



State land management in Montana
by Henry T Murray

A THESIS Submitted to the Graduate Committee in partial fulfillment of the requirements for the degree of Master of Science in Agricultural Economics
Montana State University
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Abstract:

The State of Montana possesses over 5,000,000 acres of land granted to It by the Federal Government, The Income from this grant goes, In a large part, to the oosanon schools of the State, yet contributes only 11.8 per cent of the funds necessary to maintain these schools.

The year 1933 la noteworthy In the history of state lands of Montana. During the Legislative Assembly of that year, all gracing rentals were reduced at least 50 per cent, the minimum rate removed and a maximum rate substituted for it. Acreage leased increased from 57 per cent for the previous eight year average to 71 per cent for the subsequent eight years. The average rate per acre dropped from a 12.4 cent average to a 7.1 cent average, with a consequent average lose in revenue of 23 per cent.

Of the five counties studied, Chouteau, Custer, Fergus, Phillips, Valley, approximately 62 per cent of the possible revenue from gracing lands were actually collected, 6 1/4 per cent was lost through failure to collect, while 31 3/4 Per cent was lost through failure to lease. As measured on the basis of what the lands were actually capable of producing when judged by soil survey productivity, farm management studies, and historical yields, it is found that present rental rates are below what they should be to be in keeping with the provisions of the grant. This conclusion is also borne out when rentals are compared with those obtained by other agencies.

An average of only 83 per cent of the agricultural lands in these counties produced any revenue whatever during the period, 1931-40 inclusive, while the average return per acre was only 28 cents for the farm land actually producing rental.

A little more than three per cent of the leases control a little more than 31 per cent of all state lands under lease. This may be considered an Indlcbesnt of the present competitive system. However, it is found that competitive bidding plays a very minor part in the distribution of state land leases. Of a total of more than 10,000 leases examined in the State Lend Office, less than seven per cent had been let through competition.

Mhile gracing districts have much to offer in the matter of conservation of resources, they have not only obtained state land leases at rental rates below their value, but at rates so low that the very purpose of these land grants is apt to be defeated.

This study indicates that a careful Inventory of all lands should be made so as to determine the acreage of each class of land. Following this a policy making committee, appointed by the governor, could formulate a sound policy for the future administration of state lands.

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Chairman, Graduate Committee

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Map of Montana showing counties and major cities:

- Counties:** Lincoln, Glacier, Toole, Liberty, Hill, Blaine, Phillips, Valley, Daniels, Sheridan, Flathead, Pondera, Chouteau, Teton, Choteau, Fort Benton, Blaine, Phillips, Valley, Daniels, Sheridan, Roosevelt, Wolf Point, Richland, Sidney, McCone, Circle, Dawson, Glendive, Wibaux, Garfield, Jordan, Prairie, Terry, Wibaux, Custer, Miles City, Baker, Fallon, Ekalaka, Carter, Powder River, Broadus, Big Horn, Carbon, Red Lodge, Park, Livingston, Madison, Virginia City, Beaverhead, Dillon, Jefferson, Gallatin, Bozeman, Sweet Grass, Big Timber, Stillwater, Columbus, Hardin, Treasure, Rosebud, Forsyth, Hysham, Musselshell, Roundup, Golden Valley, Ryegate, Harlowton, Wheatland, Meagher, White Sulphur Springs, Helena, Boulder, Broadwater, Granite, Philipsburg, Deer Lodge, Anaconda, Ravalli, Hamilton, Mineral, Superior, Thompson Falls, Polson, Kalispell, Libby.
- Shaded Counties:** Chouteau, Teton, Yellowstone, Custer, Glacier.
- Indian Reservations:** Flathead, Sanders, Blackfoot.

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ABSTRACT

The State of Montana possesses over 5,000,000 acres of land granted to it by the Federal Government. The income from this grant goes, in a large part, to the common schools of the State, yet contributes only 11.8 per cent of the funds necessary to maintain these schools.

The year 1933 is noteworthy in the history of state lands of Montana. During the Legislative Assembly of that year, all grazing rentals were reduced at least 50 per cent, the minimum rate removed and a maximum rate substituted for it. Acreage leased increased from 57 per cent for the previous eight year average to 71 per cent for the subsequent eight years. The average rate per acre dropped from a 12.4 cent average to a 7.1 cent average, with a consequent average loss in revenue of 23 per cent.

Of the five counties studied, Chouteau, Custer, Fergus, Phillips, and Valley, approximately 62 per cent of the possible revenue from grazing lands were actually collected, 6 1/4 per cent was lost through failure to collect, while 31 3/4 per cent was lost through failure to lease. As measured on the basis of what the lands were actually capable of producing when judged by soil survey productivity, farm management studies, and historical yields, it is found that present rental rates are below what they should be to be in keeping with the provisions of the grant. This conclusion is also borne out when rentals are compared with those obtained by other agencies.

An average of only 83 per cent of the agricultural lands in these counties produced any revenue whatever during the period, 1931-40 inclusive, while the average return per acre was only 28 cents for the farm land actually producing rental.

A little more than three per cent of the leases control a little more than 31 per cent of all state lands under lease. This may be considered an indictment of the present competitive system. However, it is found that competitive bidding plays a very minor part in the distribution of state land leases. Of a total of more than 10,000 leases examined in the State Land Office, less than seven per cent had been let through competition.

While grazing districts have much to offer in the matter of conservation of resources, they have not only obtained state land leases at rental rates below their value, but at rates so low that the very purpose of these land grants is apt to be defeated.

This study indicates that a careful inventory of all lands should be made so as to determine the acreage of each class of land. Following this a policy making committee, appointed by the governor, could formulate a sound policy for the future administration of state lands.

PART I. PROBLEM AND PURPOSE OF STUDY

The Problem

When Montana was admitted to the union as a State in 1889, more than 5,000,000 1/ acres of land were reserved by the Federal government to the State for the support of public education. Additional grants were subsequently made for various purposes while certain tracts were sold. In many cases the land that was sold has reverted to the State through failure of the purchasers to meet their purchase contracts.

During the years 1916 to 1924, school funds were invested in farm mortgages. Of the 2,363 loans that were made on more than 800,000 acres of land, only about twenty per cent have ever been repaid. While some of these loans have been refinanced and are still outstanding, the State has taken title to more than 450,000 acres of mortgage lands by reason of defaulted mortgage contracts. Consequently, the State, after little more than half a century, still has more than 5,500,000 acres of land to be administered. 2/

The administration of this land grant, which in a large part belongs to the school children of the State, presents a problem deserving of the most careful consideration by all its citizens. The problem of the administration of these lands may be likened unto a two edged sword; on the one hand we have the school interests, on the other we have the livestock and farming interests. Unless this extensive acreage is fairly and impartially administered injustices may result. If any group insists upon rentals that

1/ 5,856,720 acres, Appendix 1.

2/ 5,536,631.23 acres, June 30, 1940.

are too high, the stockman or farmer will be injured or the land will remain unleased. Likewise, if the stockman takes undue advantage, much income will be lost to the school children of the State. However, there must be some middle ground upon which these lands may be managed with maximum benefits to all concerned. Any attempt to find a solution to the problem of state land management in Montana, which seeks the greatest possible revenue from these lands without regard to the welfare of the stockman and farmer, is fore-doomed to failure. Likewise, any attempt to secure the use of these lands without a fair and just recompense to the school children of the State deserves the same fate.

If the schools of the State are to receive revenue from these lands, it is evident that all lands must be, not only offered for lease, but kept leased at prices which the lessees can afford to pay.

Purpose of Study

The purpose of this thesis is to determine, if possible, the answers to the following questions:

- 1.- What are the present and potential contributions of the state lands of Montana to the school funds of the State?
- 2.- Are the returns from the rental of state lands comparable to the rental of like lands similarly situated in the same locality?
- 3.- If not comparable, which rental value is to be used? In other words, what are the reasonable rental values of state land? 3/

3/ "What is this land worth to an average farmer in its present condition, for a line of production common to the community, if the products are sold at average prices prevailing in the years 1909-14 with such adjustments

- 4.- Are state lands being so administered "as to secure the largest measure of legitimate and reasonable advantage to the state"? 4/
- 5.- Do the users of state lands secure an unfair advantage over the non-users of these lands?

PART II. HISTORICAL ASPECTS OF STUDY

Land Grants To The State

Montana acquired this vast heritage of public lands through the "Enabling Act" approved February 22, 1889. This act passed by Congress provided for the admission of North and South Dakota, Montana and Washington to the Union of States and provided that upon admission

"sections 16 and 36 in every township" --- "and where such sections, or any parts thereof, have been sold or otherwise disposed of, by or under authority of any act of Congress, other lands equivalent thereto, in legal subdivisions of not less than $\frac{1}{4}$ section, and as contiguous as may be to the section in lieu of which the same is taken, are hereby granted to said states for the support of common schools." 5/

All legal provisions have been made to safeguard the interests of the schools in the matter of administration and disposal of these lands. They

as are necessary to allow for the changes in economic position of certain crops, or livestock"? Gaddis, P. L. Appraisal Methods of Federal Land Banks, Journal Farm Economics, Vol. 17, 1935, p. 469.

4/ "The guiding rule and principle shall be that these lands and funds are held in trust for the support of education, and for the attainment of other worthy objects helpful to the well being of the people of the state; and it is the duty of the board (State Land Board) to so administer this trust as to secure the largest measure of legitimate and reasonable advantage to the state". Revised Codes of Montana 1935, Chapter 160, Sec. 1805.3.

5/ (25 Statute 676) United States Congress, February 22, 1889.

can only be disposed of after having been advertised and must be sold at public sale. Provision is also made so that lands capable of producing an agricultural crop cannot be sold for less than \$10.00 per acre and lands principally valuable for grazing cannot be sold for less than \$5.00 per acre. The Enabling Act also provides that no lands could be leased for a longer period than five years nor in tracts larger than 640 acres to any one person.

Not only were specific provisions made for the administration of the lands but also for the funds derived therefrom. 6/

Department Of State Lands And Investments

Legal provision was made for administration of all school lands of the state, and for lands, which may hereafter be granted for the support and benefit of the various state educational institutions by providing for a state land board composed of the governor, superintendent of public instruction, secretary of state and the attorney-general. 7/

The department so created, was to be known as the "Department of State Lands and Investments", the purpose of which "shall be to administer the federal land grants made to the state of Montana, and the other state

6/ "With the exception of lands granted for public buildings the proceeds shall constitute permanent funds for the support and maintenance of public schools and various state institutions for which the lands have been granted."

"Rentals of leased lands, interest on deferred payments on lands sold, interest on funds arising from these lands and all other actual income shall be available for the maintenance and support of such schools and institutions". -- Enabling Act, Section 11.

7/ Chapter 157, Section 1801.5, Political Code.

lands, and the funds arising from these lands." 8/ The membership of state land board as listed above, was to be the governing body and would be known as the "State Board of Land Commissioners." They were invested with rather broad powers in the administration of all lands under their jurisdiction; and the code provides

"The guiding rule and principle shall be that these lands and funds are held in trust for the support of education, and for the attainment of other worthy objects helpful to the well being of the people of this state; and it is the duty of the board to so administer this trust as to secure the largest measure of legitimate and reasonable advantage to the state." 9/

The legislature then made provision 10/ for the governor to appoint

"by and with the consent of the State Board of Land Commissioners, a state Land Agent, who is authorized and empowered, and whose duty it shall be, to select, subject to such rules and regulations as may be prescribed by the Secretary of the Interior, and cause same to be conveyed to the State of Montana, all school and indemnity lands, and all public lands, donated to the State by the United States for the various public buildings and institutions, by virtue of the Act of Congress of February 22, 1889".

The State Land Agent 11/ was charged with the responsibility of selecting his assistants and office personnel and was given authority to prescribe rules and regulations for the conduct of the office. Later as the duties of the department became heavier, the position of State Forester 12/

8/ Ibid.

9/ Ibid, Sec. 1805.3.

10/ Ibid, Sec. 1805.5.

11/ Revised Codes of Montana 1935, Chapt. 158, Sec. 1805.7

12/ Ibid, Sec. 1805.6.

was created whose duty it was to work under the direction of the board in all matters pertaining to the state forests.

Provision had been made by the constitution 13/ for the classification of all state lands by the board of land commissioners as follows:

First, lands which were valuable only for grazing purposes.

Second, those which are principally valuable for the timber which is on them.

Third, agricultural lands.

Fourth, lands within the limits of any town or city or within three miles of such limits; provided, that any of said lands may be reclassified whenever, by reason of increased facilities for irrigation or otherwise, they shall be subject to a different classification.

Montana codes 14/ further expanded upon this classification and provided that the third class; i. e., agricultural lands, should be subdivided into two sub-classes (a) irrigable lands, and (b) non-irrigable lands, and that the fourth class should be sub-divided into (a) lands within the limits of any city or town, and (b) lands not within such limits, but within three miles thereof.

The second session of the legislative assembly (1891) made provision for the leasing of any lands granted to the state. 15/ This assembly also

12/ Ibid, Sec. 1805.6.

13/ Constitution of Montana, Art. XVII, Sec. 1.

14/ Revised Codes of Montana, 1935, Chapt. 159, Sec. 1805.16.

15/ "The State Board of Land Commissioners shall have the power to lease the lands of the State at a rate not less than five per cent per annum (payable in advance) on the appraised value of the same, and shall

enacted a rather stringent trespass law providing punishment by fine of not less than \$25.00 and not exceeding \$1,000.00 for any person who "shall commit trespass or other injury to the lands of the State, or upon any of the improvements thereon." 16/

Upon Granville Stuart, first State Land Agent, fell the responsibility of selecting a large part of the lands not specifically designated as to location; and also of selecting lands in lieu of those portions of 16 and 36 already acquired by other agencies. A major part of the selections were made on horse-back, about the only means of conveyance available at that time, and the greater part of his tenure of office was spent in an effort to make the best possible selections before any further withdrawals by incoming settlers. Many days were spent in the saddle and the task was accomplished, not without considerable difficulties. All of this work was done with a minimum of expense to the State. 17/

The "system of appraisement" became a matter of contention rather early in the history of the management of state lands. According to Granville Stuart 18/ the problem of appraisal was very much the same at that

require of the lessee such a bond as shall secure the state from loss or waste; and in no case shall the lessee be allowed to cut or waste more timber than shall be necessary for the improvements on the land or for fuel for the use of the family of the lessee." -- Section 39. Session Laws of Montana 1891.

16/ Ibid, Section 32.

17/ Granville Stuart reports; "I have economized in every way possible in the matter of expenses. For the 20 1/2 months service my bills have cost the State \$1,215.72."

18/ Second Annual Report of the State Land Agent.

time as it is today; "expensive in its execution and unsatisfactory in its results."

PART III. METHODOLOGY

Limitation of Study

State land holdings are extensive and widespread. Neither time nor money is available for a study of the management of these lands in their entirety. It was necessary, therefore, to delimit the field of study. A wide diversity of problems dealing with grazing, farming, mineral, timber, oil, gas and water power is encountered in dealing with state lands. Because the leasing of agricultural and grazing lands accounts for over eighty per cent of the revenue from the state lands and because data available at the Montana Agricultural Experiment Station facilitate the study of problems encountered in managing the agricultural and grazing lands, this study is confined to them.

Source Of Data

As past returns were to be compared with the potential returns according to the soil survey ^{19/} and farm management studies of the Montana Agricultural Experiment Station, it was necessary to confine the study to that part of the State for which the soil classification records were available. Chouteau, Custer, Fergus, Phillips, and Valley counties were

^{19/} Made by the Agronomy Department of the Montana Agricultural Experiment Station in cooperation with the Soil Survey Division of the United States Bureau of Chemistry and Soils.

selected to get the most representative sample possible from that area. None of the counties selected presented any peculiarities that could in any way be regarded as unusual for the region. Grazing and farming conditions are typical. As nothing was known regarding the management features of any of the state lands in these counties, their selection was absolutely impartial.

In order to obtain a historical background, primary data were secured from the files of the Commissioner of State Lands and Investments for the period from 1931 through 1940. ^{20/} The soil survey data and the results of farm management studies were used to show the probable earning power of these lands over a long period.

Application of Data

The value of agricultural land is influenced by a great many factors. Actual sales are often considered the best criterion on which to base valuation. Location, too, is sometimes used and adherents of this philosophy point out that what may be identical tracts of land, as far as physical capacity to produce is concerned, may be almost worthless in a desert, but worth millions in the loop district of Chicago. Topography and availability of water supply are no doubt factors to be considered in evaluating land either for farming or grazing. Distance from school and church, as well as

^{20/} Data obtained included: legal description of each tract, acreage, lease or certificate of purchase number, date of lease, lessor's name, address and tract history. Additional information on mortgage lands included: mortgagor's name and address, amount of original loan, original appraisal of land and improvements, present appraisal when available, record of payments made and leasing receipts, date upon which State acquired title, and present book value of the property.

distance and condition of roads over which one must travel to reach the market cannot be ignored. But in the final analysis, it is the physical productivity of agricultural and grazing land that determines whether it has any sale value and whether one would be justified in using it at any price. Productivity is the most important factor influencing the value of agricultural land according to many authorities. 21/

The Federal Land Banks were perhaps the first agencies to call attention to the matter of productivity or earning power as a basis of evaluation. 22/ Soil is the principal factor in determining the physical productivity. 23/ Each soil type has quite definite, determinable possibilities for the growth of crops, grasses and forests. Through the long accumulation of data and experience by research workers and farmers on soil types, there is no lack of definite information on which to base conclusions. 24/

21/ Hammar, Dr. C. H., Factors Affecting Farm Values in Missouri. Missouri Bulletin No. 229. Meldrum, W. G. and Meldrum, H. R., A Production Method of Valuing Land. Iowa Bulletin No. 326.

22/ "In making such appraisal, the value of the land for agricultural purposes shall be the basis of appraisal and the earning power of said land shall be the principal factor." -- Federal Farm Loan Act of 1916.

23/ "In a rational, fundamental, and comparative classification of land on a productivity basis the inherent natural capacity of the land for plant production must be the chief consideration. Data for such classification cannot be obtained from statistics of productivity, since these merely express the results arising from a number of factors of which natural capacity of the land is one only. Of the three factors in the concept of land, climate and relief are mainly concerned with other matters than productivity; the only other factor, therefore, is soil, and the burden of productivity must be borne by it." -- Marbut, C. F. Soil Survey is a Necessary Basis of Land Classification. U. S. D. A. Yearbook, 1934.

24/ Kellog, C. E., Soil Survey Provides Data For Classification. U. S. D. A. Yearbook, 1935.

