terms of leases found, their frequency of occurrence, and their percentage of the total are shown in Table 12.

The 1/3-2/3 crop-share lease was distributed through all six areas of the county. However, the 40-60 crop-share lease was more prevalent in the high producing areas of the northwest and middle west (area 1 and 3). These two areas count for nine out of the twelve occurrences of this type of lease or 75 percent. The other three were found in the northeast and southwest areas.

There were a total of seven leases with the following rental terms: 50-50; 1/4-3/4; or 45-55. These were generally scattered among the north and south parts of the county. The sample was too small to draw very many conclusions about these leases. About all that can be said is that they accounted for seven percent of the total leases in the sample.

It should be pointed out that all cropland that is leased is leased on a crop-share basis.

A comparison of the lease data from the Sherman County Agricultural Stabilization and Conservation Service (ASCS) office in 1971 and the data from this study in 1973 is shown in Table 13. The 1971 data was taken from wheat certification reports, and consequently, only land in production that year was reported.

The percentages for number of farms for each type of lease

Table 12. Crop-share lease terms by area.

Crop-share lease terms	Area						Combined	Frequency of occurrence	Percent
	1	2	3	4	5	6			
40-60	5	1	4	0	2	0	12	13	
1/3-2/3	13	10	5	14	14	8	64	68	
50-50	2	0	0	0	1	1	4	4	
1/4-3/4	1	0	0	0	1	0	2	2	
45-55	0	1	0	0	0	0	1	1	
No cropland - rangeland only ^{a/}	2	1	0	2	4	2	11	12	
Total	23	13	9	16	22	11	94	100	

^{a/} Eleven of the total of 94 leases were for rangeland only. These are listed here.

Table 13. Comparison of 1973 study sample with data for all of Sherman County from the Sherman County ASCS Office in 1971.^{a/}

Division of Crop Between Landlord and Tenant	<u>Number of Farms</u> ^{b/}		<u>Percent of Farms</u>		<u>Cropland Acres</u>		<u>Percent of Cropland</u>	
	1971	1973	1971	1973	1971	1973	1971	1973
1/3 - 2/3	159	64	47	53	121,222	48,788	40	46
40-60	21	12	6	10	18,054	9,723	6	9
50-50	25	4	7	3	30,173	4,545	10	4
100% Tenant	93	37	28	31	83,051	39,638	28	38
25-75	5	2	2	2	4,449	1,641	1	2
Odd	<u>35</u>	<u>1</u>	<u>10</u>	<u>1</u>	<u>44,290</u>	<u>616</u>	<u>15</u>	<u>1</u>
Total	338	120	100	100	301,239	104,951	100	100

^{a/} The 1973 figure is a sample of approximately one-third of the total farms in Sherman County in 1973.

^{b/} The number of farms in the 1971 report from the Sherman County ASCS Office refers to only those farms that had a crop in 1971. In addition to the above number, there were 24 farms with no crop in 1971. The figure for 1973 figures each crop lease plus the land owned. Each method comes up with a number greater than the actual number of farming units in the county. The number of farms here is a reflection of the number of different owners (in the case of lease) and the way the farm may be divided for the ASCS program.

and percent of cropland for each type of lease were not exactly the same. However, they both show the same trends.

Both sets of figures show that the majority of land is leased. It is 72 percent in the case of the 1971 ASCS data and 62 percent in the case of the 1973 survey. Both show that the majority of farms and land is leased with a 1/3-2/3 share rental term.

The basic type of lease on rangeland is the cash lease. The results of the survey are shown in Table 14.

Table 14. Type of lease for use of rangeland.

Item	Frequency of occurrence	Percent
1/3-2/3 division of calf crop	1	1
50-50 division of calf crop	2	2
Cash payment to landlord ^{a/}	17	18
Other ^{b/}	13	14
No lease or payment for use of rangeland ^{c/}	61	65

^{a/} There are seven of these leases which are with the Bureau of Land Management. Five of the BLM leases are located in the southern part of Sherman County in areas 5 and 6.

^{b/} Other types of leases on rangeland include paying part or all of the real estate taxes, maintaining fence or buildings, helping pay for crop spray, etc. for the use of the rangeland.

^{c/} Of the 61 leases listed above, nine were cropland only; 27 were rangeland used, but no payment made; 24 leases were rangeland not used; and one lease was where the landowner retained the use of the rangeland.

This data shows that in most situations the rangeland is not mentioned in the lease. Rangeland may be used by the tenant, but it may be small in size and of no concern to the landlord. Only 35 percent of the leases mentioned something about the rangeland, and in 18 percent of these a cash rent was called for. Of the 17 leases on rangeland, seven of them are with the Bureau of Land Management, which administers the grazing lands along the Deschutes and John Day Rivers. The other ten cash leases for rangeland are with private individuals.

Most of the leases for rangeland are in sample areas 4, 5, and 6. This is the southern and eastern part of the county. This area accounts for 79 percent of the rangeland leases. Forty-six percent of the total rangeland leases are in area 5 which is the southwest part of the county. Farms in the northwest part of the county have 18 percent of the leases on rangeland. As will be remembered, ranchers in that area had an average of 39 beef-cows per farm.

Average Size of the Parcels Leased

The survey obtained information on the average size of parcel leased. It was obtained on the basis of cropland and range or unuseable land. The data is summarized in Table 15.

The earlier data on rangeland leases showed that most of the rangeland leases were in the sample areas 4, 5, and 6. The

data in Table 15 shows that these areas consist of a larger number of rangeland acres per lease.

Table 15. Summary of leased land by area.

Item	Area						Combined
	1	2	3	4	5	6	
Total acres per lease	847	963	855	1112	1240	1991	1135
Crop acres per lease	673	778	746	611	547	1019	695
Percent	80	81	87	55	44	51	61
Range or unuseable acres per lease	174	184	109	501	694	972	439
Percent	20	19	13	45	56	49	39
No. of leases per farm ^{a/}	2.3	1.9	2.3	1.8	2.2	1.2	1.9
No. of leases in sample	23	13	9	16	22	11	94

^{a/}The number of leases per farm is the total number of leases divided by the number of farms regardless of whether they had leased land or not.