"Qualified soils men are able to judge the inherent crop-producing capacity of soils from the character of soil profiles and to list the soils in the order of their capacity to produce crops. Fertility, friability, ease of working, amount of stones and gravel, topography, tendency to erode, and drainage are among the factors that affect soil productivity. In semi-arid areas such as Montana, moisture is usually the limiting factor in crop production. Hence, ability of soil to absorb and to utilize available precipitation for plant growth is probably more important than any other factor." ^{25/}

Renne and Lord ^{26/} contend that "productivity value" is more satisfactory than "sales value" as a means of evaluating land for the following reasons: (1) the value may be more readily determined by means of a scientific soil survey and land classification supplemented with other productivity data and with farm price and cost data now available; (2) it may be more scientifically adjusted to changes in the earning capacity of the land which might result from long-time changes in price levels or changes in production due to drouth, insect pests or other factors.

They further show that without some accurate scale by which to gauge the value, poor lands tend to be over-valued and good lands to be under-valued. According to our present laws, Montana lands are supposed to be assessed at their full cash value; which means, what they would bring at a voluntary sale. The assessment figures, therefore, afford some indication as to the discrepancies in land valuation. In a study of 5,000 farms ^{27/}

^{25/} Standards and Procedure for Classification and Valuation of Land for Assessment Purposes, H. H. Lord, S. W. Voelker, and L. F. Giesecker. 1942 Unpublished manuscript, Montana Agricultural Experiment Station.

^{26/} Renne, R. R. and Lord, H. H., Assessment of Montana Farm Lands, Montana Bulletin 348, October 1937.

^{27/} Ibid. See also, Engleborn, Albert S., Assist. Land Planning Specialist, Iowa, Land Use Planning Publication No. 8.

it was found that some individuals were being assessed 25 times too much and others 10 times too little.

The need of a more scientific valuation of land is apparent. Accordingly, the productivity of the soil is regarded, for the purpose of this study, as the basic factor upon which valuations are determined. That productivity is translated into monetary units by multiplying the known long-time sustained yields of grazing and crop land by the long-time average price for the product of these lands. All lands, then, must first be classified and graded according to productivity before valuations are applied.

Procedure In Classification And Grading

The classification and grading of land includes three distinct steps:

- (1) Classification according to use capabilities; i. e., farming, grazing, forest, recreation.
- (2) Grading of land within each use classification according to relative productivity.
- (3) Determination of per acre value of different grades within the farming and grading classification.

Classification According To Use

The first step in classification is to determine the use for which the land is best suited. This step is relatively simple where physical factors definitely eliminate certain uses. Some land is so rough or the soil is so gravelly that cultivated crop production need not be considered. On the other hand, where economic factors such as: production techniques, costs, inter-regional competition, and prices must also be considered, the problem becomes more complicated. There is a vast acreage in semi-arid regions,

such as we are studying, that might be properly classified as farm land from the standpoint of topography and soil type. Productivity on this land is low and it has few crop alternatives as a result of low precipitation. Its use classification is therefore largely dependent upon the price of the principal crop -- wheat.

Under present costs and methods of production, one dollar per bushel for wheat would place large areas of this land in the farming classification, but 50 cent wheat would cause much of it to be definitely submarginal for wheat production.

Grading Land According To Productivity

This step consists of determining the productivity of different kinds of land within a use classification. Lands with various yields of any given crop; wheat for example, may be conveniently grouped into grades denoting definite ranges in productivity. If the actual productivity can be ascertained with a high degree of certainty, the range in yield for each grade can be quite narrow, but if actual yields are uncertain because of various hazards, a range allowing for more variation is more fitting. However, if small differences in productivity have considerable economic significance, it is expedient to express productivity in exact terms even though they be somewhat uncertain.

Value Of Historical Yield Data

A recognition of the value of historical yields has become more apparent since the inception of the Agricultural Adjustment Administration program. It is recognized that yields may reflect intensity of cultivation

and management factors rather than the productivity of the soil. Inherent productivity of the land rather than differences in management must be the basis of grading. Each soil type must be translated into a grade which is based on the ability of the soil to produce crops before a soil survey can be used as a basis of valuation. Opinions of local farmers, historical yields, as well as the judgement of experienced soils men, are used in this translation. While historical yields are helpful in predicting future yields, an average of past performances is by no means an infallible indication of what will occur in the future. ^{29/} Land classification maps, based on these surveys, have been prepared for twenty-five counties in the Great Plains region of the State. These maps classify dry farm land into four grades and grazing land into five grades. Since wheat is the most important crop on dry farming lands (90 per cent of Montana's dry farm lands being used in wheat production) average wheat yields provide a convenient and generally acceptable basis for grading such land.

Graded as to yield of spring wheat on summer fallow, we have:

First grade. . . .	19 bushels and over, per acre	\$1.80
Second grade . . .	16 to 19 bushels, per acre	1.06
Third grade. . . .	13 to 16 bushels, per acre	.24 ^{30/}

Fourth grade production shows no economic rent as farm land and was therefore called third grade grazing land.

Grazing areas are graded as to the acres required for a 1,000 pound steer for a ten month grazing period.

^{29/} Ibid.

^{30/} For a method of computation see Appendix ii.

First grade. . . .	18 acres or less, per acre	\$.18
Second grade . . .	19 to 27 acres, per acre	.12
Third grade. . . .	28 to 37 acres, per acre	.09
Fourth grade . . .	38 to 55 acres, per acre	.07
Fifth grade. . . .	56 acres and over, per acre	.04 <u>31/</u>

The survey from which these grades were established is known as the reconnaissance soil survey. Since this is taken at two mile intervals, there are some objections to it as a basis upon which to establish land valuations. On a county-wide basis it would average out and approximate closely a more detailed survey. However, when soil is classified according to the predominating grade, it is entirely conceivable that the soil on any given tract might be better or poorer than would be indicated at two mile intervals.

PART IV. IMPORTANCE OF STATE LANDS AS SOURCE OF REVENUE

Table I shows the annual contribution of state lands to the common school funds expressed both as a total sum and as a percentage of total school revenue.

Only 11.8 per cent of the funds actually used to conduct the common public schools of the State is derived from a total of over 4,500,000 acres. In 1940, the returns from both agricultural and grazing lands amounted to an average of 9.5 cents per acre.

31/ For a method of computation see Saunderson, M. H., Some materials Relating to Livestock and Land Valuation, Mimeographed circular, Department of Agricultural Economics, Montana Agricultural Experiment Station.

TABLE I.--IMPORTANCE OF STATE LANDS AS SOURCE OF REVENUE TO
COMMON SCHOOLS OF MONTANA, 1931 - 1940 INCLUSIVE ^{32/}

Year	Revenue from General Levy	Revenue from Dis't School Levy	Revenue from State App't. (State lands)	Total Revenue Common Schools (All sources)	Per Cent from State Lands
1931	2,510,129	5,512,030	1,086,655	9,208,814	11.8
1932	2,396,514	4,876,535	834,759	8,107,808	10.3
1933	2,140,331	4,645,165	706,927	7,492,423	9.4
1934	2,104,485	4,383,756	791,024	7,279,265	10.9
1935	2,083,867	4,148,715	993,428	7,226,010	13.7
1936	2,104,702	3,845,527	1,005,275	6,955,504	14.5
1937	2,110,153	4,281,113	838,206	7,229,472	11.6
1938	2,141,170	4,144,758	805,003	7,090,931	11.4
1939	2,077,123	4,130,338	883,929	7,091,390	12.5
1940	2,058,353	3,940,205	864,417	6,862,975	12.6
TOTAL	21,826,827	43,908,142	8,809,623	74,544,592	11.8

Status of 1940 Leases on
Common School Grants

Grazing acreage	3,164,616.11 acres	
Grazing rental		\$171,701.27
Agricultural acreage	27,296.76 acres	
Agricultural rental		17,164.25
Crop-share acreage	335,643.51 acres	
Crop-share rental		147,098.00 ^{33/}
TOTAL	3,527,556.38 acres	\$335,963.52

Rental per acre. 9.5 cents per acre
Land leased. 0.765 per cent

The question naturally arises as to whether this may be considered an

^{32/} Source -- Biennial Reports, State Board of Equalization; Biennial Reports, Department of State Lands and Investments.

^{33/} Public Schools share of crop-share rental not shown separately. Public schools had 98.3% of the acreage, so were given credit for 98.3% of the revenue.

adequate income from so extensive an acreage. The answer must be in the negative. Approximately one-fourth of the lands are not under lease and consequently are returning nothing to the common school. As to the potential contribution, Mr. I. M. Brandjord, Commissioner of State Lands and Investments for many years, is of the opinion ^{34/} that returns are far from being maximized.

PART V. MANAGERIAL ASPECTS OF ADMINISTRATION

Lack Of Policy

The State Land Department has been characterized during most of its existence by a lack of policy. The lands were classified as to their best use in the light of knowledge then existent, but apparently no serious thought was given as to which part of this land, if any, should be withheld from private ownership. This question was not so thought provoking in

^{34/} "There can be no doubt that this vast estate would have produced a far better income if it had been privately owned and privately managed -- and thousands of citizens and numerous agencies throughout the State endeavor to exert a very considerable influence on the administration of state lands. As already explained, there is a wide spread misunderstanding prevalent as to the purpose of these grants and the State's obligation in their administration. The misunderstanding that this is common property is far reaching and the sentiment is altogether too prevalent that the school should not be niggardly in the disposition of this common property. The resulting influence is as constant as the law of gravitation.

For the common good, I appeal to the public spirited citizens of the state, to the school boards, and to all officers and agencies of the government of the state concerning this sacred trust, to cooperate in the fullest measure toward its proper administration so that it may contribute its reasonable share toward the support of the common schools of the state and thereby lighten the tax burden resting upon the people." Biennial Report, Department of State Lands and Investments, 1936.

early days because State land policies were largely based on the belief that all lands should be placed in private control as soon as possible. At the present time there is a pretty general realization that the State will continue to administer much of the land that it now owns.

During the entire history of state land management, there has never been a consistent policy in regard to selling or leasing. The biennial reports of the several Registers and Commissioners are continuous arguments of the merits of leasing versus selling and selling versus leasing. 35/

35/ In 1892; Regarding leasing: "This has proved to be a most excellent provision and our endeavor of late has been to lease rather than sell lands." ...Granville Stuart.

In 1900; "In all my previous reports I have urged that all school and university lands be withdrawn from sale..." ... H. D. Moore.

In 1902; "There is no difficulty in selling or leasing agricultural land. I favor the policy of selling. A man who invests \$10.00 or more per acre in a piece of land which will produce a living for himself and family is unquestionably more interested in the future of the state than a five-year renter."

1918; "Based upon an average sale price of \$15 or more per acre, the leased lands are earning less than 1% of their value as long as leased, but jump to 5% income earning value immediately they are sold."

1932; "The proceeds from the sale of these lands will bring a far better income to the schools of the state than rentals from leases, and when placed in private ownership the lands will be improved and developed and thereby contribute to the up-building of the communities in which they are located." ... I. M. Brandjord.

1940; "Sales are not being held only to rectify some situations that could not otherwise be justly taken care of, or for home building purposes and to stabilize sound economic farming and livestock growing units." ... Nanita B. Sherlock

1941; "It is not the intention of the State Land Office nor the State Board of Land Commissioners to recommend the wholesale or indiscriminate sale of State Lands." ... J. W. Walker.

The statement of Mr. J. W. Walker (see footnote 35; 1941) was made in response to press reports that the policy of the present administration would be to sell all of the state lands at the earliest possible moment in order to get these lands on the tax rolls. Mr. Walker did not indicate that no lands would be sold, neither did he indicate that lands would be sold indiscriminately.

The failure to adopt a sound policy for the management of state lands is not entirely the fault of the State Board of Land Commissioners. It must be recognized that they are subjected to constant pressure by those who advocate sale 36/ on the one hand, and on the other, by those who were so greatly disturbed 37/ by reports that a policy of selling state lands had been adopted.

Appraisal Practices

The law specifies that "in all appraisals hereafter made, there shall be one and only one kind of value placed on each tract of land at the same time, and this value shall be used as the basis both for the rental and sale of such land, subject to all constitutional limitations." 38/

Section 1805.25, Revised Codes of Montana, 1935, provides that "the

36/ "That State lands be administered to produce as much revenue as possible and that to accomplish this purpose, the policy of pricing lands for sale be such as to facilitate their purchase and keep them on the tax rolls."

Recommendations of Governor's Committee on Reorganization and Economy, transmitted to Governor Ford, October 4, 1941.

37/ The Montana Stockgrower, December 15, 1941, Front page.

38/ Revised Codes of Montana, 1935, Chapter 160, Sec. 1805.17.

minimum annual rental for agricultural purposes shall be five per cent per annum of the appraised valuation...". ^{39/} It is assumed that agricultural land will return five per cent on the appraised value. If land is valued at \$10.00 per acre, it shall return 50 cents per acre rent. It further specifies that Class I, extra good grazing land, shall be given a leasing appraisal of \$35 to \$50 per section. Taking the higher value for convenience, it will be seen from the formula

$$v = \frac{a}{r}$$

where v = capitalized value
a = annual rental of land
r = rate of interest

that $\frac{50.00}{.05} = \$1,000.00$ per section as the sales valuation.

An examination of the records of the Department of State Lands and Investments reveals that, almost without exception, each tract of land has two values indicated -- one a rental appraisal and the other a sales appraisal. The natural assumption, then, in view of the wording of the law, is that there would be the same relationship of approximately five per cent.

However, it is found that no such relationship exists. Examples have been found where the sales appraisal of one tract is three times the other and yet the rental value was the same. Another example, where the sales value of one tract was 15 times the other and the rental value was the same.

^{39/} Ibid. Section 1805.25

Another where one section valued at \$13.00 per acre rented for \$50.00 and not far from it in the same county, a section valued at \$1.00 per acre rented for \$40.00 for the section.

The discrepancy is explained in this way by executives of the State Land Department. A tract which may be suitable for farming, carrying a valuation of \$15.00 per acre should lease for 75 cents per acre as agricultural land, but because there was no demand for that land for that purpose at the time, it was given a lease appraisal of \$40.00 for the section. Naturally, it is unreasonable to expect that a lessee using the land only for grazing could afford to pay an agricultural rental. It is likewise unreasonable to expect that the land would lie idle if not leased at its maximum rental value for "it is the duty of the board to so administer this trust as to secure the largest measure of legitimate and reasonable advantage to the State."

It seems that such an explanation can only be valid in the case of lands which have alternative uses such as grazing and farming and not when the land can be used only for grazing. (Legal aspects not considered). Certain lands might be graded as agricultural lands but because they were not farmed during the base years of the Agricultural Adjustment Administration cannot now be restored to production without payment of penalty. Such lands might have speculative value and the higher sale value be justified; however, on land that is classed as grazing and has no other use, there can be no justification for more than one value. From that appraisal value both sale and rental values must be determined.

In a study of 84 tracts in Chouteau County, it was found that the ratio

of rental values to sale values ranged from a low of .28 per cent to a high of 3.33 per cent with an average per cent for the lot of 1.41. A fair conclusion is that lands are either valued too high for sale or too low for rental.

The Legislature Reduces Rentals

Following the financial crash in 1929, economic conditions continued to grow worse. Farmers and livestock men alike were on the brink of disaster. Later in 1932, delegations of stockmen petitioned the State Board of Land Commissioners in an effort to have rentals on state lands reduced approximately one-half for the period of the depression. The board was powerless to act, as it was obligated to lease state lands for a minimum of not less than five per cent of the appraised value of the lands. ^{40/} Of course, the board had the power to reappraise the lands, but neither time nor money was available. Furthermore, on the basis of the cost of use of grazing land, there was no justification ^{41/} for the State Board of Land Commissioners to assume the responsibility for the school children of the state and reduce rentals as long as those rentals were reasonable when compared to other rentals on like lands similarly situated. Upon refusal of the Board to make the requested reductions, the matter was placed before the 1933 legislature in what was regarded at the time as an emergency measure. Actually, this measure did not carry emergency designation and is still in effect.

^{40/} Revised Codes of Montana 1921, Section 1883.

^{41/} Biennial Report of Commissioner of State Lands and Investments, 1932, Page 40.

Reductions of 50 per cent were made of all appraisals then on record. The supposition was that a section formerly leasing for \$80.00 would now lease for \$40.00. Actually, however, and there are many records to substantiate this point, many \$80.00 sections had been arbitrarily changed to \$50.00 sections without sanction or consent of the board. Then when the new values were established, the rental became 50 per cent of the \$50.00 and not of the \$80.00 as intended. Instead of a reduction of 50 per cent, many sections were reduced approximately 70 per cent.

The question arises: How can these values which have been authorized by the State Board of Land Commissioners be so easily changed? The answer is simple. The cards (see photographic reproduction, Appendix III) are the official office record of each tract of land. They contain location, legal description, a record of all leases on each tract, lease number, terms of lease and a plat on which is marked the appraisal for sale or lease. All permanent information is written in ink with the exception of the appraisals. It is, therefore, easy for anyone handling the card, to change the penciled notation of appraisal.

Uniform Expiration Date For Leases

After considerable confusion caused by having leases expire at all times of the year, the practice was adopted and later legalized 42/ of having all leases expire as of February 28.

The law reads,

"that rental ... shall become due and payable to the Commissioner ... on December 15 next preceeding the

42/ Biennial Report, Commissioner of State Lands and Investments, 1926, p. 40.

rental year to which the rental applies, and if not paid on or before February 1, next following, this nonpayment shall have the effect of cancelling the lease from and after February 28 of that year. The commissioner shall notify the lessee by letter addressed to the post office address given in the lease, of such cancellation, and the land shall then be open for lease to other applicants." 43/

The interpretation here is that it is mandatory on the part of the commissioner to notify the delinquent lessee that his lease has been cancelled. A fair assumption is that the land may be regarded as being under control of the delinquent lessee until so notified. No attempt is made by the Commissioner of State Lands and Investments to lease the land before that time and it is no doubt regarded by the delinquent lessee as his possession until he is formally notified of the cancellation of his lease. The State Land Department of North Dakota 44/ did some investigating of conservation payments and found that almost without exception that such delinquent lessees had themselves listed as owner-operator and were collecting benefit payments from the land. A similar study in Montana might reveal a like situation.

A frequency distribution of the time required in the past to effect a cancellation is shown in Table II and graphically illustrated in Figure 2. Almost 98 per cent of the leases were cancelled after May 1 when two month's delinquent, and 80 per cent were cancelled after June 1 when three month's delinquent. This means that of a total of 872 leases, 852 of them,

43/ Revised Codes of Montana. Chapter 160, Section 1805.26.

44/ Report of Commissioner of School Lands, North Dakota, 1940, page 22.

TABLE II.-- MONTHS OF DELINQUENCY OF STATE LAND LEASES BEFORE CANCELLATION
BY NUMBER AND PER CENT, IN FIVE COUNTIES, MONTANA, 1931-1940 INCLUSIVE

Number of Leases							Per Cent of Leases						
Months	:	:	:	:	:	:	:	:	:	:	:	:	:
Delinquent:	Chouteau:	Custer:	Fergus:	Phillips:	Valley:	Total:	:	Chouteau:	Custer:	Fergus:	Phillips:	Valley:	Total:
:	:	:	:	:	:	:	:	:	:	:	:	:	:
1	6	0	2	1	5	14		3.0	0	1.15	.96	1.7	1.6
2	1	2	2	1		6		.5	2.0	1.15	.96	.5	0.7
3	7	3	87	52	6	155		3.5	3.0	50.0	50.0	2.0	17.8
4	73	39	12	13	180	317		36.7	39.5	6.9	12.50	60.8	36.4
5	8	4	33	23	41	109		4.0	4.0	19.0	22.0	13.8	12.5
6	49	43	13	10	41	156		24.6	43.5	7.5	9.6	13.8	17.9
7	27	5	7		10	49		13.6	5.0	4.0	0	3.8	5.6
8	1	3	14	1	3	22		0.5	3.0	8.0	.98	.5	2.5
9	23		2		3	28		11.6	0	1.15	0	1.0	3.2
10 and over	4		2	3	7	16		2.0	0	1.15	3.0	2.1	1.8

Totals	199	99	174	104	296	872		100	100	100	100	100	100

Number of
Cancelled Leases

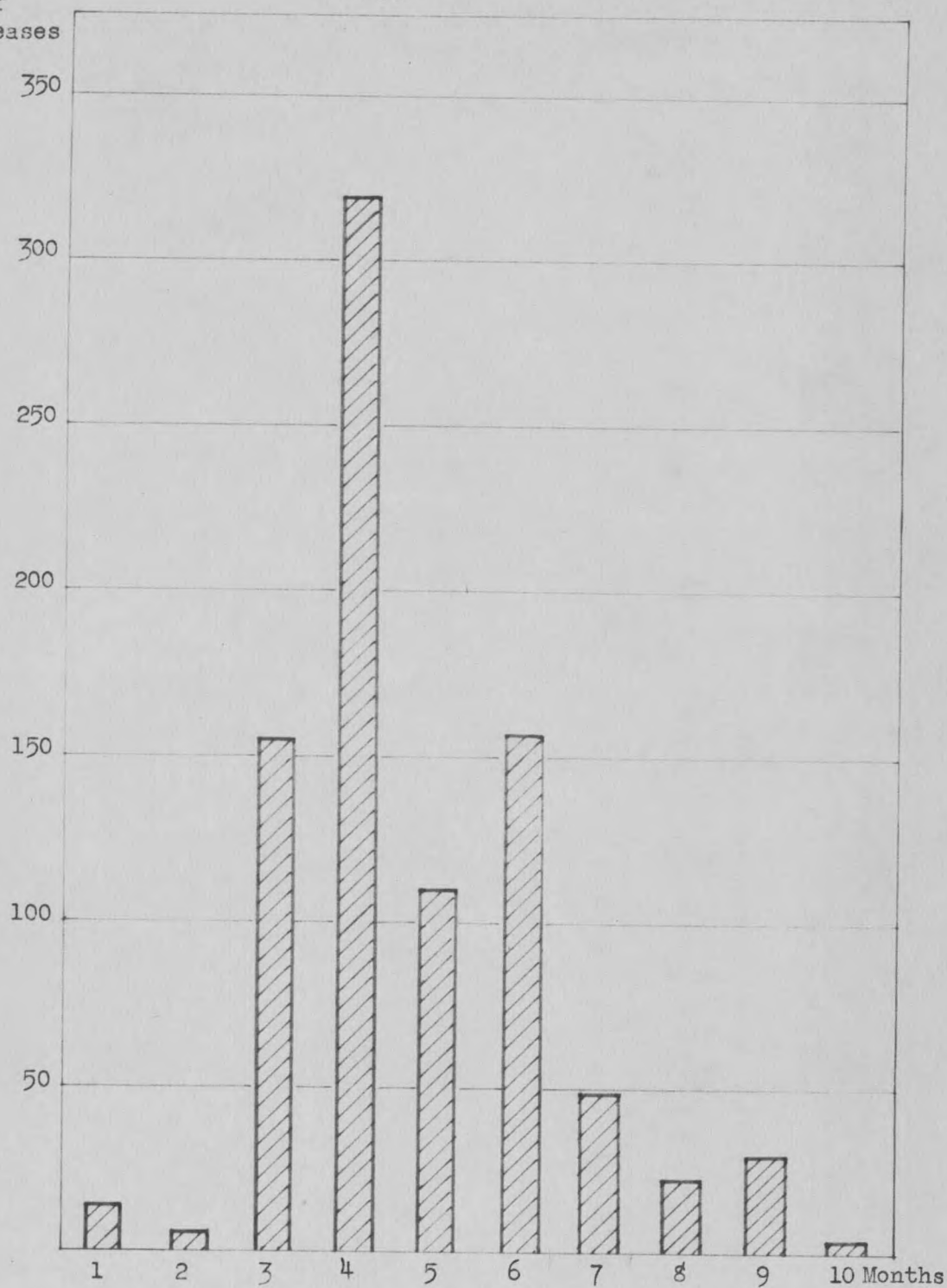


Figure 2.--Number of Cancelled State Land Leases by
Months of Delinquency, Five Montana Counties,
1931-1940, Inclusive

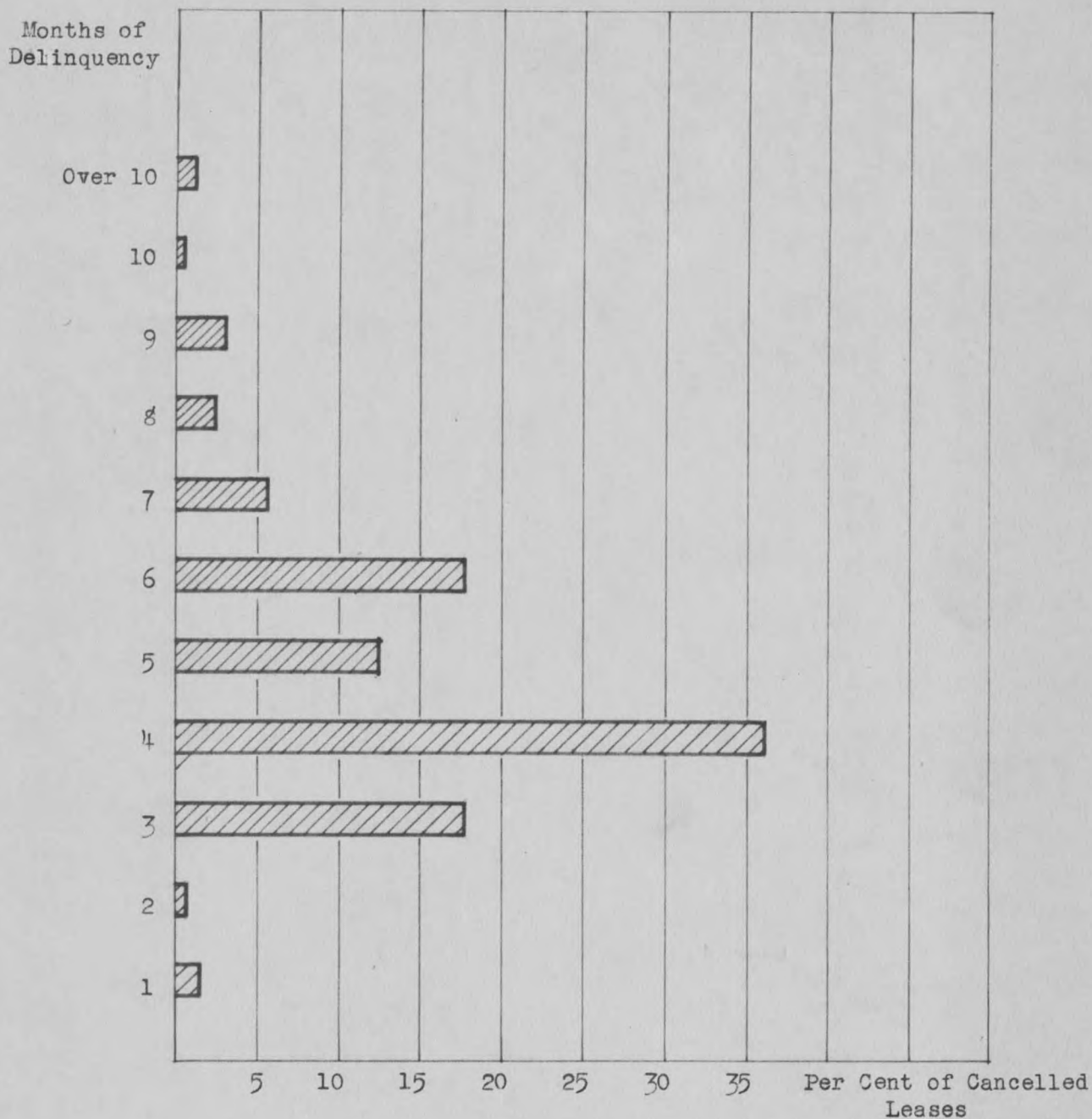


Figure 3.--Per Cent of Cancelled State Land Leases by
Months of Delinquency, Five Montana Counties,
1931-1940, Inclusive

or 97.7 per cent, were cancelled so late that it was impossible to obtain the full rental value for that year if leased at all.

If lands are available for lease in March or April, they can be leased for 100 per cent of the year's rental. ^{45/} If not available until May, only 90 per cent of the year's rental may be collected, in June only 80 per cent, etc. Consequently, the State loses at an increasing rate as the year advances. Furthermore, this study reveals that lands not leased before the beginning of spring operations on the farm or ranch have slight, if any chance, of being leased for that season.

Politics Play A Part

Politics have played all too large a part in the administration of the State Land Office in the past. ^{46/} The office routine requires skill and experience on the part of the personnel and these workers can be efficiently replaced only after a considerable period of training. Composed largely of women, the office staff does not offer the same inducement to political maneuvering as does the field department.

It is the field department, then, that feels the impact of political expediency. Fieldmen in the past have not been engaged because of their qualifications or training for the position, but because of their past political records. ^{47/}

^{45/} Revised Codes of Montana, 1935; Chapter 160, Section 1805.25.

^{46/} See footnote, Importance of School Lands, Page 25 of this thesis.

^{47/} Field Staff

"A", 7 years on staff, previously store-keeper of life long experience.

Soil is recognized by the State Land Department as an important element in appraisal 48/ yet men with no knowledge of soils are engaged. They are required, in many instances, to go miles from any habitation to locate and appraise isolated tracts and yet have only limited knowledge of surveying or land location. When land so located is compared to soil survey maps in which the crew is oriented by following a continuous line, there are often serious doubts as to whether or not the land was actually viewed by the appraisers. A knowledge of methods of range survey is essential in establishing the density of the forage 49/ and yet men are engaged who have

"B", 7 years on staff, former County Commissioner and State Senator.

"C", Former speaker of the House, Former liquor vendor. Deputy in office for a period previous to 8 years ago. On staff since July, 1941.

"D", On staff since May, 1941. Previously real estate business.

"E", On staff since May 1941. Farmer, Served in Land Office as deputy about 20 years ago.

Information as result of interview with H. C. Biering, Chief Field Agent.

48/ "Soil is the outstanding determining factor for classification and valuation of land. Too often in the past, a level surface, without consideration of soil value, has been productive of erroneous classification and appraisal". ...H. C. Biering, Chief Field Agent, 1941, Instructions to Field men.

49/ Class 1. Extra good grazing land, thirty-five dollars (\$35.00) to Fifty (\$50.00) dollars.

Class 2. Good grazing land, well sodded with grass, thirty dollars, (\$30.00).

Class 3. Fair grazing land, with medium grass, twenty five dollars, (\$25.00).

Class 4. Poor grazing land, thinly grassed, twenty dollars, (\$20.00).

no knowledge of the principles involved.

Not only are the field men not trained and qualified, but they carry on their work, apparently ignorant of the fact that the same information that they obtain in the field is available in more accurate form at less expense from existing records.

Reclassification of State Lands

A reclassification and reappraisal of all state lands was undertaken in 1936. Previous to June 30, 1940, 1,552,963.56 acres had been reclassified. At the present rate, it is estimated that ten years will be required to complete the work. 50/ It might well be asked if the results will justify the time and expense required.

A check of these reclassification records reveal that this work done at so great a cost in time and money shows little more than present use of the land. The number of acres of crop, the acreage lying fallow, acreage in pasture, hay, etc. are all shown on a nicely colored map. Of what value is a record of present land use as a permanent record? (Appendix IV) The maps that were made last year will probably be out of date this year; those made in 1936 most certainly will be. A record of present use is not significant as a permanent record.

Class 5. Any other grazing land, such amount as may be fixed by the board. ...Revised Codes of Montana, 1936, Chapter 160, Section 1805.25.

50/ Interview - H. C. Biering, Chief Field Agent.

PART VI. FINANCIAL ASPECTS OF ADMINISTRATION

Grazing Land Leases

When provision was made for the leasing of state lands, the law provided that lands "may be leased for a term not exceeding five years at a rental to be determined by the State Board of Land Commissioners." ^{51/} Thus the Board was permitted to use discretion in determining rentals. However, the 1899 session of the Legislative Assembly amended the law so that "the minimum (rental) shall be not less than five per cent per annum of the appraised value of said lands." ^{52/}

The term of all leases remained at a maximum of five years until Congress saw fit to pass an amendment to the Enabling Act ^{53/} which extended the time to 10 years. This amendment was concurred in by the Montana Legislative Assembly in 1939. The livestock business is not a year to year proposition and it was felt that the longer tenure would permit the stockman to plan his operations over a longer period of time and carry out many conservation measures considered impractical under a shorter contract.

The longer term has met with universal approval. The benefits to the State are manifest in increased water development, fencing and conservation.

The determination of rentals on the basis of five per cent of the appraisal remained in effect until 1933. Until that time, the law had read that the minimum could not be less than five per cent of the appraised

^{51/} Session Laws of Montana, 1891, State lands, Section 6.

^{52/} Ibid. 1899, House Bill No. 145, Section 3479

^{53/} Enacted June 25, 1938, Approved by Legislature 1939.

value of the land. The 1933 law provided that "the maximum annual grazing rental for state land shall not exceed \$50.00 per section except where the leasing price is increased above this sum by competitive bidding." 54/

Where there had previously been a floor under the rentals, there was now a ceiling above.

The Results of the 1933 Revision of Rentals

The State

Table III shows a summary of data taken from four biennial reports previous to, and four following, the reduction in rentals. The per cent of acreage under lease increased from 57 to 71 per cent, or an increase of 14 per cent, but in accomplishing this increase in the acreage leased, the average rental rate dropped from an average of 12.4 cents to an average of 7.1 cents, or a drop of 42.7 per cent. The income actually received dropped from an average of \$326,708.54 to \$251,558.20 or a loss of 23 per cent in average revenue.

Five Counties

The reduction in rentals succeeded in bringing additional acreage under lease as will be seen in figure 5, but it did not increase the revenue collected to any appreciable extent. The grazing acreage leased on which revenue was not collected (figure 7) shows rather a precipitous decline for the years 1933-36, but in 1937 reached a point even higher than the year 1932. Figure 6 shows there was considerable decline in acreage not leased following the reduction of rentals.

54/ Revised Codes of Montana, 1935, Chapter 160, Sec. 1805.25.

TABLE III.- COMPARISON OF RENTALS FOR A PERIOD OF EIGHT YEARS PRECEDING AND EIGHT YEARS FOLLOWING LEGISLATIVE REDUCTIONS OF GRAZING FEES IN 1933, MONTANA STATE LANDS ^{a/}

Year	Total Acres of State Land	Acres of State Land Leased	Per Cent Acres Leased	Rentals Earned	Rentals Actually Collected	Average Rate of Rental Per Acre
6/30/26	4,663,567.93	2,242,805.96	48	\$ 352,092.75	326,409.36	14.5
6/30/28	4,692,188.19	2,671,261.07	57	379,547.48	371,688.71	13.9
6/30/30	4,573,910.15	2,875,017.59	63	396,760.70	397,652.14	13.8
6/30/32	4,682,441.89	2,763,057.20	59	295,854.90	211,083.94	7.6
Total	18,612,108.15	10,552,111.82		1,424,255.83	1,306,834.15	
Average	4,653,027.00	2,638,803.50	57	356,063.96	326,708.53	12.4
6/30/34	4,857,968.78	3,306,741.49	68	169,249.40	176,002.68	5.3
6/30/36	4,962,163.61	3,690,260.06	74	198,373.73	290,252.42	7.9
6/30/38	4,940,971.31	3,300,831.49	67	207,210.47	184,851.30	5.6
6/30/40	5,114,924.90	3,808,457.80	74	355,126.16	355,126.16	9.3
Total	19,876,028.60	14,106,290.84		929,959.76	1,006,232.56	
Average	4,969,007.00	3,526,572.00	71	232,489.94	251,558.20	7.1

^{a/} Source: Biennial Reports, Department of State Lands and Investments, 1926-40, inclusive.