All the farms in the survey averaged 1.9 leases per farm. The range was from 0 to 7 leases per farm with one lease per farm occurring 18 times or 37 percent of the time.

Length of Time of the Lease

The interviewer asked the questions, "How long has this property been leased by your family?" and "How long have you had this present lease?"⁴ The results are shown in Table 16.

Table 16. Summary of tenure of tenants by area.

Item	Area						Combined
	1	2	3	4	5	6	
Avg. years lease has been in family ^{a/}	15.9	22.8	9.3	18.8	15.1	22.4	17.3
Avg. years present tenant has held present lease ^{b/}	10.7	9.8	6.8	11.7	7.7	10.1	9.6

^{a/} Average years property has been leased by family could include the situation where the leased property has passed from the father to the son. In this case the sum of the years the father leased the property plus the sum of the years the son leased the property would be the figure presented.

^{b/} The average length of time the farmer has had the current lease is represented here. This is not the average length of time for which the lease is written.

The data clearly shows that the leased property does not move out of the family very often and that lease agreements do not change very often.

Leases were found to be for definite as well as indefinite lengths of time. The average length of time of the definite leases was 5.1 years. There were 34 leases which were for an indefinite length of time. This is about one-third of the total number of leases.

The leases that were for a definite period of time could be renewed in several different ways. They ranged from the drawing up of a new lease to the re-signing of the present lease. Basically,

most cases involved both parties getting together and agreeing on the new lease. In one or two cases, the landowner or the tenant has the option to renew the lease, but as stated above, most cases involved the tenant and landowner arriving at a mutual agreement on a new lease.

Leases with Related Persons

There have been many questions about the relationship of landowner and tenant. This study showed the following results. When the relationship of the landowner and the tenant is compared with the crop-share lease terms. This is shown in Table 17.

Ten out of 12, or 83 percent of the 40-60 crop-share leases are with landowners that are not related to the tenant. As was mentioned earlier, these 40-60 crop-share leases are more likely to be found in the higher producing areas of 1 and 3. The predominate crop-share lease, which is a 1/3-2/3 share, is found throughout the county and with both relatives and non-relatives.

The survey shows that 60 percent of the lease agreements were written and lease agreements were verbal 40 percent of the time. The tenants indicated six times that they desired a written lease. This was the second most often mentioned item as something the tenants wanted changed.

The relationship between the tenant and the landowner and

Table 17. Comparison of the landlord-tenant relationship with the crop-share lease terms.

Relationship of land- lord to tenant	Crop-share lease terms					Rangeland lease only	Frequency of occurrence	Percent
	40-60	1/3-2/3	50-50	1/4-3/4	45-55			
Father-Mother	0	18	2	1	0	1	22	24
Brother-Sister	0	8	0	0	0	1	9	10
Uncle-Aunt-1st Cousin	1	6	0	0	0	0	7	7
Grandparents	0	2	0	0	0	0	2	2
Other Relatives	1	4	0	0	0	0	5	5
No Relation	10	26	2	1	1	9	49	52
Total	12	64	4	2	1	11	94	100

whether the lease is written or verbal was observed. The results are shown in Table 18.

Table 18. Landlord relationship compared with written and verbal leases.

Relationship of landlord to tenant	Written lease	Verbal lease	Total
	<u>Frequency of Observation</u>		
Father-Mother	6	16	22
Brother-Sister	3	6	9
Uncle-Aunt-1st Cousin	2	5	7
Grandparents	1	1	2
Other Relatives	3	2	5
No Relation	41	8	49
All Leases Total	56	38	94

To further analyze the form the lease agreement may take, the percent comparison as well as the frequency of observation for relatives vs. non-relatives is shown in Table 19.

This shows that a written lease is more likely to occur when the tenant and landowner are not related. When the lease is with a relative, two out of every three leases will be verbal.

Only 6 out of 22 leases with father-mother as landlord, were written agreements. It is here perhaps that a written lease is most important. The reason for this would be that in case of the death

of either party, terms for continuation of the farming of the land would be known. Brothers, sisters and other relatives would then be able to see what the exact terms of the agreement were and there would be no question about them.

Table 19. Comparison of related landlords vs. non-related landlords with written and verbal leases.

	Written Lease	Verbal Lease	Total
<u>Tenant-Landlord Related</u>			
Frequency of Observation	15	30	45
Percent	16	32	48
<u>Tenant-Landlord Not Related</u>			
Frequency of Observation	41	8	49
Percent	44	8	52

The survey shows that those leases which are for an indefinite length of time had the following frequency of distribution among the tenant-landowner relationship. This is shown in Table 20.

Sixty-four percent of the leases were for a definite length of time. It is more likely that the lease for an indefinite length of time is with a landlord who is a relative than with a landlord who is not a relative. Leases for a definite time were for an average of 5.1 years.

Table 20. Landlord relationship compared with definite and indefinite time leases.

Relationship of landlord to tenant	Lease for an indefinite time	Lease for a definite time	Total
Father-Mother	14	8	22
Brother-Sister	6	3	9
Uncle-Aunt-1st Cousin	2	5	7
Grandparents	1	1	2
Other Relatives	2	3	5
No Relation	9	40	49
Total			
Frequency of Observation	34	60	94
Percent	36	64	100

Tables 17, 18 and 20 show that leases with father-mother landlords are more likely to be a 1/3-2/3 crop-share lease term and a verbal agreement for an indefinite period of time. Leases with landlords that are not related to the tenant were a 1/3-2/3 crop-share lease term 50 percent of the time and 40-60, 19 percent of the time. They were more likely to be written and for a definite period of time. The conclusion that can be drawn is that where the landlord and tenant are not related the agreement tends to be more business-like.