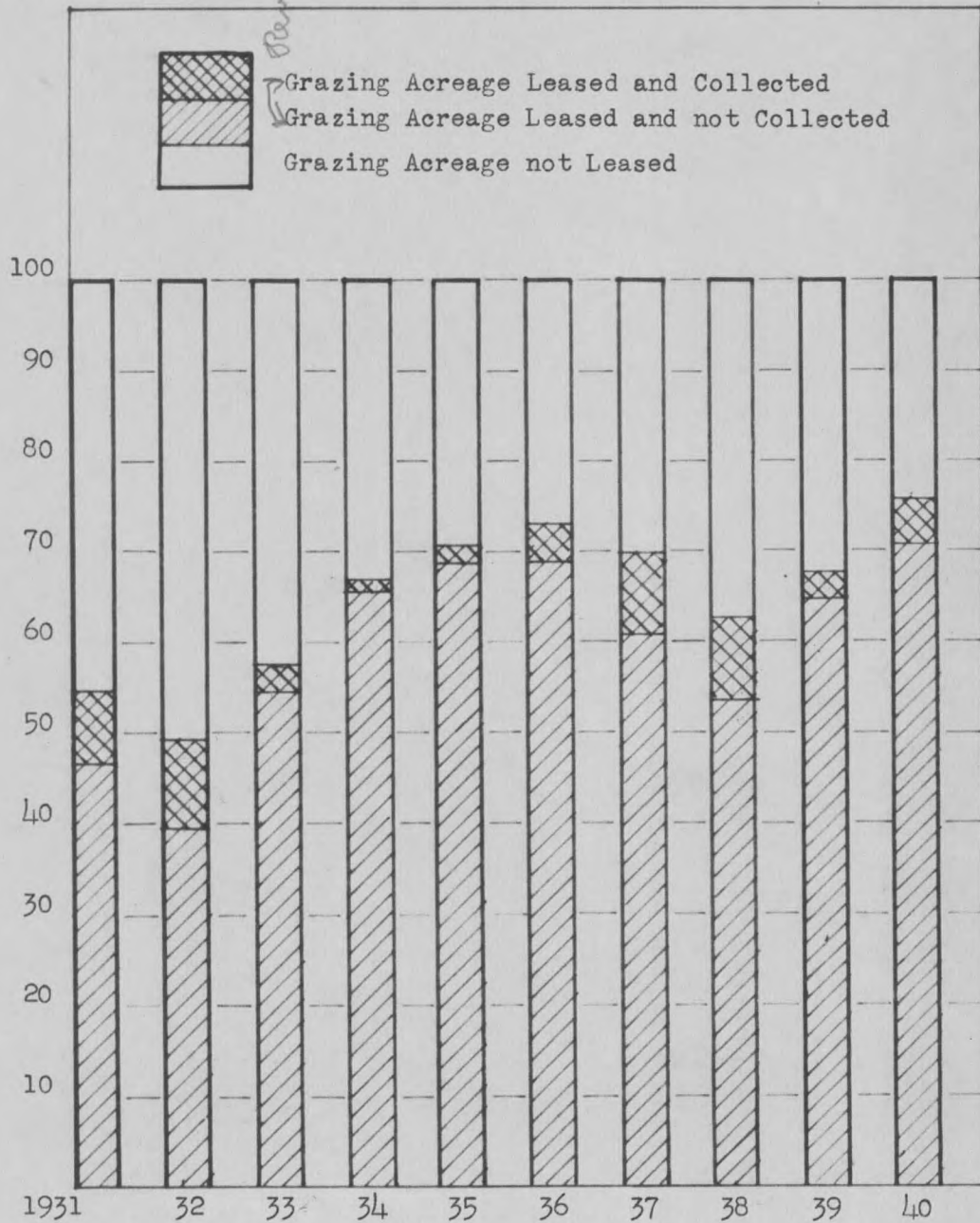


Figure 4.--Proportion of State Grazing Acreage Leased from which Revenue was Collected as Compared to Acreage Leased from which no Revenue was Collected and Acreage not Leased. Five counties, 1931-40, inclusive.

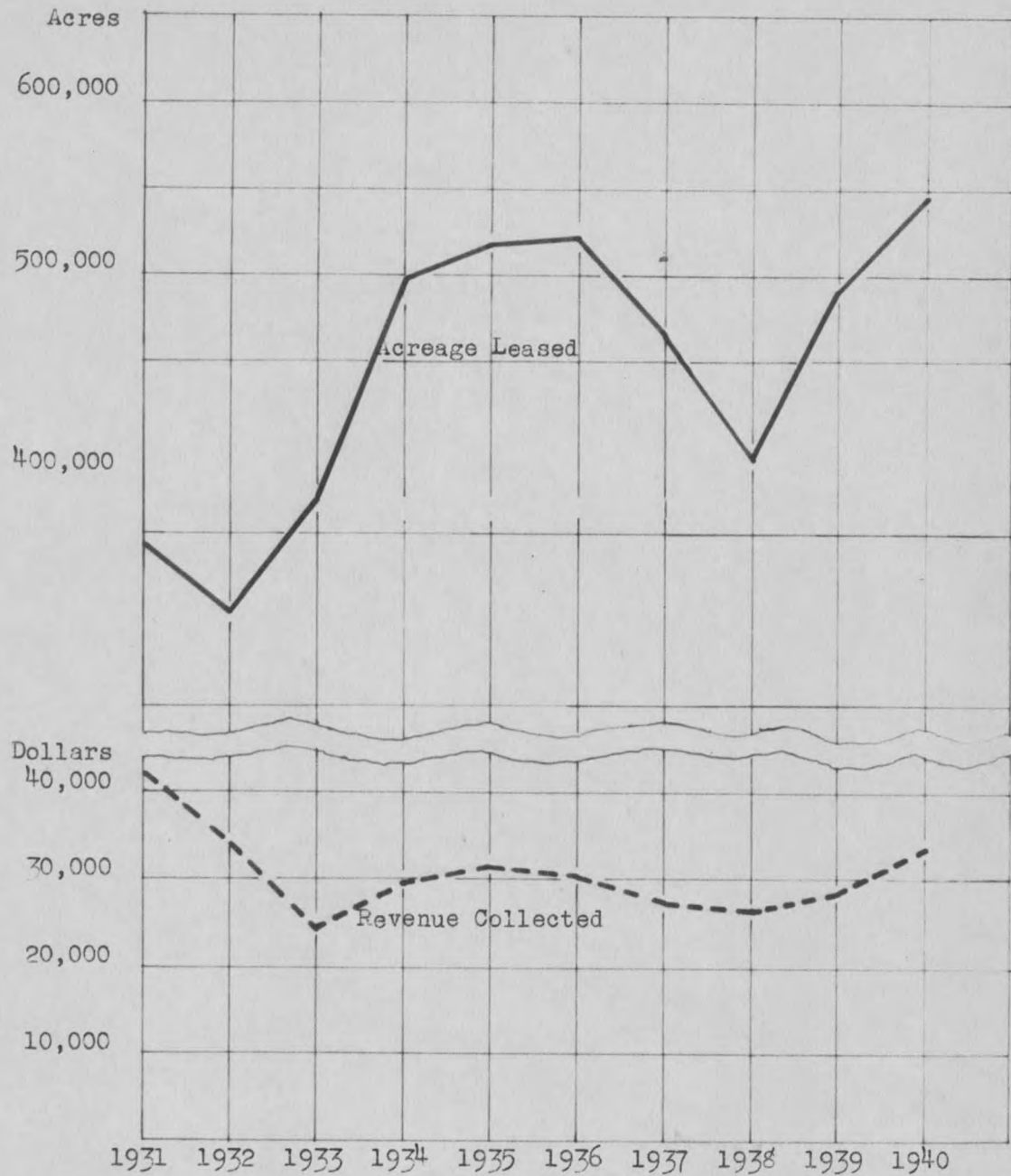


Figure 5.--State Grazing Acreage Leased and Total Revenue Collected from Leases, Five Montana Counties, 1931-1940, Inclusive

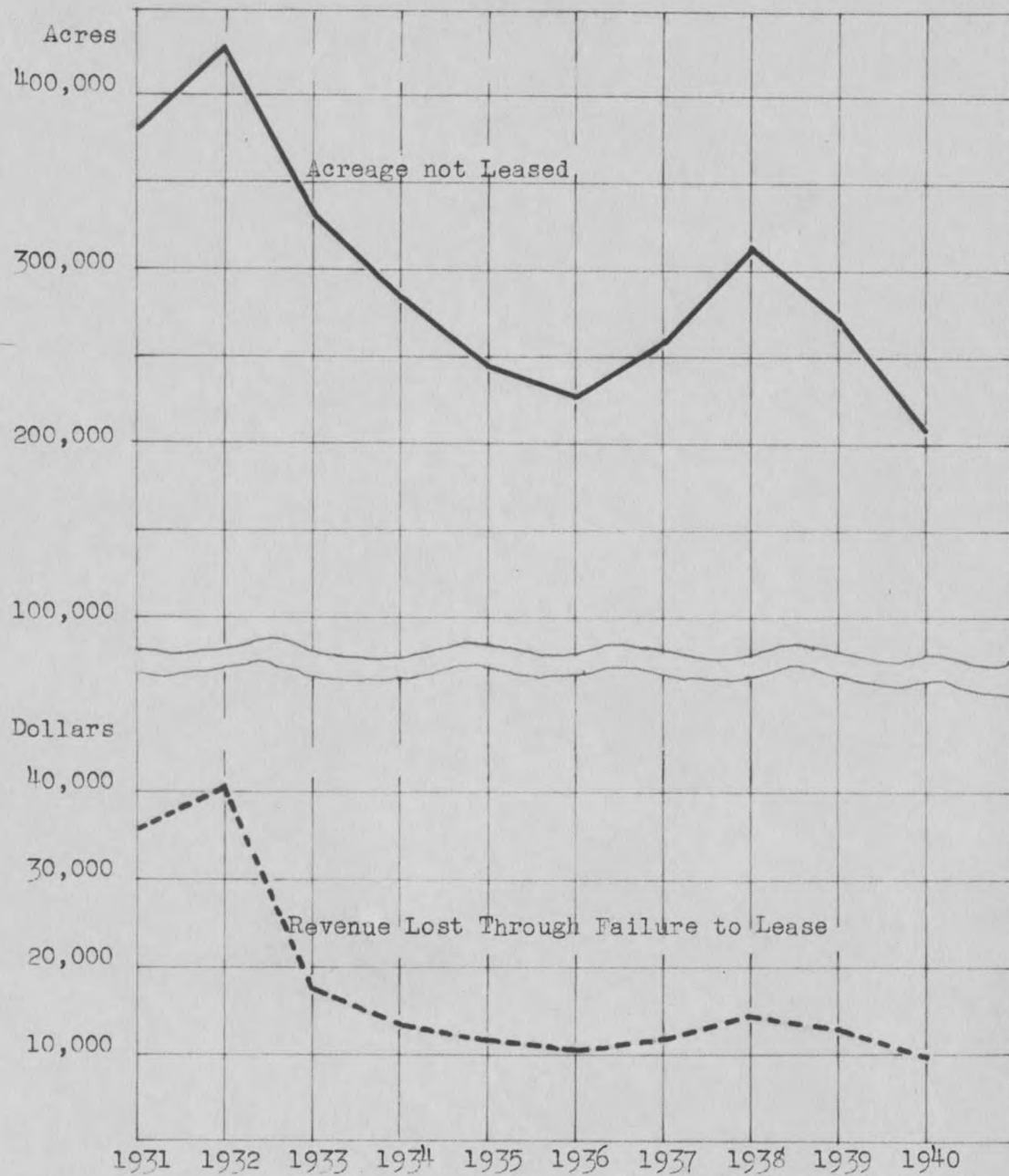


Figure 6.--State Grazing Acreage not Leased and Revenue Lost Through Failure to Lease, Five Montana Counties, 1931-1940, Inclusive

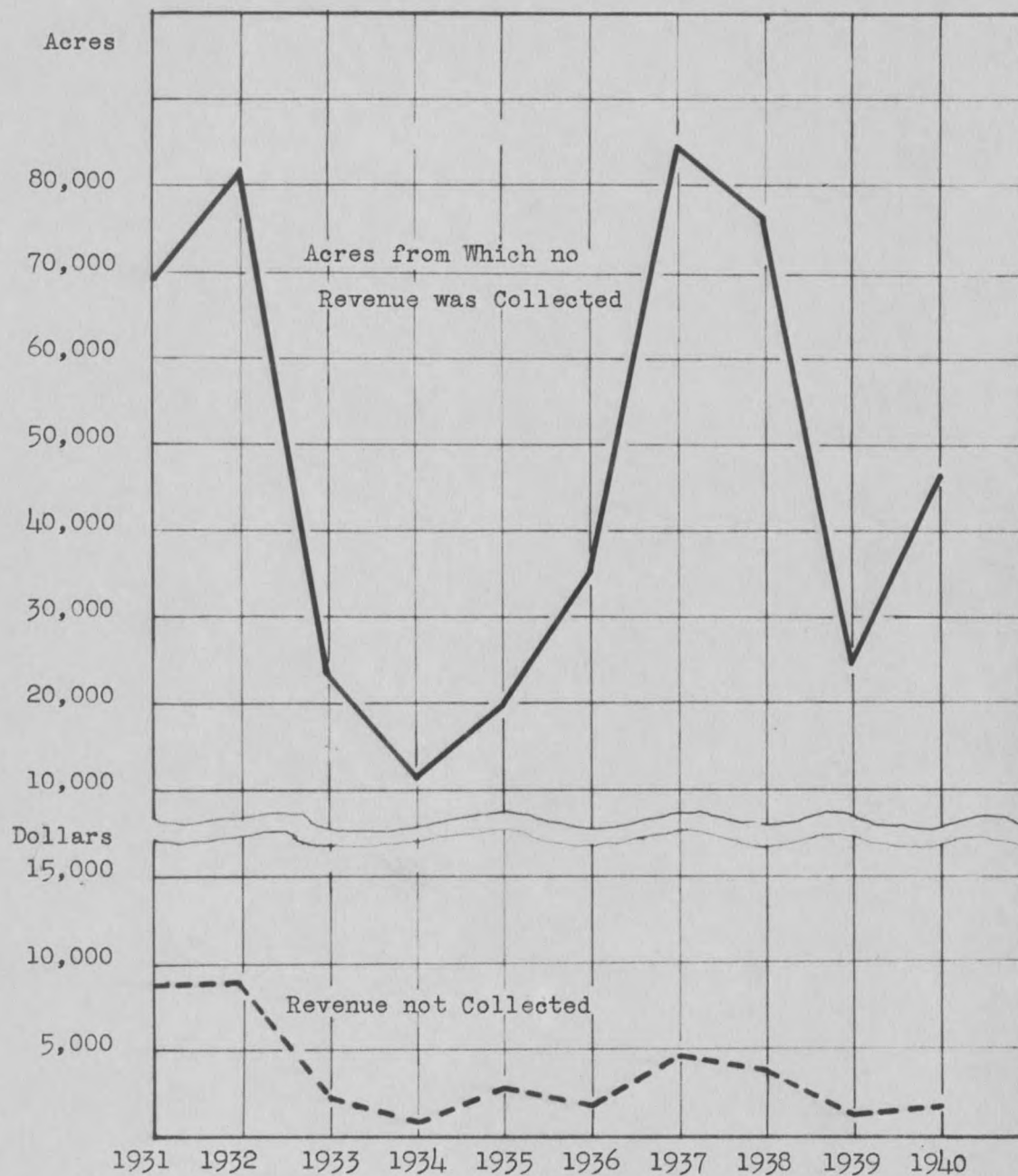


Figure 7.--State Grazing Acreage Leased on Which Revenue Was not Collected, Five Montana Counties, 1931-1940, Inclusive

This ten year study of five counties shows (Table IV) that only 59.04 per cent of the grazing acreage produced any revenue. An additional 5.6 per cent was leased but no revenue was collected; and 35.36 per cent of the grazing acreage was not leased. This is graphically illustrated for each year of the study in figure 4. It will be seen that the extent of the acreage leased and not collected in 1937 under the reduced rentals was slightly greater than the same classification in 1932 under the higher rentals.

Table V dealing with the monetary values involved, shows that a total of \$211,919.44 was lost during the ten-year period through failure to lease and through failure to collect from lands that were leased. Column 4 of the same table shows that an average of \$3601.42 per year was lost through failure to collect. This is an average of more than six per cent of the possible earnings of the grazing lands in these five counties.

Addition of the \$3601.42 not collected and the \$17,590.52 potential rentals lost through failure to lease reveals that an average annual revenue of \$21,191.94 or an average of 38.02 per cent of the potential revenue was lost in these five counties. Addition of the 47,001.78 acres leased, but from which no revenue was collected, and the 294,401.81 acres that were not leased, shows that an annual average of 341,403.59 acres or 40.96 per cent of the grazing lands of these five counties produced no revenue whatever.

When 41 per cent of the state lands in these counties produce no revenue and, according to Table III, 29 per cent of the acreage of the entire State is not leased, it is time to look for the cause. The loss in

TABLE IV.- LEASING AND RENTAL STATUS OF STATE GRAZING LANDS,
IN PER CENT. FIVE MONTANA COUNTIES 1931-1940 INCLUSIVE a/

Year	Lands Leased And Rentals Collected		Lands Leased and Rentals Not Collected		Lands Not Leased and Rentals Lost	
	Per Cent	Per Cent	Per Cent	Per Cent	Per Cent of	Per Cent Of
	of	of	of	of	State Lands	Potential
	State	Potential	State	Potential	Not	Revenue
	Lands	Revenue	Lands	Revenue	Leased	
1931	46.50	48.95	8.19	9.86	45.31	41.19
1932	39.29	41.04	9.73	10.47	50.98	48.49
1933	54.23	55.80	3.09	4.80	42.68	39.40
1934	65.25	68.52	1.38	1.60	33.37	29.88
1935	68.29	68.62	2.29	6.43	29.42	24.95
1936	68.56	71.95	4.13	4.13	27.31	23.92
1937	60.12	63.28	9.81	10.23	30.07	26.49
1938	53.26	59.56	9.12	8.35	37.62	32.09
1939	64.76	67.43	2.87	2.86	32.37	29.71
1940	70.14	74.66	5.41	4.07	24.45	21.27
Average	59.04	61.98	5.60	6.28	35.36	31.74

a/ Source: Primary Data from the Records of the Department of State Lands and Investments.

TABLE V. LEASING AND RENTAL STATUS OF STATE GRAZING LANDS
FIVE MONTANA COUNTIES, 1931 - 1940 INCLUSIVE ^{a/}

Year	Lands Leased And Rentals Collected		Lands Leased but Rentals Not Collected		Lands Not Leased and Rentals Lost Through Failure to Lease	
	Acreage	Rentals	Acreage	Rentals	Acreage	Rentals
	Leased	Collected (Dollars)	Leased	Not Collected (Dollars)	Not Leased	Lost (Dollars)
1931	391,528.11	42,305.04	68,987.48	8,521.33	381,557.22	35,594.04
1932	328,976.56	34,079.84	81,445.50	8,695.15	426,781.16	40,275.35
1933	419,440.35	24,272.12	23,913.72	2,083.43	330,077.84	17,135.50
1934	548,782.40	29,857.68	11,546.63	699.15	280,684.64	13,022.55
1935	568,253.08	31,546.09	19,033.50	2,955.83	244,849.81	11,468.20
1936	572,344.61	30,965.32	34,473.95	1,779.44	227,932.81	10,293.47
1937	516,533.57	27,907.80	84,265.68	4,513.05	258,369.65	11,681.75
1938	445,609.75	26,539.08	76,287.10	3,719.88	314,746.81	14,295.94
1939	542,656.97	28,372.03	24,069.31	1,205.02	271,264.75	12,499.71
1940	596,164.37	33,823.90	45,994.91	1,841.93	207,753.38	9,638.72
Totals	4,930,289.77	309,668.90	470,017.78	36,014.21	2,944,018.07	175,905.23
Average	493,028.98	30,966.89	47,001.78	3,601.42	294,401.81	17,590.52

^{a/} Primary data from records of the Department of State Lands and Investments.

rentals from land under lease can be accounted for by failure to promptly cancel all delinquent leases. Possible corrective measures will be considered under Chapter VIII.