Residency and Occupations of Landlords

The residency of the landlords was also a topic of this study.

It was found that there were 34 leases, or 36 percent of the landowners who lived in Sherman County; 53 leases or 56 percent of the landowners did not live in Sherman County; and seven leases or seven percent of the landowners were the United States Government (B. L. M.).

When the question was asked, "Do the landlords live in Oregon?", 81 leases, or 86 percent, responded in the affirmative; six leases, or six percent, responded in the negative; and seven leases, or seven percent, of the landlords were the United States Government (B. L. M.).

Besides place of residence, the occupation of the landlords was of interest in this study. The data is shown in Table 21.

As one can see here, the majority of the landowners are retired people who, for the most part, do not live in Sherman County, but do live in Oregon. Sherman County does not have the professional services (i. e., doctors, hospitals, etc.) that are found in more populated areas. It may be concluded that because the landowners are for the most part, older, retired people, they desire to be nearer these professional services. However, they may have retained ownership of the land as an investment to yield a return to support them in retirement.

Table 21. Landlord occupation compared with crop-share lease terms.

Occupation of landlord	Type of crop-share lease						All leases	
	40-60	1/3-2/3	50-50	1/4-3/4	45-55	Rangeland only	Frequency of observation	Percent
	<u>Frequency of occurrence</u>							
Retired	3	29	3	1	1	3	50	53
Businessman	1	3	0	1	0	0	5	5
Farmer	0	13	0	0	0	0	13	14
Bank Trust	5	6	0	0	0	0	11	12
U. S. Government	0	0	0	0	0	7	7	8
Clerk	0	0	0	0	0	1	1	1
Estate	1	0	0	0	0	0	1	1
Other	2	3	1	0	0	0	6	6
Totals	12	64	4	2	1	11	94	100

Sharing of Expenses

Several of the inputs to farming were also covered in the questionnaire. They will be discussed in the order they were asked.

Fencing is an important item on ranches with livestock. Cattle must be fenced out of the growing crop, onto the range, or onto the stubble after harvest. Sometimes it is a matter of just maintaining the existing fence, and other times it is a matter of building new fences. The survey indicated the following data as shown in Table 22.

Table 22. Division of fencing costs between landowner and tenant. ^{a/}

Item	Construction of new permanent fence	Maintenance of existing fence
	<u>Frequency of Occurrence</u>	
100% of cost paid by tenant	30	42
Materials paid for by landowner, labor provided by tenant	35	34
Other	1	0

^{a/} Those leases that did not discuss farm fencing were not included in this table.

This would indicate, that where there is fencing, about half the farmers handle all the costs themselves and half the farmers build the fence while the landlord pays for materials.

The costs of weed control spray for the growing crop and fertilizer costs are an important part of a lease. When 2, 4-D is used as the weed control spray, the costs are about \$0.75 per acre, while use of the new chemicals, such as Igram, increases the cost to \$4.70 per acre. The cost of aerial applications is about \$1.25 an acre for 2, 4-D but increases to \$2.00 per acre with the newer chemicals. Therefore, the total cost of the new chemicals plus aerial application is about three times the cost of applying 2, 4-D. However, the new chemicals do a better job earlier on some weeds which are poorly controlled by 2, 4-D, and this results in a better wheat yield.

The main element of fertilizer applied is nitrogen. It is applied either as anhydrous ammonia or aqua ammonia and is shanked into the soil sometime during the summer fallow year before planting time in the fall. The application rate of nitrogen will normally vary from approximately 20 pounds to 50 pounds per acre. This rate will depend on soil depth and moisture conditions, and range from zero to 60 pounds. Results of the survey on division of fertilizer costs between landowner and tenant are shown in Table 23.

This can be compared to a similar chart which shows the division of cost for weed spray for the growing crop. The results are as shown in Table 24.

The data shows that the fertilizer cost is more frequently

Table 23. Summary of division of fertilizer cost between landowner and tenant by terms of crop-share lease.

How fertilizer cost is divided	Type of crop-share lease					Combined	
	40-60	1/3-2/3	50-50	1/4-3/4	45-55	Frequency of occurrence	Percent
	<u>Frequency of Occurrence</u>						
40% Landowner-60% Tenant	9	0	0	0	0	9	11
1/3 Landowner 2/3 Tenant	0	32	0	0	0	32	39
50% Landowner-50% Tenant	0	0	3	0	0	3	4
100% Tenant	2	28	0	1	0	31	37
Other ^{a/}	0	0	1	0	0	1	1
45% Landowner-55% Tenant	0	0	0	0	1	1	1
Not mentioned or none applied ^{b/}	1	4	0	1	0	6	7

^{a/} Other refers to a term not listed.

^{b/} There were 11 leases for rangeland which are not included here.

Table 24. Summary of division of crop weed spray cost between landowner and tenant by terms of crop-share lease.

How crop weed spray cost was divided	Type of crop-share lease					Combined	
	40-60	1/3-2/3	50-50	1/4-3/4	45-55	Frequency of occurrence	Percent
	<u>Frequency of Occurrence</u>						
40% Landowner-60% Tenant	4	0	0	0	0	4	5
1/3 Landowner-2/3 Tenant	0	6	0	0	0	6	7
50% Landowner-50% Tenant	0	0	3	0	0	3	4
100% Tenant	4	54	0	2	1	61	73
Other ^{a/}	4	4	1	0	0	9	11

^{a/} Other refers to terms not listed, but for crop-share leases which had terms for crop weed spraying.

shared between landlord and tenant than is the cost of the weed control spray for the growing crop. A few situations were encountered where the costs of the new chemical weed control sprays were to be shared while the 2,4-D sprays were to be handled entirely by the tenant. These were reported under the "other" heading in Table 24. The author would expect that this will become a common occurrence as these new sprays are used.