If it is assumed that when land is not leased it is not used, then it should be possible to find several year's growth of vegetation on a large portion of the 29 per cent of unleased land. However, this doesn't hold true in actual practice. The man who controls a lease for a term of years will probably protect his investment by employing conservation measures. No so with the unleased tract, which generally becomes the grazing commons for the neighborhood livestock, especially if it remains unleased for more than a year or so. Consequently, the land from which the State receives the least revenue is generally subjected to the most abuse. The State, at one time, had a trespass law. ^{55/} It was repealed, inadvertently or otherwise, during the 1927 legislative session. Perhaps it had some faults. Perhaps a stringent trespass law is not the solution to the problem of unleased lands. An effective field force, stationed judiciously throughout the State can, no doubt, be a factor in bringing more acreage under lease; but a trespass law as an aid in accomplishing this result is worthy of serious consideration.

Reasonableness of Income

A composite graph of the productivity of the five counties is rather meaningless. Consequently, separate graphs, figures 8 to 12 inclusive, are presented for each county, showing the productivity valuation as

^{55/} Revised Codes of Montana, 1921. Chapter 149, Section 1904.

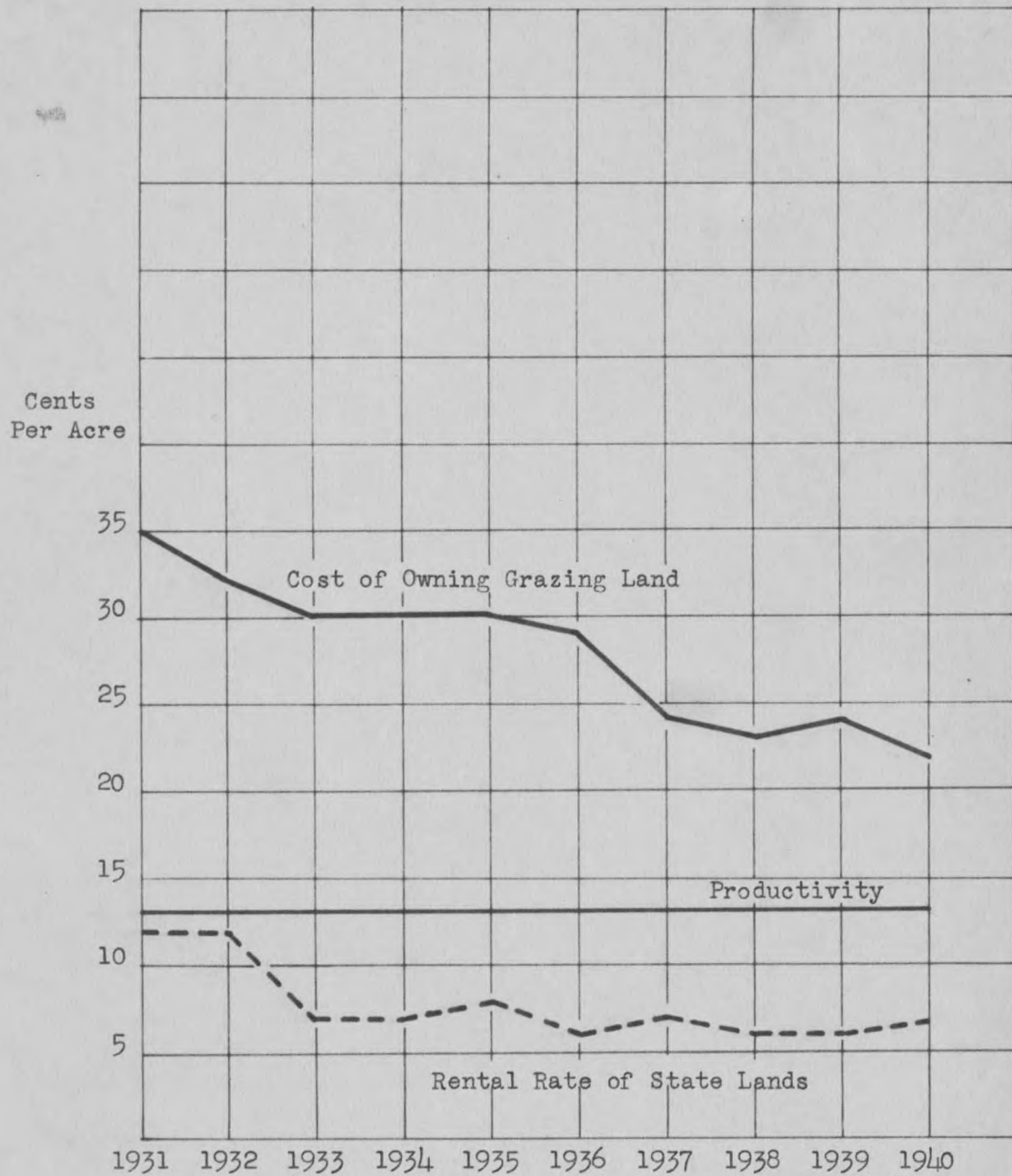


Figure 8.--Cost of Rental of State Grazing Lands in Chouteau County, Montana, as Compared to Productivity and Cost of Owning, 1931-1940, inclusive

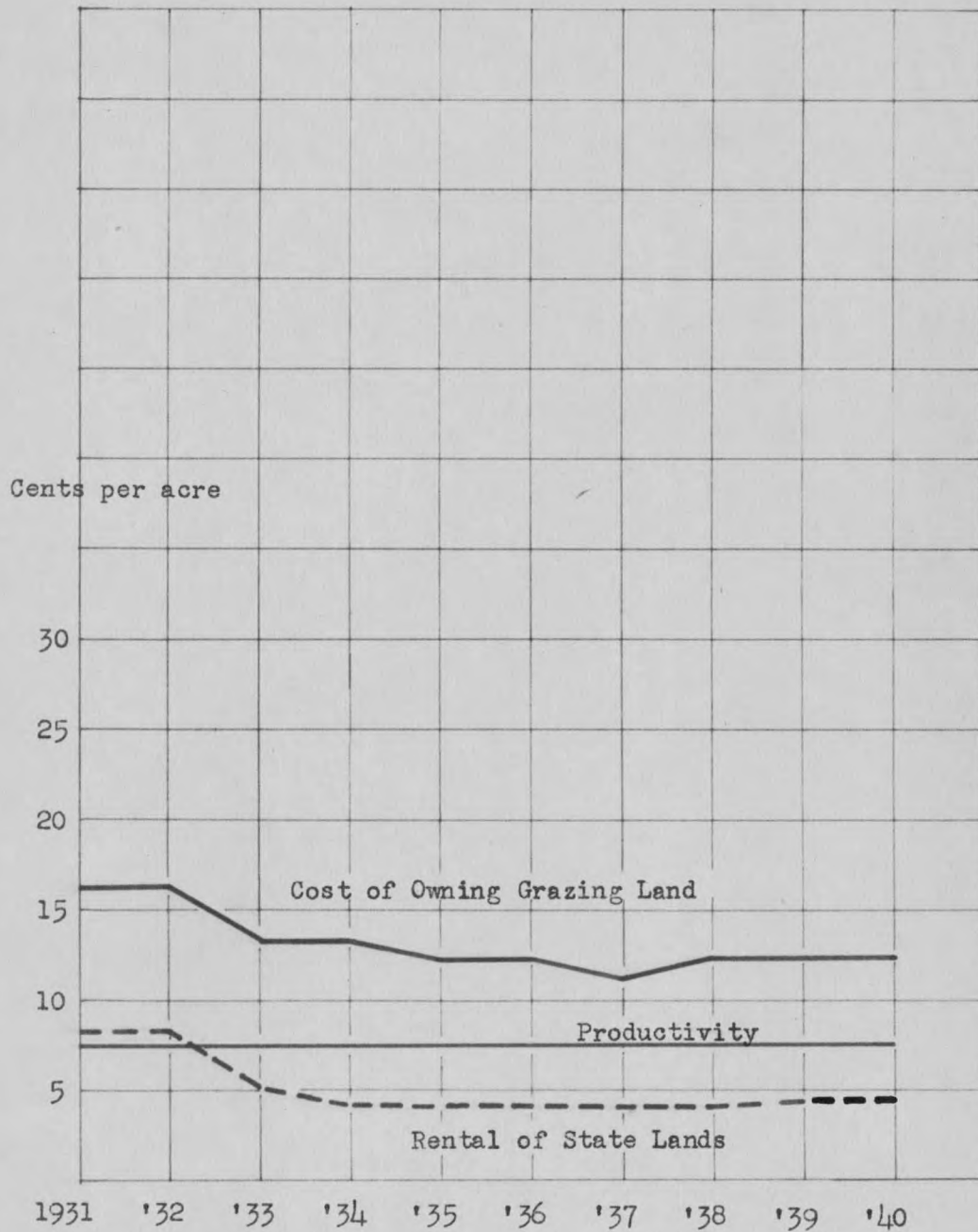


Figure 9.--Cost of Rental of State Grazing Lands in Custer County, Montana, as Compared to Productivity and Cost of Owning 1931-1940, inclusive

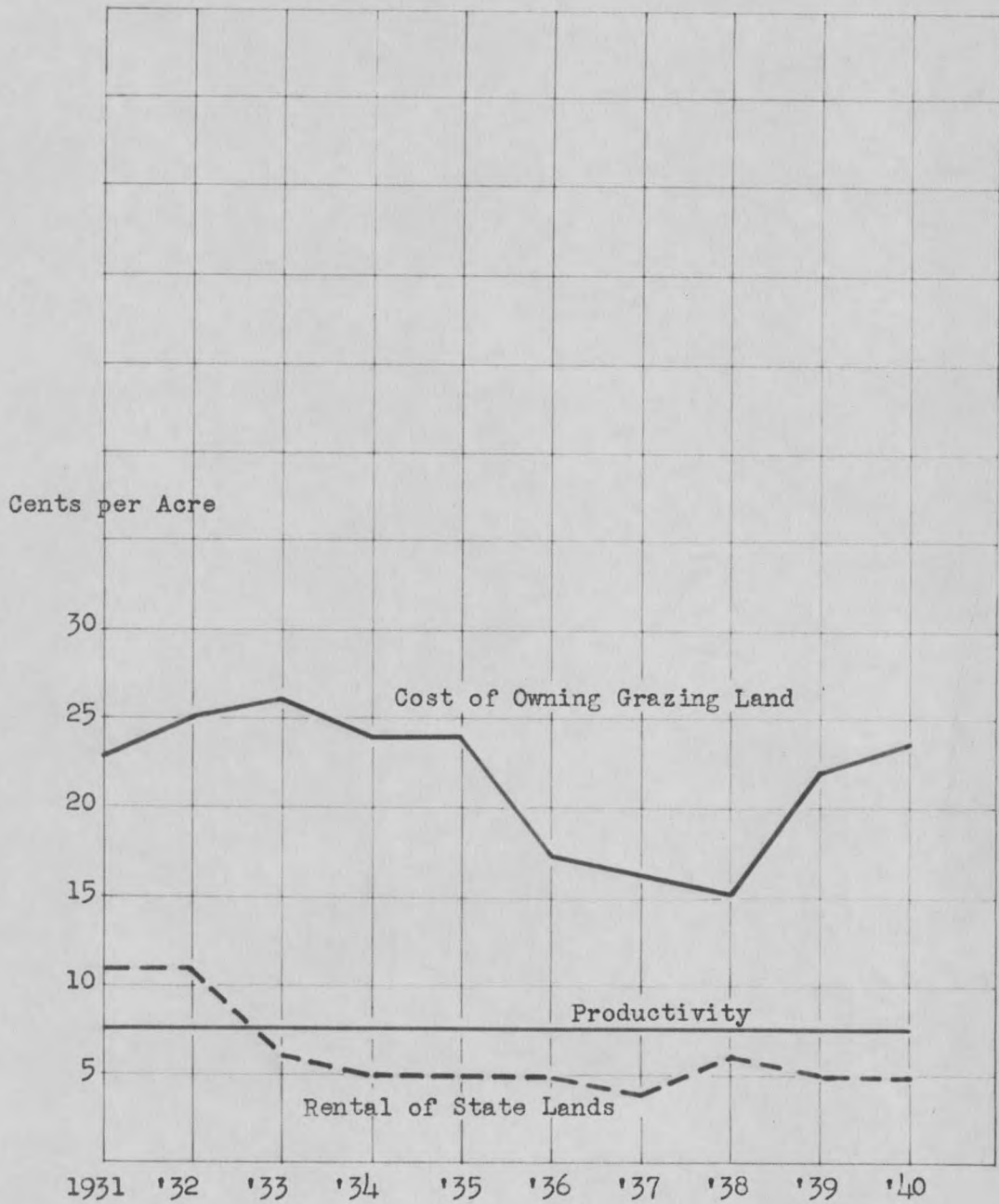


Figure 10.--Cost of Rental of State Grazing Lands in Fergus County, Montana, as Compared to Productivity and Cost of Owning 1931-1940 inclusive

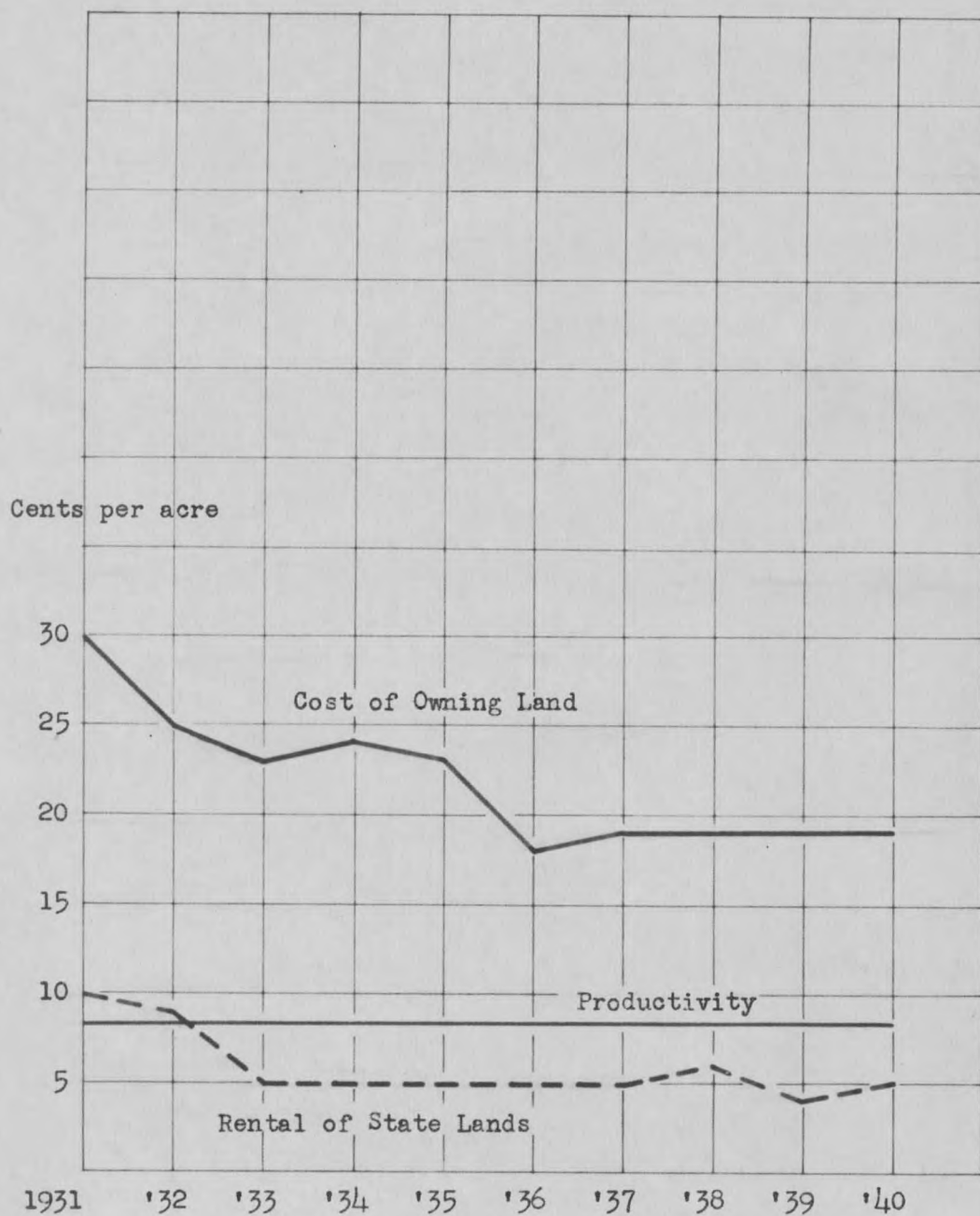


Figure 11.--Cost of Rental of State Grazing Lands in Phillips County, Montana, as Compared to Productivity and Cost of Owning 1931-1940 inclusive

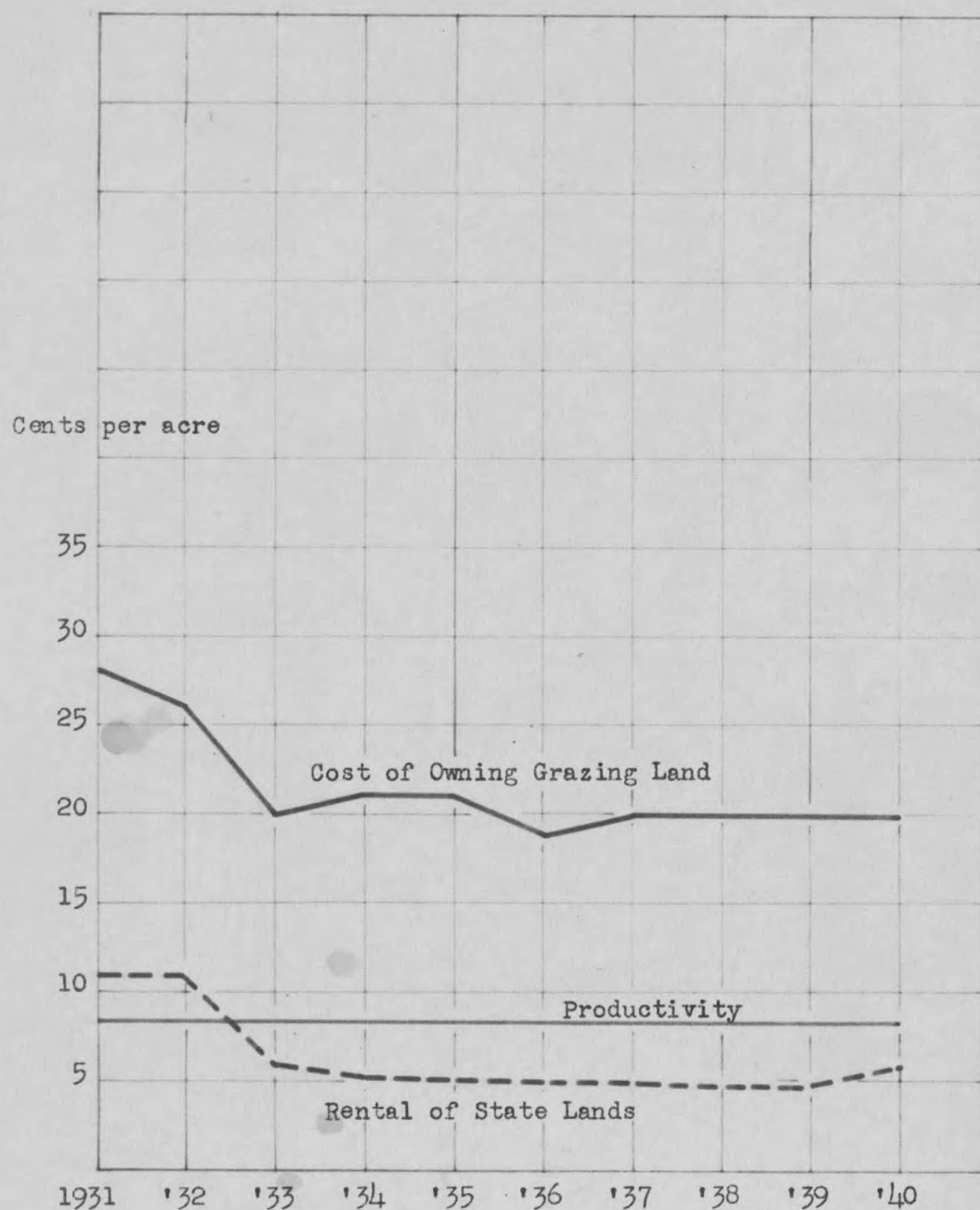


Figure 12.--Cost of Rental of State Grazing Lands in Valley County, Montana, as Compared to Productivity and Cost of Owning 1931-1940 inclusive

compared to cost of owning ^{56/} and the average rental actually paid. In general, there has been a tendency, except in the case of Fergus County, to bring the cost of ownership downward toward the line of productivity.

A study of these graphs will show, without exception, that the rental of grazing lands in 1931-32 was higher than their productivity value, and that the reduction made by the legislature brought them to a level below their productivity. The rental values used in the graphs are the rentals actually paid. The fact that the rental value may go up or down is not due to any basic change in rate, but rather to the quality of the acreage leased. During difficult times, as in the recession of 1938, there is a tendency to let the leases on the less desirable land lapse and to hold to those on the more desirable. The average rate per acre will thus be higher, as will be seen in figures 10 and 11 for Fergus and Phillips counties respectively.

Agricultural Leases

Cash Leases

According to the 1940 biennial report ^{57/} less than 30,000 acres, or 8.03 per cent of the 371,215.96 acres of agricultural land under lease in the entire State, was paying a cash rental of 64 cents per acre. The

^{56/} Cost of owning is determined by adding the average county tax on grazing lands to interest on the investment, represented by the assessed valuation, computed at five per cent. Source; Biennial Reports, State Board of Equalization, 1931-1940 inclusive.

^{57/} Biennial, Commissioner of State Lands and Investments, 1940, page 38.

remaining 341,435.25 acres, or approximately 92 per cent were leased on a crop-share rental basis and returned \$149,636.27 to the State as rental; an average of 44 cents per acre.

Crop-Share Leases

Under the provisions of a program inaugurated about 1937, all crop-share leases were required to summer-fallow 50 per cent of the acreage each year. Assuming then, that one-half of the acreage indicated (341,435.25) produced the entire crop-share, the rental would be 88 cents per acre for the land actually producing crops. As the average farm price received by Montana farmers for the decade, 1931-40 inclusive, was 70 cents, ^{58/} simple arithmetic shows that agricultural land belonging to the State paid an average rental of one and one-fourth bushels of wheat per acre for summer-fallowed ground, on a State-wide average.

Table VI shows that for the period 1931-40 inclusive, almost 124,000 acres in the five counties studied, produced no revenue whatever. This is an average of 12,400 acres per year of non-productive farm land. This material is graphically illustrated in figure 13.

Of a total of approximately 595,000 acres of agricultural land from which revenue was collected, the average return per acre was 28 cents. Again, assuming that 50 per cent was summer-fallowed, the rentals would be twice as much, or 56 cents per acre. The average ten year price, 70 cents for wheat, means that the average farm rental for these five counties was

^{58/} Halcrow, Harold G., Statistical Summary of Prices. Montana State College, Agricultural Experiment Station, June 1941. Mimeographed Circular 33.

eight-tenths bushel per acre. The prevailing rental rate of state lands of one-fifth the crop, would indicate that the average yield was approximately four bushels per acre in the counties studied. It will be seen that, on an average, only 83 per cent of the lands paid any rental, either in crop-share or cash.

TABLE VI. RETURNS FROM AGRICULTURAL LEASES ON STATE LANDS, FIVE MONTANA COUNTIES, 1931-1940 INCLUSIVE ^{a/}

Year	: Acreage : from which : Revenue was : Collected :	: Total : Revenue : Collected : (Dollars) :	: Revenue : Per Acre : (Dollars) :	: Acreage : from which : Revenue was : Not Collected :	: Per Cent : Acreage : Yielding : Revenue
1931	22,799.70	4,098.45	.18	6,567.00	78
1932	26,926.43	6,733.49	.25	21,248.08	56
1933	46,931.34	10,125.55	.22	20,362.85	70
1934	60,413.40	14,836.17	.25	10,987.56	85
1935	66,573.79	21,099.41	.32	6,819.54	91
1936	57,191.07	9,166.15	.16	21,085.39	73
1937	65,459.77	15,028.27	.23	12,950.10	83
1938	80,135.60	24,578.25	.31	12,550.67	86
1939	83,060.00	32,951.54	.40	5,769.50	93
1940	85,985.56	31,028.13	.36	5,519.86	94
Total	595,476.66	169,645.41	.28	123,860.55	83

^{a/} Source, Primary Data Secured from Records of the State Land Office.

Provision was made for leasing agricultural lands:

"For a share of the crops delivered at the grain elevator or market, which share shall not be less than what is commonly paid by lessees of privately owned lands as share rent in the locality where the state land is situated; and in no case shall such share rental be less than one-fifth (1/5) of the entire crop raised, delivered at the elevator." ^{59/}

^{59/} Revised Codes of Montana, 1935, Chapter 160, Section 1805.30.

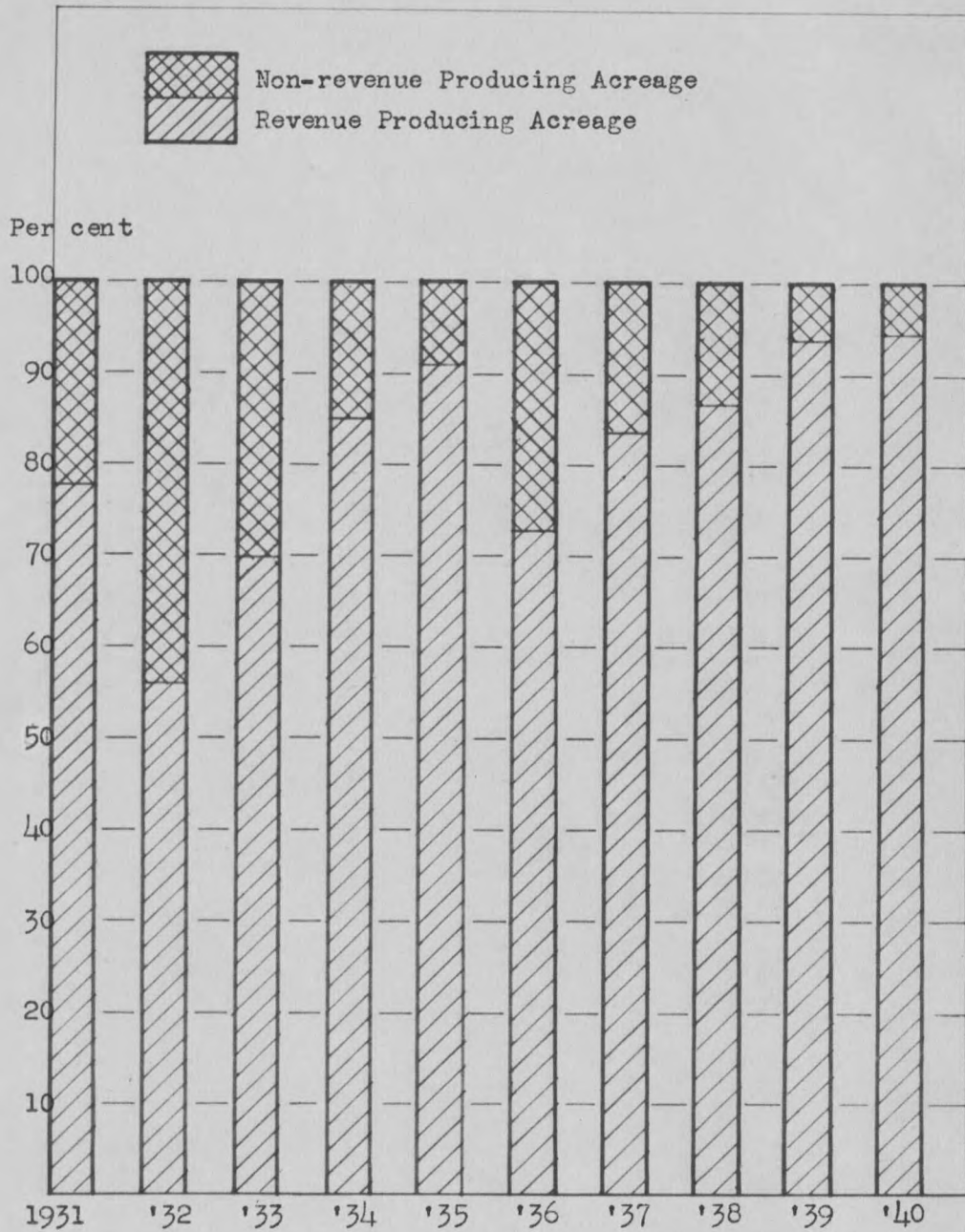


Figure 13.--Per Cent of Revenue and Non-revenue Producing Acreage of Farm Lands Under Lease, Five Montana Counties, 1931-40 inclusive

The one-fifth share which was intended as a minimum, has come to be almost the maximum rental unless raised by competition. Should competitive bidding prevail, the bid is usually raised by offering a larger share of the crop, such as one-fourth, one-third, etc. State land Office records reveal some cases where the appraisal calls for one-fourth share but, in general, the prevailing lease rate is at the minimum permitted by law.

Each spring, after seeding is completed, the Commissioner has inquiries mailed out as to the number of acres seeded and as to how much will be summer-fallowed. In spite of its efforts to maintain a constant check, many lessees consistently report "No Crop", "Too Dry", and "Taken by Grasshoppers." It is impossible, with the field force, on a part-time basis and engaged primarily in reclassification, to make a personal check of the situation. Accordingly, records reveal that many agricultural leases continue year after year with no returns to the State and, should an attempt be made to challenge the renewal of a lease, the bid is simply raised. Apparently, it is just as easy to agree to pay one-fourth or even one-third of "No Crop", as it is to agree to pay one-fifth.

Judged on the basis of potential productivity, figures 11-18 inclusive, present some pertinent information. The line of "Productivity" is the long time average yield of wheat computed at a value of 70 cents per bushel.

Chouteau County (figure 14) shows the highest productivity. At the 1931-40 average farm price of 70 cents, it would require less than one and one-third bushels of wheat to pay the rental on average agricultural land, but a glance at the rental actually paid show that on the average

one-half bushel sufficed. Of the five counties studied, Chouteau is the only one where the cost of owning has been consistently below the level of productivity. This, again, serves to substantiate the findings of Renne and Lord that the better lands tend to be under-valued for assessment purposes.

The productivity of average farm lands in Custer County (figure 15) which belong to the State shows that they are capable of sustaining an average rental charge of a little more than 31 cents per acre. The cost of ownership has shown a decline during the period of this study and is now below productivity while rentals of state land have consistently shown little return to the State.

Fergus County rentals (figure 16) have been very erratic and only once have reached a return which should be sustained under average conditions. Taxes have been high and the cost of ownership has consistently been higher than the land will sustain.

Phillips County (figure 17) has averaged little more than 20 cents rental on agricultural lands belonging to the state while the line of productivity is in excess of 60 cents. The cost of ownership started above productivity but has dropped until at the present time, the average farm lands of Phillips County are well below the charge which they are capable of sustaining.

Rentals of Agricultural land in Valley County (figure 18) have also been erratic and generally quite low. Cost of ownership has taken rather pronounced drops and is now pretty well in line with the productivity of the land.

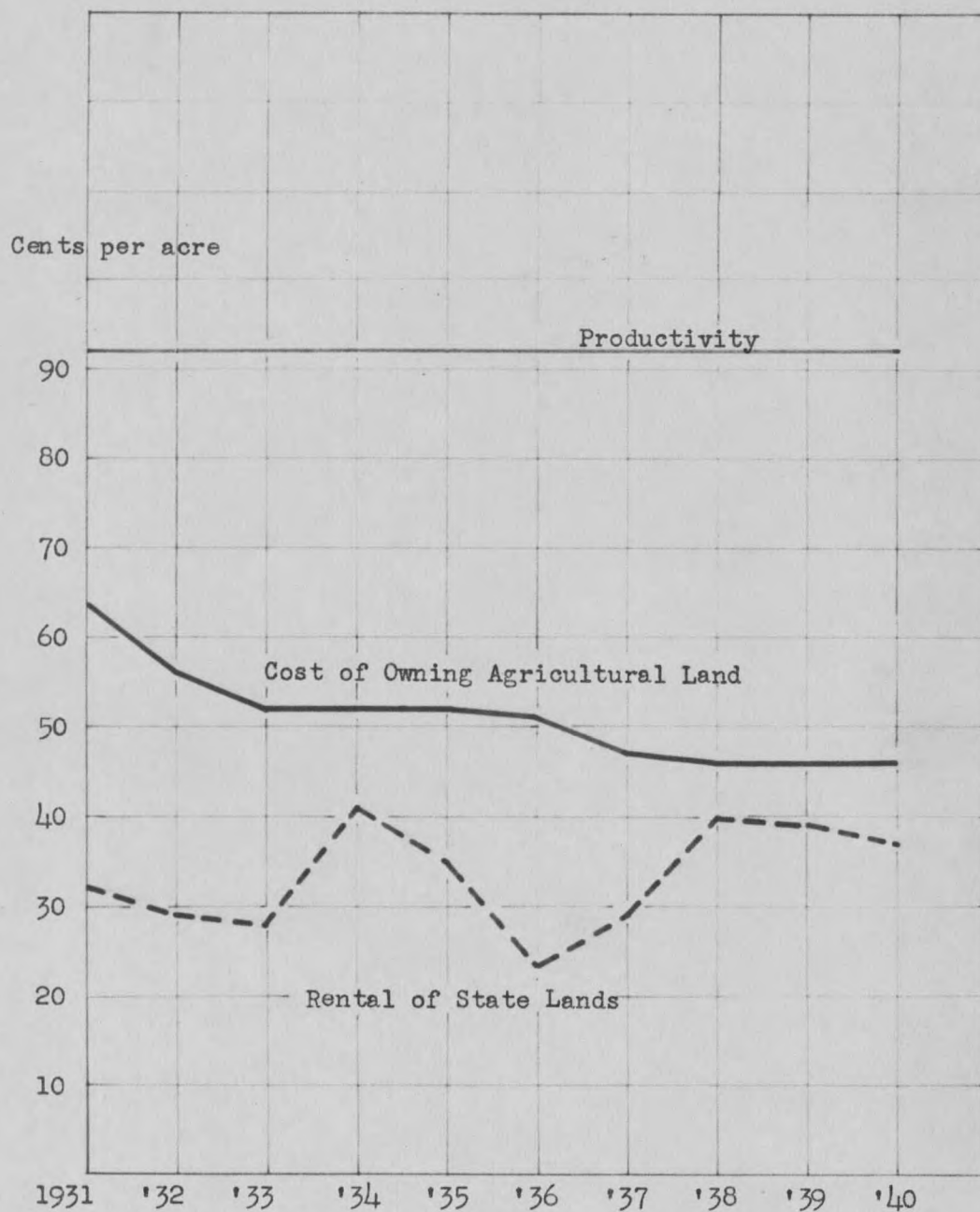


Figure 14.--Productivity of Agricultural Lands in Chouteau County, Montana, as Compared to Cost of Owning and Average Rental Returns 1931-1940 inclusive

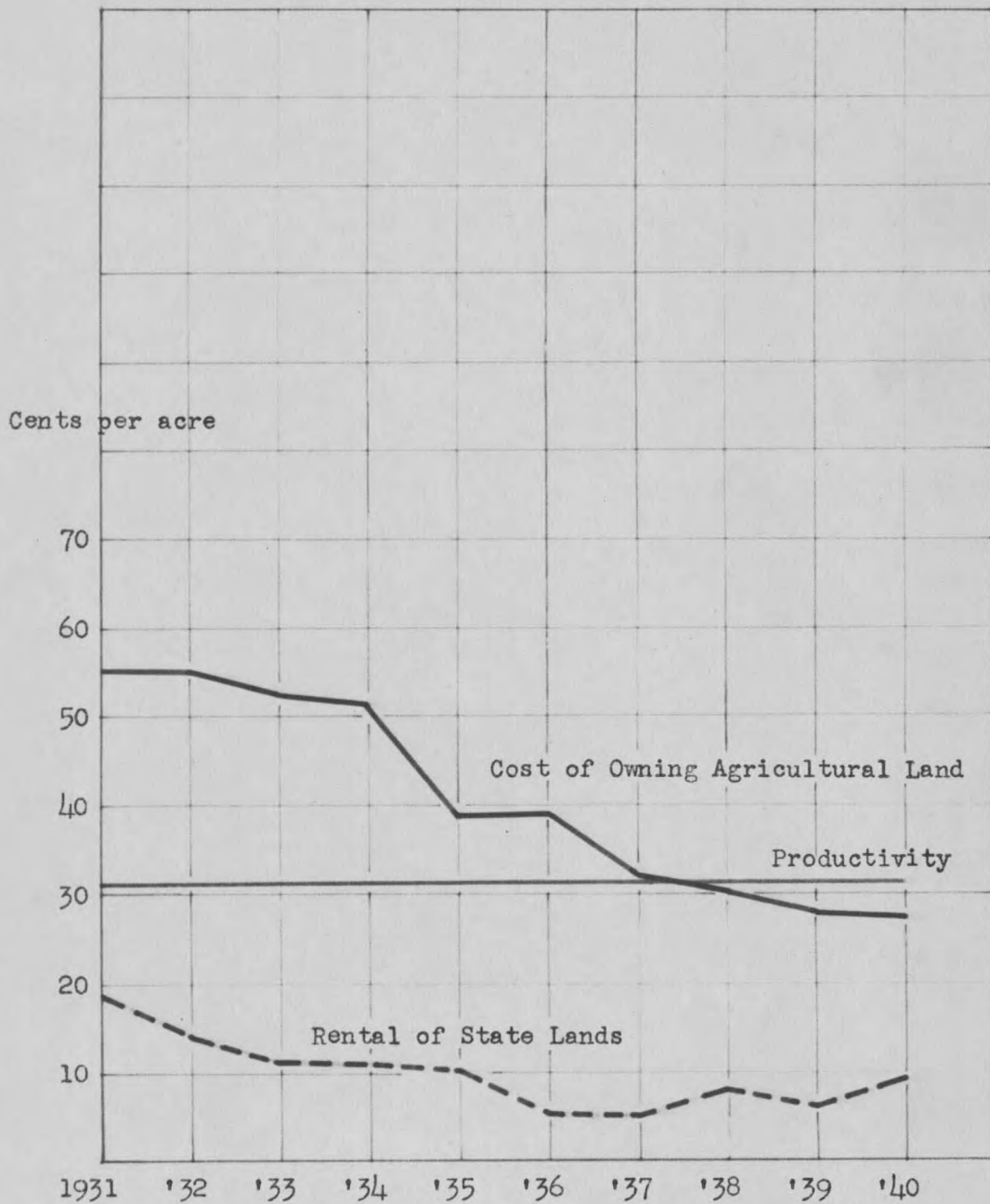


Figure 15.--Productivity of Agricultural Lands in Custer County, Montana,
as Compared to Cost of Owning and Average Rental Returns,
1931-1940 inclusive