Another expense which must be assumed every year is the cost of the seed for the new crop. The tenant assumes this expense in 94 percent of the leases as shown in Table 25.

Table 25. Supplying of crop seed for new crop on leased land.

Who furnishes crop seed for new crop	Response	
	Frequency of occurrence	Percent
Tenant	80	94
Landlord	1	1
Other	4	5

Another expense is the real estate taxes. These are paid by the landlord in 78 percent of the leases. This would include the taxes on the land and buildings. The data from the survey is shown in Table 26.

Table 26. Summary of who pays real estate taxes on leased land.

Who pays taxes	Response	
	Frequency of occurrence	Percent
100% Landowner	73	78
Landowner-land; Tenant-bldgs.	3	3
50% Landowner; 50% Tenant	5	5
100% Tenant	4	4
1/3 Landowner; 2/3 Tenant	1	1
Other	1	1
Bureau of Land Management land --no taxes	7	8

The tenant pays all the real estate taxes on three percent of the leases for the use of the rangeland, and in another three percent of the leases pays half the real estate taxes for the use of the rangeland.

The crop insurance was, in most cases, handled by each party in relation to the share of the crop they received. For example, if the tenant was to receive a 2/3 share of the crop, then he would provide crop insurance on this share.

Providing of Farm Buildings

The question was also asked, "What farm buildings were

provided by the landlord? " The results are shown in Table 27.

Table 27. Farm buildings provided by landowner.

Building	Response	
	Frequency of occurrence	Percent
None	49	52
Shop	3	3
Barn and Shop	5	5
Barn, Shop, and House	15	16
Barn and House	9	10
Barn	7	8
House and Shop	3	3
House	3	3

As the data shows, in 52 percent of the leases, buildings are not provided by the landowner, but in the remainder of the leases, a barn, shop, and house are provided the most often. There were 12 farmers who leased 100 percent of the land they farmed. This would account for some of the buildings being provided as reported above. A useable house was included in 32 percent of the leases.

Division of Receipts

The wheat, barley, and certificate payments from the federal

farm program were divided in the same way as the terms of the crop-share lease the landowner-tenant had. Livestock, as indicated earlier, generally were not a part of the lease. If there were livestock on the farm, they were most commonly owned solely by the tenant. In those cases where livestock were a part of the lease, the receipts were divided as shown in Table 28. Because there were only 7 leases in the survey which included livestock, the sample is too small to draw any conclusions.

Table 28. Division of livestock receipts.

Division of receipts between landowner and tenant	Response	
	Frequency of occurrence	Percent
50% Landowner - 50% tenant	3	3
100% Tenant	1	1
Other	2	2
1/4 Landowner-3/4 Tenant	1	1
No livestock or livestock were not a part of the lease	87	93

The tenant is generally able to use the rangeland on the parcels that are leased. As indicated earlier, in some cases a cash payment is made in order to do so.

There have been some provisions of the federal farm program in the past which have necessitated the cutting of grain hay. This

commodity is usually divided. However, even here, many tenants will purchase the landowner's share. The tenants will then use it to feed their livestock. The responses to the question "How are hay receipts divided?" are shown in Table 29. The hay crop is divided in some way between the landowner and tenant in 33 percent of the leases. The tenant receives the total hay crop in 30 percent of the leases, and in 37 percent of the leases the hay crop is not mentioned.

Table 29. Division of hay receipts.

Division of hay receipts between landowner and tenant	Responses	
	Frequency of occurrence	Percent
40% Landowner-60% Tenant	4	4
1/3 Landowner-2/3 Tenant	23	25
50% Landowner-50% Tenant	2	2
100% Tenant	28	30
1/4 Landowner-3/4 Tenant	1	1
45% Landowner-55% Tenant	1	1
Not Mentioned ^{a/}	35	37

^{a/} Includes some leases which were for rangeland only.

Storage of the Grain Crop

The grain crops are harvested by hillside, self-propelled combines and hauled by truck to a storage elevator. Most of the

grain in Sherman County is stored in one of the two co-op elevators: Mid Columbia Grain Growers at Moro and Grass Valley, and Sherman County Co-op Grain Growers at Wasco. There are some farm storage bins located throughout the county. It was found that in only 14 percent of the leases were storage facilities for the grain included. Generally, the lease specifies that the grain is to be delivered to a licensed warehouse, and some leases specify which one. By putting the grain through a licensed warehouse, both parties - tenant and landowner - can receive weight slips on the grain. Each party then knows how much grain he has to sell and can then sell when he so desires.

Selling of the Grain Crop

The question was also asked "Who decides when to sell the grain crop?" The responses to this question are shown in Table 30.

Table 30. Summary of who decides when to sell the grain crop.

Who decides when to sell the grain crop	Responses	
	Frequency of occurrence	Percent
Each sells own	72	77
Mutual decision	9	9
Tenant decides	13	14

In 77 percent of the leases each person sells his own grain. When prices fluctuate, each person can only blame himself if the crop is sold at a lower price. With the landlord selling his share, it takes a lot of the pressure off of the tenant should the price go up. This has been particularly true during this past year where there has been quite an increase in price as well as wide fluctuations.

Farming Practices

The next area covered by the questionnaire deals with farming practices. The question was asked, "Does the lease include any requirements for soil conserving practices?" In 95 percent of the cases, the answer was "no." However, many of the farmers said that their leases specified to "farm in the usual or customary way for the area." Other leases said "to farm in a good or usual manner." Only one lease mentioned specifically that the tenant should stubble mulch.

The second question asked was, "Does the lease include any requirements for weed control?" Here, 31 percent gave an affirmative answer. In many cases the landlord pays for the cost of the chemical for noxious weed control. The tenant then must apply it or pay the cost of having it applied. The leases covered a broad spectrum from that of not saying anything about weed control to that of saying noxious weeds must be controlled. The two weeds most

often mentioned were rye and morning glory. It takes persistent practice in weed control to control these two weeds.

The third question asked was, "Does the lease include any discussion of what cropping practices are to be followed?" Here, only 10 leases were answered in the affirmative. Most said to "farm in the normal or usual manner for the area." There were four leases that spelled out some definite things to follow. One said that the crop should be seeded in the fall, a second said that the ground must be bottom plowed, a third said that the tenant must stay within the farm program and must plant wheat, and a fourth said that land that is in pasture or hay will continue to remain so for the term of the lease.

It tends to be an exception rather than a rule that specific farming practices are stated in the lease. Generally the tenant is expected to farm in the normal manner for the area.

Death of Either Party

There were 21 leases that had terms of action to be taken if either the landlord or the tenant were to die. These terms ranged from automatically terminating the lease at the death of the tenant, to continuing the lease until the expiration date in case of the landlord's death. Some leases also provided the tenant with the first option to purchase the land upon the death of the landlord. Several

tenants expressed the desire to have a written lease with this statement in their lease.

A statement of terms of action in a lease in the case of death of either party and whether the lease was written or verbal was compared. The results are shown in Table 31.

Table 31. Summary of whether lease contains statement on terms of action if either party dies as compared to written or verbal agreements.

Form of Lease	Does lease contain statement		Total
	Yes	No	
Written Lease			
Frequency of Response	19	37	56
Percent	20	40	60
Verbal Lease			
Frequency of Response	2	36	38
Percent	2	38	40
Combined			
Frequency of Response	21	73	94
Percent	22	78	100

This clearly shows that the chances of having something in the lease to cover the situation if one or the other party dies is greater with a written lease. However, one must note that for every written

lease that does contain some terms if there is a death, two written leases do not.

Arbitration of Differences of Opinion

There are 14 leases which have provisions for arbitrating differences of opinion. The provisions include a committee being selected with each party selecting one person and a third person selected by mutual agreement of both parties. The provisions also include where this committee will meet. The decisions of the committee are binding on both parties.

It is important to point out the trust and mutual understanding that seems to be exhibited by the landlord and tenant. This is demonstrated by the fact that only 14 leases have provisions for arbitration of differences of opinion, that the average duration that the present lease has been in effect is 9.6 years, and that, other than those who live on the farm or in Sherman County, the average number of times the landowner visits the ranch is 7 times per year.

Landowners, in all except one case, have not objected when tenants wanted to farm more land. There is an understanding that the tenant will continue to do the same good job of farming that he has been doing, no matter how much land he farms.

Termination of Leases

There were many different answers to how the leases could be terminated. These ranged from "it can't" to "verbally by either party." Basically, the ranchers said that if either party wanted termination or if there were poor farming methods being employed, termination of the leases could take effect immediately. Some leases presented rates of compensation to the tenant for tillage operations if the lease were to be terminated. Some leases said termination could occur at the end of the period for which the lease was written.

There are only two leases which include some discussion of what compensation would be paid the tenant for capital improvements made to the ranch. One other tenant mentioned that this had been discussed, but nothing was in the present lease.

Items Tenants Desired Changed

A few tenants expressed a desire to have some things changed in their present leases. The item coming up most often was the desire for a longer lease. It occurred seven times. The desire for a written lease was indicated next most often. Other items indicated were that the tenant desired to be able to meet the last bid if the property were to be sold, that there be some definite terms of action

in case of the death of either party, and that there be terms of settlement if the tenant was to make capital improvements to the ranch and move before they were depreciated out. There were also a few comments about how some of the costs were divided. These comments related to specific items with specific leases.

Experience From Leasing

The question, "Has leasing of farm ground been a satisfactory experience?" was asked of all the ranchers in the sample. There were 42 who said "yes," one who said "no," and six who had not leased any land so were unable to comment. The fact that 42 said "yes" illustrates the fact that crop-share leasing in Sherman County is successful. The tenants seem to be satisfied. The landlords were not interviewed, so the author cannot state how they feel. It can be said that it is a system that has worked, is now working, and most likely will continue to work in the future.

V. SUMMARY AND CONCLUSIONS

Leasing of farm land has been an important part of the agricultural scene in Sherman County for over 60 years. The crop-share lease is currently the most common means of leasing cropland. This study found it to be the only way that cropland was leased by the farmers interviewed in 1973. Of the ranchers who leased land, all but one reported that it has been a satisfactory experience for them.

Summary

The average size ranch of the ranches included in this study for Sherman County is 3,527 acres. It consists of 2,159 acres or 61 percent cropland and 1,367 acres or 39 percent rangeland. There was also an average of 45 beef cows per ranch. The rangeland and beef cows were primarily in areas 4, 5, and 6. This is the southern and middle east part of the county where the soil is shallower, rainfall lower, and where there is more rangeland mixed with the cropland than in the northern part of the county.

The percent of cropland per ranch varied from 87 percent in area 3 to a low of 39 percent in area 5. The ranches with the highest percent of rangeland and the greatest number of beef cows were located in areas 4, 5, and 6. Area 1, which is one of the more

productive areas, had an average of 39 beef cows per ranch. This is higher than one might normally expect, but they also had an average of one full-time hired man per ranch, which was the highest of any area.

Of the 3,527 acres per ranch, 59 percent of the land is leased, 39 percent is owned, and the remaining 2 percent is custom farmed. Custom farming was found in only six cases out of the 49 ranches surveyed. The 49 ranches surveyed had an average of 1.9 leases per ranch or a total of 94 leases for all ranches. This ranged from zero leases to a high of seven. There were seven ranchers, or 14 percent, who owned all the land they operated, and 12 ranchers, or 25 percent, who leased all of the land they operated. The remaining 61 percent operated a combination of leased and owned land.