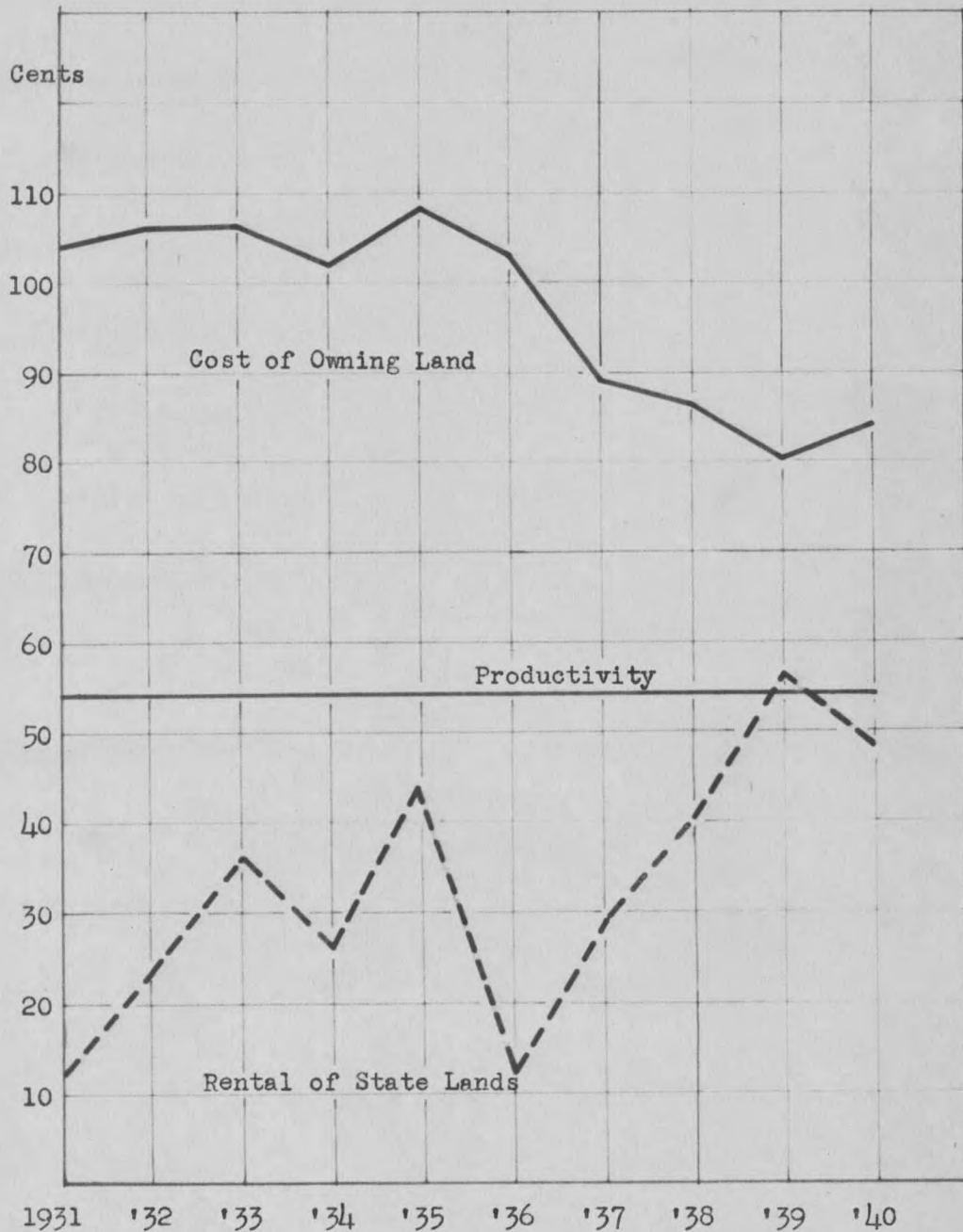


Figure 16.--Productivity of Agricultural Lands of Fergus County, Montana,
as Compared to Cost of Owning and Average Rental Returns,
1931-1940 inclusive

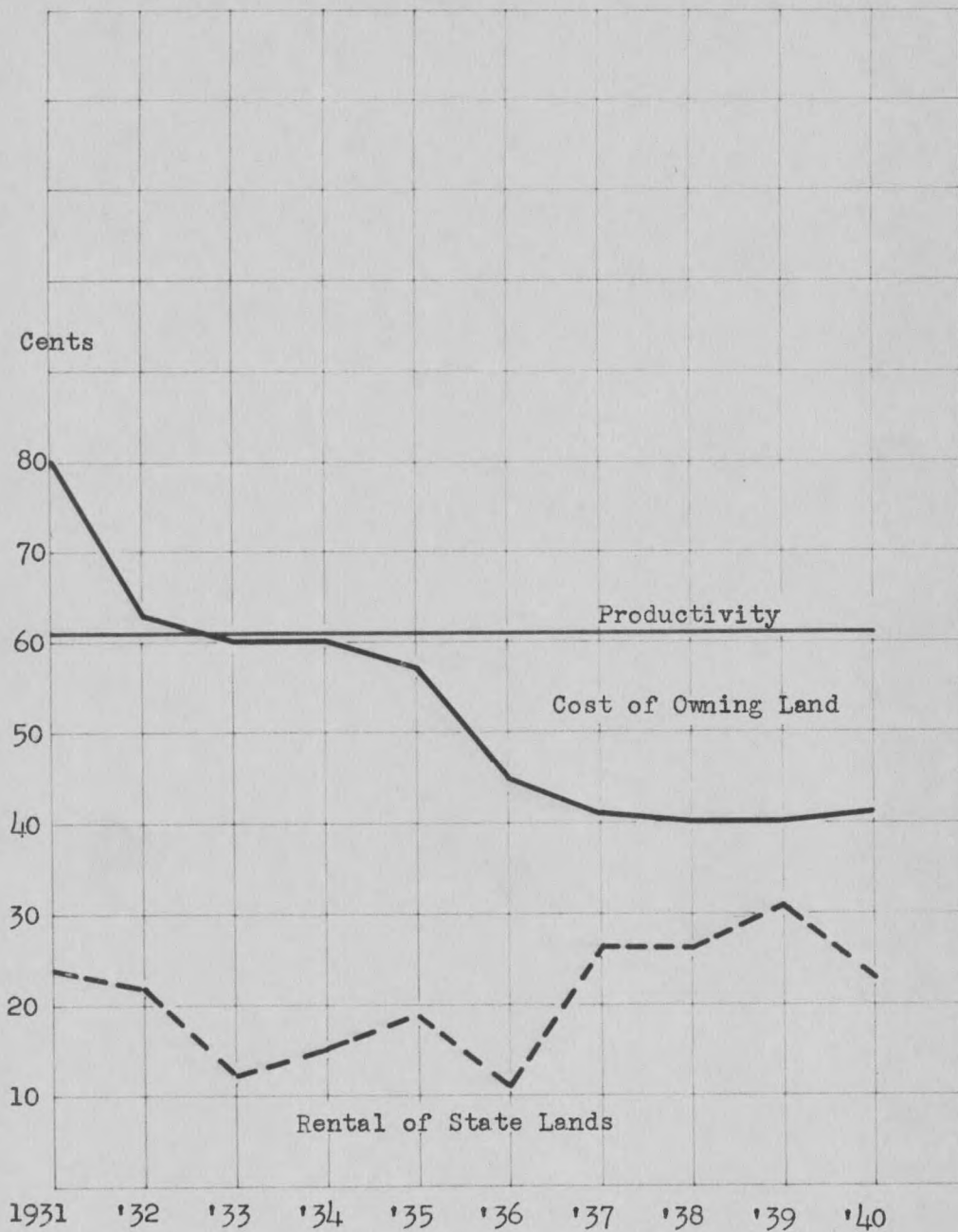


Figure 17.--Productivity of Agricultural Lands in Phillips County, Montana, as Compared to Cost of Owning and Average Rental Returns 1931-1940 inclusive

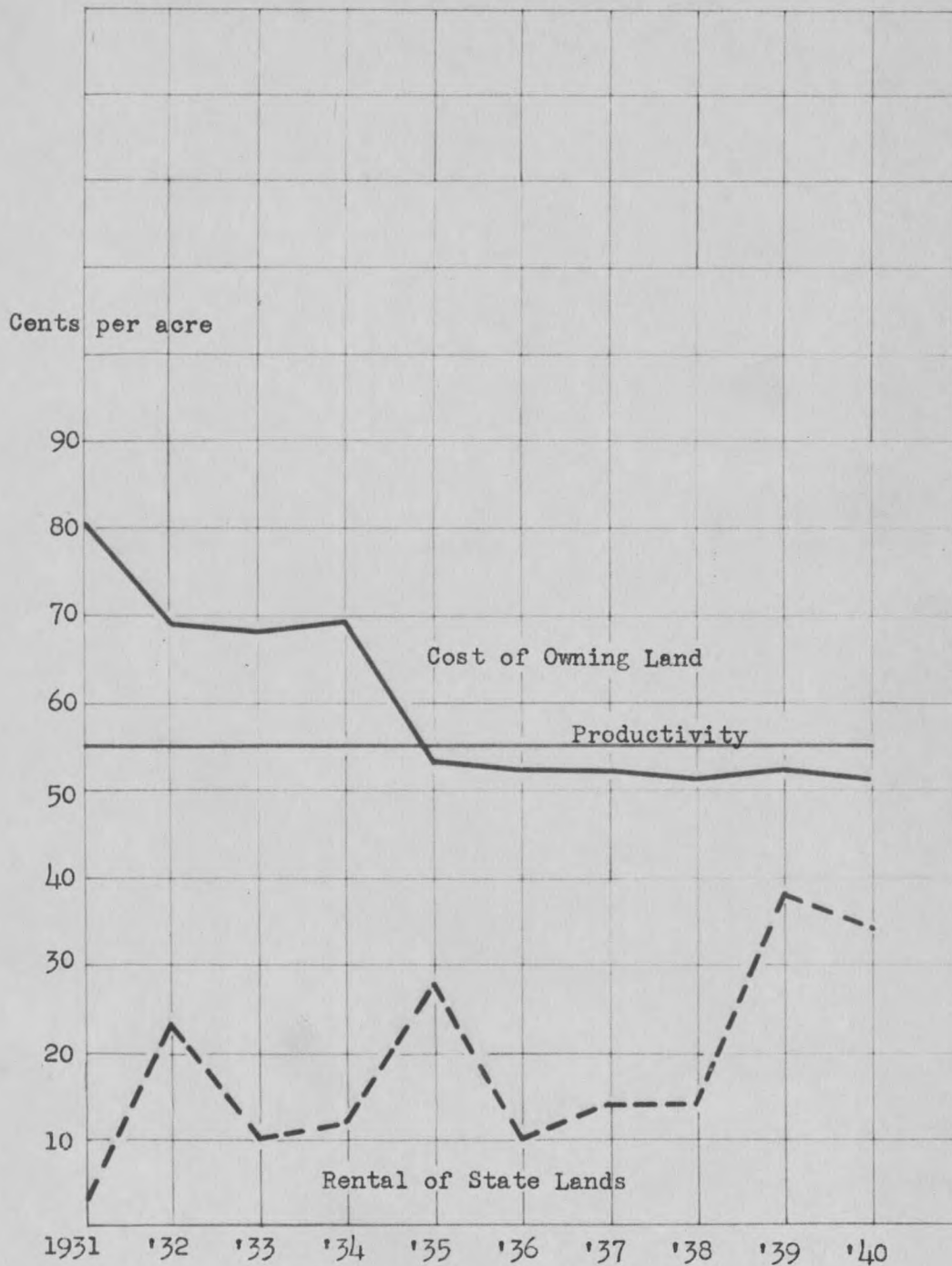


Figure 18.--Productivity of Agricultural Lands in Valley County, Montana, as Compared to Cost of Owning, and Average Rental Returns, 1931-1940 inclusive

It is not expected that the average rental will exactly coincide with the productivity of the land but over a given period of time, it should approximate it quite closely. The fact that rentals have always been below productivity would indicate that the State does not get a great enough differential rent between the higher and lower grade lands. It is apparent, in the majority of cases, that the lessee of third grade land pays just as high a rate of rental as the lessee of first grade land, although it has been shown that the first grade land can produce an economic rent of \$1.80 per acre while the third grade produces only 24 cents.

Sale Of Grant Lands

As previously indicated, provision was made for the sale of any or all state lands. Some sales have been made for cash at the time of the transaction, but the usual practice has been made to accept ten per cent at the time of sale, and subsequent to February 13, 1923 to make a contract on the amortization plan extending over a period of thirty-three years and bearing interest at the rate of five per cent per annum. Contracts on town and city lots, however, are written for a maximum of twenty years.

Until June 30, 1940 more than one and one-half million acres 60/ had been sold for a total of more than \$25,000,000.00 at an average price of \$15.37 per acre. When the 72nd Congress reduced the minimum price of grazing lands from \$10.00 to \$5.00 per acre, it was expected that sales would increase greatly. However, with the economic conditions existing

60/ 1,629,370.82 acres. Total price \$25,047,443.37.

at the time and with the 50 per cent reduction in grazing fees, there was no incentive for anyone to own the land.

The greater part of the state land that has been sold was disposed of during the years previous to World War I when the State was being rapidly settled and when, as has since been realized, conditions were abnormally good. Land was sold at that time for prices so high that it was impossible for the purchaser to pay for it. With the coming of less favorable times, contracts became delinquent and many were voluntarily relinquished. Much of the land had been plowed and abandoned leaving the usual menaces, such as weeds and soil-blowing.

In an effort to keep the purchasers on the land, terms have been changed, contracts rewritten and the time of the contracts extended. Amortized contracts extending over a period of 33 years have been made and penalty interest has been remitted 61/ in the expectation that home owners could be induced to continue their contracts.

Table VII shows that on a 10 year average, approximately 50 per cent of the payments (see also figure 19) due on Certificates of Purchase were actually collected. There is a possibility that some small part of the \$271,736.36 that became due and unpaid during the period 1931-40, inclusive, may yet be paid, but the probability of getting any substantial part is almost nil.

The extremes to which the Department of State Lands and Investments has gone in an effort to cooperate with delinquent purchasers is shown in

61/ Session Laws of Montana, 1939. Chapter 140.

TABLE VII.- COLLECTION STATUS OF REVENUE EARNED UNDER CERTIFICATES OF PURCHASE CONTRACTS, FIVE MONTANA COUNTIES, 1931-1940, INCLUSIVE ^{a/}

Year	Acreage from which Revenue was Collected	Revenue Collected (Dollars)	Per Cent of Revenue Col'd.	Acreage from which Reve- nue was not Collected	Revenue not Collected (Dollars)	Per Cent of Reve- nue not Collected
1931	59,487.58	59,995.75	54	72,916.69	50,198.53	46
1932	44,506.79	29,436.77	37	74,289.86	51,713.54	63
1933	39,739.26	25,768.37	40	56,203.39	38,222.01	60
1934	36,384.08	22,269.53	43	43,114.21	29,273.82	57
1935	37,190.84	28,157.40	52	37,727.52	26,275.89	48
1936	36,799.45	35,478.67	58	34,028.87	26,189.92	42
1937	37,069.16	21,997.91	52	27,799.88	20,261.84	48
1938	34,738.99	19,050.15	56	18,559.94	15,168.34	44
1939	31,139.27	16,930.14	69	12,750.52	7,479.44	31
1940	28,647.90	17,034.65	71	10,309.86	6,953.03	29
Total	386,003.32	276,119.34	50.4	387,700.74	271,736.36	49.6

^{a/} Source: Primary data secured from Office State Lands and Investments.

Table VIII and is graphically illustrated in figure 20. Almost 84 per cent of the 313 contracts in the counties being studied were delinquent for two years and about 33 per cent were delinquent for five years, before they were cancelled. It will be seen that 42 contracts were delinquent for six years, 35 for seven years, 17 for eight years, four for nine years and two for more than 10 years, before being cancelled. The State received no return from these lands during the period of the delinquency of these contracts.