The 1/3-2/3 crop-share lease term, is the most common and is found in 68 percent of the total leases. It occurred the most often in all areas. The 40-60 crop-share lease term is the next most common, occurring 13 percent of the time. Seventy-five percent of the total 40-60 crop-share lease term occurs in the more productive areas of the northwest and middle west parts of the county. There were other crop-share lease terms such as the 50-50, 25-75, and 45-55. The number of these in the sample is very small so it is difficult to draw any conclusions about them.

Fifty-two percent of the leases are with landlords that are not

related to the tenant, while 48 percent are with a related landlord. Twenty-four percent of all leases involved the father or mother as the landlord. The occupation of the landlord was also summarized, Fifty-three percent of the landowners are retired.

Sixty percent of the leases are written, and the remaining forty percent are based on a verbal understanding. The tenant is more likely to have a written lease when he is leasing from non-relatives than when he is leasing from relatives. The need to have the lease written was mentioned six times by the tenants as one of the items that tenants desired to have changed. A written lease is used not because the parties do not trust each other but because it is a good business practice and because it protects both parties should there be a death or misunderstanding.

Some tenants also mentioned that they would like to have the option to meet the last bid if the property were to be sold. This is written into some of the leases, but specific information on this item was not a formal part of the questionnaire used.

Leasing of farm land is usually a long-term situation, as indicated by the length of time certain parcels of land have been leased. The average number of years a parcel of land is leased by one rancher or his family is 17.3 years, and the average number of years the tenant has had the current lease is 9.6 years.

When a definite length of time has been determined for the

duration of a lease, whether written or verbal, the average is 5.1 years. There were 34 leases, or 36 percent, which were for an indefinite length of time.

Even though tenants are able to farm leased parcels for long periods of time, the desire for leases of longer duration was mentioned most often. As one tenant said, "With the cost of machinery, we need a lease for a longer term so that we can be assured of farming that land over the time in which we will be making machinery payments." With new hillside combines costing \$30,000 plus and four-wheel drive tractors costing \$20,000 or more, it takes a lot of capital to equip a rancher today with the necessary equipment to run a farm. The tenant and his lender in many cases want to be assured that there will be land resources to farm in order to generate income to pay for the equipment.

In only 22 percent of the leases was there some agreed upon term of action if one or the other party to the lease were to die. Some tenants indicated a desire for this subject to be included in their leases.

Wheat, barley, and certificates were generally divided in the same manner as the type of lease the landowner and tenant had. For example, if the lease was a 1/3-2/3 crop-share lease, the landowner would receive 1/3 of the wheat, barley, and certificate payment. The tenant would then receive the other two-thirds.

The hay crop, when there was one, was divided by the lease agreement between tenant and landowner 32 percent of the time; the tenant received all of it 30 percent of the time; and the hay crop was not mentioned in the lease 37 percent of the time. If the hay crop was divided, the tenant usually bought the landlord's share.

Livestock were a part of the leases only seven percent of the time. Sixty-five percent of the leases either did not have any rangeland or did not charge for its use. Eighteen percent charged a cash payment, and 14 percent charged some other type of payment for the use of the rangeland.

The landowner paid the real estate taxes in 70 percent of the lease agreements. There were an additional six percent of the leases in which the tenant paid part or all the taxes for the use of the rangeland; eight percent of the leases were with the Bureau of Land Management.

Buildings were not present on 52 percent of the leased farms; however, when they were, a barn, shop, and home combination were most common.

All costs for cropweed spray were handled by the tenant 73 percent of the time, shared by the landowner and tenant 16 percent of the time, and either not mentioned or a rangeland lease was involved 11 percent of the time. The costs for fertilizer, however, were handled by the tenant in 37 percent of the leases, shared by the

landowner and tenant 56 percent of the time, and either not mentioned or a rangeland lease was involved seven percent of the time.

Conclusions

The 1/3-2/3 crop-share lease is the most common in Sherman County. Fairness of this lease cannot be determined because a more detailed cost of production study by area would need to be made. The popularity of this type lease could be due to either custom and tradition or because the landowners and tenants are satisfied with its provisions. The 40-60 crop-share lease is more prevalent in the more productive areas of the county. This supports rent theory which states that there will be a higher rent on the more productive land. With the 40-60 lease, the landowners receives a larger percent of the crop than with the 1/3-2/3 crop-share lease. Regardless of the rental terms of the crop-share lease, the landowner's share will be a reflection of the quality of land he owns.

Lease agreements should have the flexibility to incorporate new technology that has been proven to be beneficial. This may result in some of the increased variable costs being shared between the landowner and tenant where previously they have been handled entirely by the tenant. An example of this is some of the new sprays farmers can use for broadleaf weed control. These new sprays are more costly than the current one being used, which is 2,4-D. The

costs per acre for some of the new chemicals are as follows:

Costs Per Acre for Selected Herbicides

Herbicide	Cost/Acre	Amount of Chemical/acre
2, 4-D	\$0.75	3/4 lb.
Igram	4.70	1-1/2 lb.
Bronate-Banvel	\$3.78 + 0.24 = 4.02	1-1/2 pt. Bronate; 10 oz. Banvel
Lorox-Bromoxynil	\$1.58 + 2.19 = 3.77	1-1/2 # Lorox; 1 pt. Bromoxynil

Applying these chemicals by airplane is also more costly.

The cost for 2, 4-D is \$1.25 per acre whereas the cost for the new chemicals is \$2.00 per acre.

Ranchers are using the new herbicides where dictated by their special weed problems. It is a practice that is being widely adopted. The economic reasons for the sharing of costs were discussed in Chapter II. Currently, a few crop-share leases state that the expense for these new chemicals will be shared on the same basis as the division of the crop. These leases also state that if 2, 4-D is used as a chemical, the cost is to be born entirely by the tenant. Perhaps, because of the increased expense of these new chemicals, more leases will include the sharing of their costs. The change being from that of the tenant handling the entire cost to the sharing of the

chemical cost by the tenant and landlord in the same proportion as the crop is shared.

Landowners and tenants with verbal agreements should consider changing them to written leases. The majority of the verbal agreements are between landlords and tenants who are, in some way, related, with the majority of the landlords being father-mother. Verbal agreements in these situations may be satisfactory most of the time, but it is here perhaps that a written lease is most important. Being related does not mean that situations will not arise where definite lease terms will need to be known; for example, in case of the death of either party.

Leasing of farm land in Sherman County has been an important part of its agricultural scene for over 60 years and this continues to be true. Forty-two out of 43 tenants who have leased land say it has been a satisfactory experience for them.

BIBLIOGRAPHY

1. Ackerman, Joseph. Family farm problems and policies. In: Land problems and policies, ed. by John F. Timmons and William G. Murray. Ames, Iowa State College, 1950. p. 205-217.
2. Barlowe, Raleigh. Land resource economics. Englewood Cliffs, New Jersey, Prentice-Hall, 1958. 585 p.
3. Berry, Russell L. Cost sharing as a means of improving the share rent lease. *Journal Farm Economics* 44:796-807 August 1962.
4. Bray, James O. Farm tenancy and productivity in agriculture: The case of the United States. *Food Research Institute Studies, Stanford University* 4:25-38 February 1963.
5. Castle, Emery and Manning Becker. Farm business management...the decision making process. New York, MacMillan, 1962. 423 p.
6. Castle, Emery. Some aspects of the crop-share lease. *Land Economics* 28:177-179. May 1952.
7. Grant, W. R., R. E. Amarel, Jr., and S. S. Johnson. Leasing on California rice farms. Davis, 1971. 36 p. (University of California Agricultural Extension Service. Agricultural Experiment Station. Giannini Foundation of Agricultural Economics. No. 71-2).
8. Harmon, Marie B. and Marshall Harris. Your farm lease checklist. Washington, D.C. 1961. 11 p. (U.S. Dept. of Agriculture. Farmers Bulletin No. 2163)
9. Harris, Marshall. Your crop-share-cash farm lease. Washington, D. C. 1961. 16 p. (U. S. Dept. of Agriculture. Miscellaneous Publication No. 838)
10. _____ Your farm renting problem. Washington, D. C. 1961. 16 p. (U.S. Department of Agriculture. Farmers Bulletin No. 2161)

11. Harris, Marshall. Your livestock-share farm lease. Washington, D. C. 1961. 16 p. (U.S. Dept. of Agriculture. Miscellaneous Publication No. 837)
12. Harris, Marshall and Howard L. Hill. Your farm lease contract. Washington, D. C. 1961. 20 p. (U.S. Dept. of Agriculture. Farmers Bulletin No. 2164)
13. Harris, Marshall and Virgil Hurlburt. Your farm rent determination problem. Washington, D. C. 1961. 23 p. (U.S. Dept. of Agriculture. Farmers Bulletin No. 2162)
14. Harwell, R. Lynn and P. Leo Strickland. Is the crop-share lease inefficient? Oklahoma Current Farm Economics 43(4): 9-17. Dec. 1970.
15. Heady, Earl O. Economics of farm leasing systems. Journal of Farm Economics 29:659-678. August 1947.
16. Henderson, Philip A. Is your lease fair? 10 p. (University of Nebraska. College of Agriculture and Home Economics. Extension Service. North Central Regional Extension Publication No. 9) (EC 70-814)
17. Johnson, Bruce B. The farmland rental market - a case analysis of selected corn belt areas. East Lansing, 1972. 54 p. (U.S. Dept. of Agriculture. Economic Research Service. Farm Production Economics Division. Agriculture Economics Report No. 235)
18. Johnson, D. Gale. Resource allocation under share contracts. Journal of Political Economics. 58:111-123 April 1950.
19. Oregon Compiled Laws Annotated. Volume 1. Civil procedure 1-101-8-193. San Francisco, Bancroft-Whitney 1940. 818 p.
20. Oregon Revised Statutes (1953), chapter 91, article 91.060 as amended in 1971, Landlord and tenant; unit ownership.
21. Reed, A. D. and T. H. Snyder. What you should know about farm leases. Davis, 1973. 6 p. (California Agricultural Experiment Station. Extension Service. Circular No. 491. Rev.)

22. Reiss, F. J. Farm leases for Illinois. Urbana, 1972. 67 p. (University of Illinois at Urbana - Champaign. College of Agriculture. Cooperative Extension Service. Circular No. 960 Rev.)
23. _____ What is a fair crop-share lease for your farm? Urbana, 1965. 27 p. (University of Illinois. College of Agriculture. Cooperative Extension Service. Circular No. 912)
24. Ricardo, David. The principles of political economy and taxation. London, T. M. Dent & Sons, 1912. 300 p. (cited in: Barlowe, Raleigh. Land resource economics. Englewood Cliffs, New Jersey, Prentice-Hall, 1958. p. 152)
25. Sherman County Court and Sherman County Club. Sherman County, Oregon; a land of wheat. Moro, Oregon, 1959. (Foldout pamphlet)

APPENDICES

EXHIBIT A

Dear

I am working on a thesis project for a M.S. Degree in Agricultural Economics at Oregon State University. The topic of my research project is: "A Study of Crop Share Leases on Wheat Farms in Three Differentiated Areas of Sherman County, Oregon. "

The objectives of the research project are:

- I. To determine existing crop-share lease terms in three differentiated areas of Sherman County.
- II. To compare existing crop-share lease terms in three differentiated areas of Sherman County.

I certainly appreciate any help which you can give me with this research project. The information you give will remain confidential. As you may note, the questionnaire forms have no place for one's name. This is intentional, so that a name is not put on them.

Sincerely,

Gordon Cook

EXHIBIT B

GENERAL FARM QUESTIONNAIRE

Location of ranch headquarters	North.....	_____	
	Middle.....	_____	
	South	_____	
Approximate distance in miles to each parcel farmed		_____	

Number of individuals employed on farm full time		_____	
Number of additional people employed		_____	
Sum of number of months additional people employed		_____	
How is farm organized	Partnership.....	_____	
(Answer the question where more than one	Corporation	_____	
family is involved)	Wages	_____	
	Other (specify)	_____	
Ages of the farm operators		_____	
Total number of acres in farm		_____	
Of land farmed, total number of acres in:	Farmland	_____	
	Range	_____	
	Unusable	_____	
Total number of acres:	Owned.....	_____	
(include land both in and out of	Leased	_____	
Sherman County)	Custom Farmed	_____	
	Other (specify)	_____	
Of the land owned, number of acres in:	Farmland	_____	
	Range	_____	
	Unusable	_____	
How many different leases do you have?		_____	
			1972 1973
Acres of land used for:	Wheat	_____	_____
	Barley	_____	_____
	Summer Fallow	_____	_____
	Set Aside	_____	_____
Do you have livestock on your ranch?		_____	
If so, what kind		_____	
How many		_____	
(i. e. number of cows		_____	
number of hogs marketed per year		_____	
Are these livestock a part of any of your leases?.....		_____	
(if so, include this information on form 2 rather than here)			

When in the production process do you sell your livestock? _____

Do you desire to farm additional acreage? _____

Can you farm additional cropland acreage with present equipment? _____

Can you farm additional cropland acreage with present labor? _____

How many more acres could you farm with present equipment? _____
 (Assume 50% Summer fallow)

How many more acres could you farm with present labor? _____

Has leasing of farm land been a satisfactory arrangement for you?..... _____

Do you desire to purchase additional land at present day prices? _____

Do you desire to lease additional farm land? _____

How many acres? _____

Would you rather: .Lease?..... _____

or

Buy? _____

to increase your farm size.

Form 2

EXHIBIT C

QUESTIONNAIRE FOR LEASED OR CUSTOM FARMED LAND

(use one questionnaire for each different agreement or different landlord for leasing, or custom farming)

Location in county North
Middle.....
South

Is this parcel: Leased?

Type of lease:

	crop-	range-
	land	land

60-40
 2/3 - 1/3
 50-50
 Cash
 Other (specify)
 Custom farmed

Total acres
 Farm land
 Range land
 Unusable

Items provided by tenants and landlord (list percentage for each, specify where necessary)

If custom farmed, include rate for each item; cash leased, if specific rate.

<u>ITEM</u>	<u>TENNANT</u>	<u>LANDLORD</u>
Land	<u> </u>	<u> </u>
Labor	<u> </u>	<u> </u>
Permanent fence		
a. Construction of new permanent fences	<u> </u>	<u> </u>
b. Maintenance of existing fences	<u> </u>	<u> </u>
Weed control spray	<u> </u>	<u> </u>
Fertilizer	<u> </u>	<u> </u>
Seed	<u> </u>	<u> </u>
Real estate taxes	<u> </u>	<u> </u>
Personal property taxes	<u> </u>	<u> </u>
Farm equipment		
a. Maintenance and repairs	<u> </u>	<u> </u>
b. Fuel and oil	<u> </u>	<u> </u>
Farm buildings		
a. House	<u> </u>	<u> </u>
b. Other	<u> </u>	<u> </u>
Insurance		
a. Buildings	<u> </u>	<u> </u>
b. Crop	<u> </u>	<u> </u>
Other	<u> </u>	<u> </u>

Relationship of landlord and tennant: Father, Mother _____
 Brother, Sister _____
 Uncle, Aunt,
 1st Cousin..... _____
 Grandparents _____
 Other Relatives _____
 No Relation _____

Does the landlord live in Sherman County? _____
 in Oregon? _____

Occupation of landlord
 (if more than one person involved, use occupation of one you mainly deal with). _____

How many times per year does your landlord visit the farm? _____

Is this lease written? _____
 if so, for what period of time?..... _____

If this lease is not written, is it verbal? _____
 if so, for what period of time? _____

Is this lease renewable? _____
 How? (specify) _____

How long has this property been leased by your family? _____

How long have you had this present lease? _____

Are livestock part of this lease? _____

What are the provisions for livestock? _____
 Who furnishes what? _____

Is a usable house included in this leased property? _____

What has been furnished by the landlord in the past in terms of repairs
 and upkeep for the house? _____

Do you prefer having a house included in a lease? _____
 Would you prefer renting? _____ Owning? _____

How are the receipts divided (percent)	TENNANT	LANDLORD
Wheat.....	_____	_____
Barley	_____	_____
Certificates	_____	_____
Livestock.....	_____	_____
Pasture	_____	_____
Hay.....	_____	_____
Other	_____	_____

Who decides when to sell: Wheat _____
 Barley _____
 Livestock _____
 Other _____

Is storage of the crop a part of this lease? (specify) _____

Has the landlord expressed any apprehension about your leasing or farming additional land?

Who makes capitol improvements to ranch? How is cost divided? (buildings other than house)

	<u>TENNANT</u>	<u>LANDLORD</u>
Building repair	_____	_____
major (new roof, remodeling)	_____	_____
minor (painting)	_____	_____
well	_____	_____
crop conserving practices	_____	_____
other (specify)	_____	_____

Are there any provisions in the lease for capitol improvements shared or handled entirely by the tennant?
 if yes, specify arrangements for deposition of value

Does the lease include any requirements for soil conserving practices?
 specify

Does the lease include any requirements for weed control?
 specify

Does the lease include any discussion of what cropping practices are to be followed?
 if so, what

Are there any agreed upon terms of action if either party to this lease dies?
 specify

How can this lease be terminated?

Are there any agreed upon ways of arbitrating differences of opinion concerning terms of the lease?
 if so, what

Are there any provisions for negotiating or reviewing terms of the lease without it being terminated?
 Specify

Are there any other terms in this lease that have not been covered by this questionnaire?
 If so, what are they?

What, if anything would you like to change in this present lease?