According to the 1940 biennial report, 884,936 acres, or approximately one-half of the total acreage sold, had been returned to the State. In the light of past experience, it is now known that much of this land

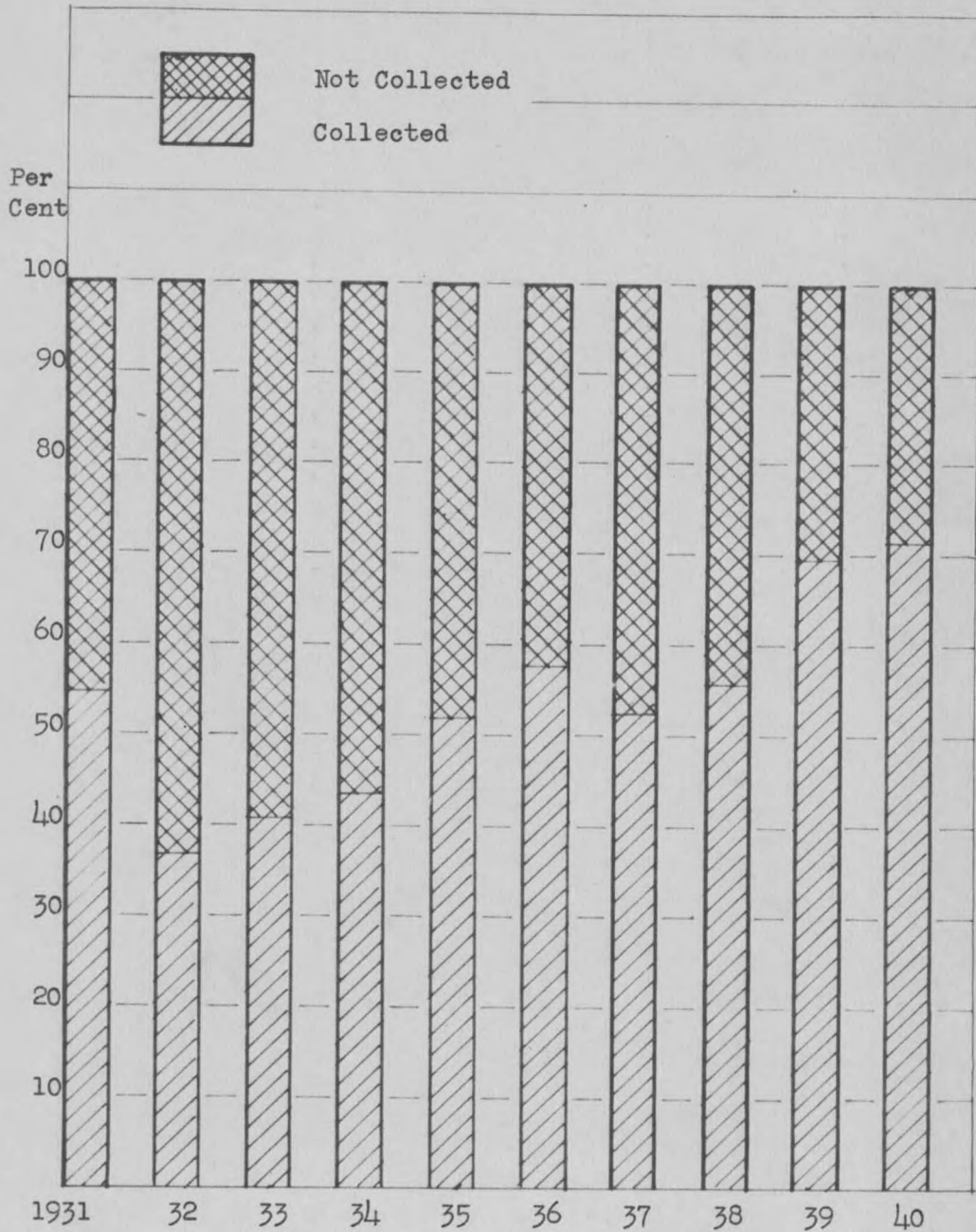


Figure 19.--Amount of Payments Due and Payable Under Certificates of Purchase, Showing Status of Collections in Per Cent, Five Montana Counties, 1931-1940, Inclusive

TABLE VIII.-- YEARS OF DELINQUENCY OF CERTIFICATES OF PURCHASE ON STATE LANDS BEFORE CANCELLATION
FIVE MONTANA COUNTIES, 1931-1940 INCLUSIVE

Years	Number of Contracts						Per Cent of Contracts					
	Delinquent	Chouteau	Custer	Fergus	Phillips	Valley	Total	Chouteau	Custer	Fergus	Phillips	Valley
1		14		9	1	3	27	8.8		15.3	25.0	3.5
2		11		3	1	7	22	6.9		5.0	25.0	8.1
3		32		9		24	65	20.0		15.3		27.9
4		42		4	1	20	67	26.1		6.8	25.0	23.3
5		12		6		14	32	7.5		10.2		16.3
6		19		15	1	7	42	12.0		25.4	25.0	8.1
7		16		9		10	35	10.0		15.3		11.6
8		10	4	3			17	6.3	100	5.0		
9		2		1		1	4	1.2		1.7		1.2
10		2					2	1.2				
Totals	160	4	59	4	86	313	100	100	100	100	100	100

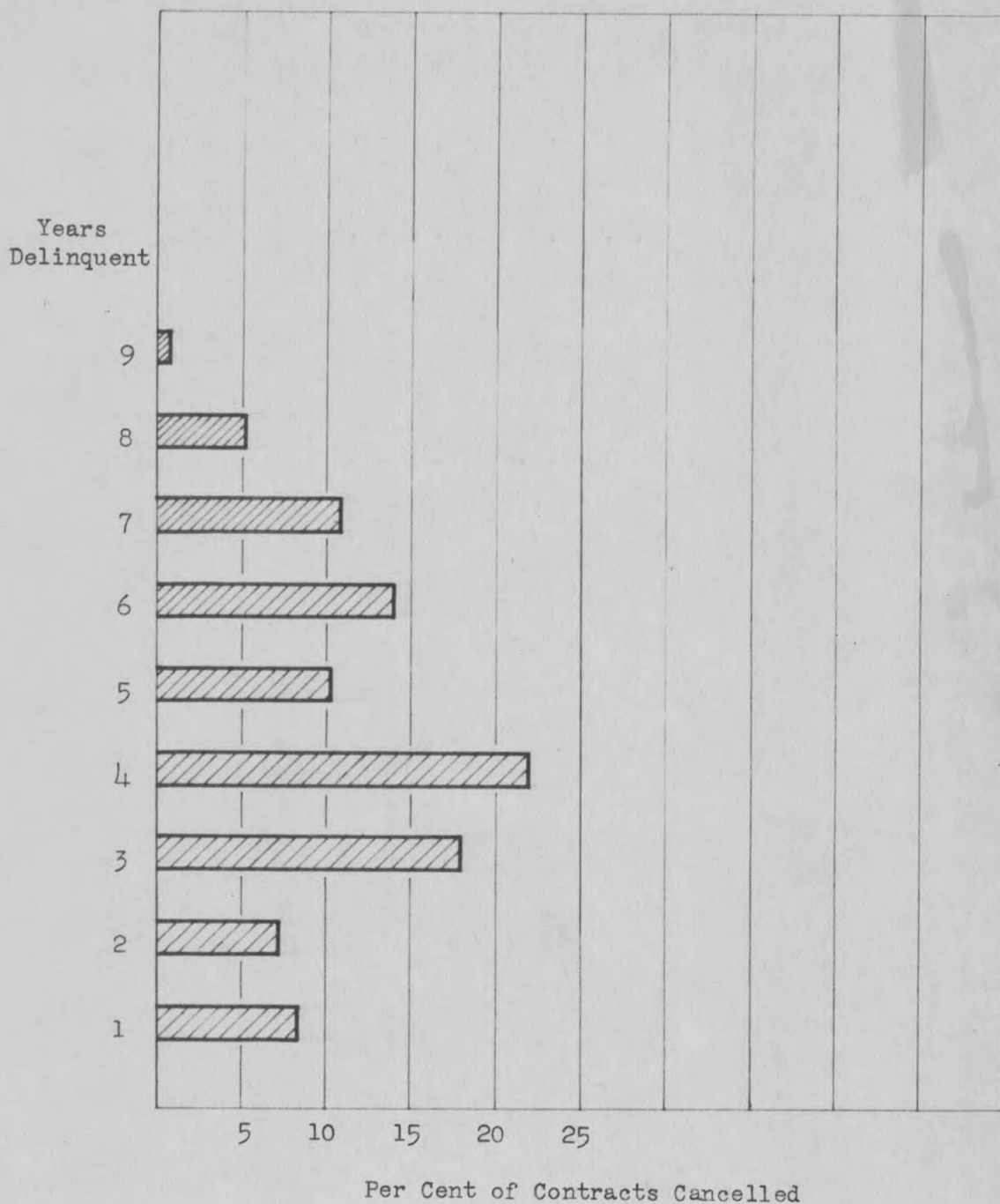


Figure 20.--Per Cent of Certificate Purchase Contracts on State Land Cancelled after Becoming Delinquent, by Years of Delinquency, Five Montana Counties, 1931-1940, Inclusive

should never have been sold for agricultural purposes. Abandoned farms and vacant buildings stand as mute evidence of fruitless attempts to cultivate land which should never have been plowed.

Except in cases where extensive improvement had been put upon the land, the greatest tragedy was the blasted hopes of the purchaser and from the State's viewpoint, the ruination of grazing land. Persons not acquainted with the long-term payment plan might reach the erroneous conclusion that the cancellation of contracts on so much land would involve great losses to the purchasers, but this is not necessarily the case. ^{62/} Only 10 per cent of the purchase price was paid at time of purchase and the annual payments were little, if any heavier, than rent. If delinquent contracts were cancelled within a reasonable time, as any private concern would do, neither buyer nor seller would have been much worse off financially. However, since contracts have been allowed to remain delinquent so long the common school funds of the State are the principal losers.

All grant lands are carried on the books at a uniform value of \$10.00 per acre. Some attempt has been made to justify this practice by pointing out that sales made to the present have exceeded \$15.00 per acre and that returns from timber, minerals, oil and gas will help to maintain an average of \$10.00 per acre for the remaining lands. It must be remembered that the better lands naturally sell first, that the remaining lands may be mountainous or rough, and that grazing lands may now be sold for \$5.00 per acre. In view of these facts, it is very doubtful if a uniform valuation of \$10.00

^{62/} Biennial Report, Commissioner of State Lands and Investments, 1934, page 27.

per acre could be sustained.

Sales Value According to Productivity

TABLE IX.- COMPARISON OF RENTAL AND SALES VALUE OF MONTANA
STATE LANDS BASED ON PRODUCTIVITY OF LAND BY GRADES

Kind of Land	Grade Number of Land	Rental Value	Sales Value
Agricultural	1	\$ 1.80	\$ 36.00
	2	1.06	21.20
	3	.24	4.80
Grazing	1	.18	3.60
	2	.12	2.40
	3	.09	1.80
	4	.07	1.40
	5	.04	.80

The sales values in Table IX are computed from rental values on the basis of five per cent earning power on the investment. Naturally, the State no longer has any extensive acreage of first grade farming land, and on a comparative basis, the acreage of second grade farming is also limited. Thus, it will be seen that much of the remaining acreage of state lands is unlikely to bring the minimum legal prices.

Future Land Sales

Lands returned to private ownership should be sold with the expectation that resource depletion, tax delinquency, reversion and resale will not be repeated. Pressure to return state lands to private ownership may be great in areas where land suitable for occupancy is limited; likewise pressure to prevent the sale of state lands in areas where rentals are low may be

equally great. The sale of isolated tracts for home-making might well receive the attention of a policy making committee. The State Board of Land Commissioners should be empowered to deny applications for purchase in any area where the extension of road and public school services would entail burdensome public expenditures. Demands for public services for isolated farmsteads have become such a problem that county administrators have taken steps to curtail such demands.^{63/} The use of restrictive covenants in conveyances might be found rather useful. Thus agricultural land located in areas inaccessible at certain seasons of the year might be sold with a stipulation prohibiting year around occupancy of the land for family residence.

Cooperation in Conservation

The State has recently been safeguarding its interest in future sales contracts by close cooperation with the Agricultural Adjustment Administration and County Planning Committees. Land that has not previously been cultivated, cannot be brought under cultivation by a purchaser until the purchase contract has been paid in full, unless permission is given by one of these agencies and an equal amount of inferior land retired. This

^{63/} Whereas, in a number of counties, the State Land Board has sold or leased lands which, in many cases, has resulted in requiring public service in some communities beyond the taxing power of the local tax unit to furnish:

"Be it resolved that we respectfully request that the State Land Board of the State of Montana investigate all such applications for leases or sales and not make any leases or sales where the applicant has apparently insufficient funds to help maintain himself and family, and where the lease or sale would necessarily result in great increase in tax requirements of the local tax unit. Adopted, upon motion duly made, seconded and carried. Resolution 2. Thirty-first Annual Meeting, State Association of County Commissioners, Havre, June 17, 18, 19, 1940.

conservation practice should prevent the soil-blowing and weed menace of abandoned crop land by preventing land that is unsuited for cultivation from being put under the plow.

Mortgage Lands

In an endeavor to secure greater returns from investments of school funds, the 1917 Legislative Assembly made provision for investing part of the Public School Permanent Fund and other educational, charitable and penal institution funds of the State in farm mortgages. More than four and one-half million dollars were invested under this act and over four million dollars 64/ of these investments remain unpaid although no new loans have been made since December 24, 1924. Montana's venture in the farm loan business has been most unfortunate. 65/

64/ Unpaid balance of Principal \$4,042,506.36, June 30, 1940, Biennial Report, Department of State Lands and Investments.

65/ "In examining our abstracts it develops that the State has made loans double the amounts which had been made by private loan companies. A loan of \$1,000 on a quarter section had been taken up by the state and a loan of \$2,000 made in lieu ... Recommendations for loans were made by inspectors who apparently had no knowledge either of land values; or human nature or of moral risk."

Biennial Report of the Register of State Lands, 1921-22

TABLE X.- CONDITION OF MONTANA STATE FARM LOANS
AND CONTRACTS AS OF JUNE 30, 1940 ^{a/}

Classification	Number of: Loans	Acres	Balance Of Unpaid Principal
1.- Amortized loans to which State does not have title.	72	24,657.45	\$ 109,819.38
2.- Original loans to which State has title and lands have not been re-sold.	639	215,501.34	1,368,932.22
3.- Amortized loans to which State has title and the lands have not been re- sold.	156	50,831.63	311,363.43
4.- Sales contracts in force.	514	169,570.09	996,052.05
5.- Sales contracts cancelled and land not resold.	519	187,152.84	1,256,339.28
Totals	1900	647,713.35	\$ 4,042,506.36

^{a/} Source: Biennial Report of Department of State Lands and Investments, 1940.

Under the provision of the State constitution ^{66/} the school fund "shall forever remain inviolate, guaranteed by the state against loss or diversion".

The 1935 legislature, recognizing the obligation of the State of Montana to protect the Public School Permanent Fund against loss or diversion, made provision for setting up a fund to be known as the State Farm Loan Sinking Fund. The purpose of this fund was to provide for the repayment of the entire investment in farm loans as of January 1, 1935, the

^{66/} State Constitution, Art. XI, Section 3.

total being \$3,250,625.95. To accomplish this end, the fund operates as follows: "All moneys received from farm loans, from whatever source, are credited to the State Farm Loan Sinking Fund. A quarterly transfer is then made to the Public School Permanent Fund and the Public School Interest and Income Fund, the amount transferred to the total investment. What is left in the sinking fund over and above the amount of the interest thus paid is transferred to the Public School Permanent Fund". 67/

Thus the legal machinery was set up for reimbursing the State School Fund. All mortgage lands now belong to the State, not to the educational institutions of the State, and as fast as they are sold, the returns find their way into the school fund. Although the Attorney-General has ruled that sale can be made without including accrued interest, much of this land will never be sold for the amount of its present debt excluding interest.

Table XI shows the status of lands acquired under mortgage foreclosure or quitclaim deed in the counties studied. While these loans were originally made for a period of ten years, the law was changed to permit more liberal financing over a longer period of time. It will be seen that of the \$644,900 originally loaned, over \$560,000 or 87 per cent was refinanced. Optimism has always been one of the attributes of Montana people and even though many of the borrowers could not make the original payments, they did not hesitate to incur a greater obligation if given a longer period for repayment. Consequently, Fergus County borrowers refinanced 108 per cent (Table XII) of the amount of their original loans. The average amount

TABLE XI.-- FINANCIAL HISTORY OF STATE MORTGAGE LANDS, FIVE COUNTIES,
1931-1940, INCLUSIVE

	Chouteau	Custer	Fergus	Phillips	Valley	Totals
Number of Loans	109	50	42	74	48	323
Total Acres	31,083.27	19,948.74	14,676.67	27,363.84	16,124.21	109,196.73
Amount of Original Loan	204,950.00	94,600.00	119,050.00	136,400.00	89,900.00	644,900.00
Loan per Acre	6.58	4.74	8.11	4.98	5.58	
Amount when Refinanced	181,279.49	38,502.08	128,551.52	126,725.54	88,425.00	563,483.63
Amount per acre	5.83	1.93	8.76	4.63	5.48	
Amount Paid on Loan	47,608.06	8,193.90	20,730.53	14,019.59	20,463.52	111,015.60
Present Book Value of Loan	193,875.71	90,764.30	108,481.28	134,825.03	93,072.00	621,018.32
Per acre Book Value	6.24	4.54	7.66	5.14	6.14	
Ten Year Revenue from Leases	27,548.84	3,065.71	13,805.00	15,110.97	10,269.50	69,800.02
State Land Office Lease Appr'sl.	2,683.78	None	1,013.26 ^{a/}	None	881.71 ^{a/}	
Per acre appraisal	.088		.093 ^{a/}		.094 ^{a/}	
Productivity Rating (Year)	7,284.35	1,663.32	6,252.08	6,277.83	5,692.34	27,169.92
Per Acre	.234	.083	.44	.23	.35	
Land Office Sales Appraisal	248,178.54	None	70,629.95 ^{a/}	None	68,641.11 ^{a/}	
Per Acre	8.11		9.25 ^{a/}		10.06 ^{a/}	
Productivity Sales Value	144,281.00	30,242.18	125,041.00	125,556.00	113,846.80	538,966.98
Per Acre	4.64	1.52	8.52	4.64	7.06	

^{a/} Only on lands outside of Grazing Districts.

Source: Primary Data Secured From Commissioner of State Lands and Investments, Productivity Data, Soil Survey, and Farm Management Studies.

refinanced for the five counties was 87 per cent. In the area studied, only 17 per cent of the amount of the original loans were repaid during the ten years of this study.

Considerable sums have been paid out by the state in the past for delinquent taxes, cost of foreclosures, etc. The "book value" represents the balance due on the original loan plus such items as were necessary to protect the State's interest. Table XII shows that the book value now represents an average of 96 per cent of the original loans in these counties.

TABLE XII. CONDITION OF MONTANA STATE FARM LOANS
IN PER CENT, 1940

County	Per Cent of Original Loan Refinanced	Per cent of Original Loan Repaid, Prin. and Interest	Per cent Ratio Book Value to Original Loan	Per Cent Productivity Value bears to Book Value
Custer	41.0	9.0	96.0	33.0
Chouteau	88.0	23.0	95.0	74.0
Fergus	109.0	17.0	91.0	115.0
Phillips	93.0	10.0	99.0	93.0
Valley	98.0	23.0	104.0	122.0
Average	87.0	17.0	96.0	87.0

As a Land Office appraisal of mortgage lands in Custer and Phillips Counties is not available, it is impossible to get a five county value for comparison with the appraisal established through productivity. However, such values are available for Chouteau (Table XI) and show an average

leasing appraisal of approximately nine cents (.088) as compared to a productivity rental value of a little more than 23 cents. The sales appraisal averages \$8.11 per acre, which at the annual rental of 8.8 cents, gives a return on the investment of approximate one per cent. The rental of 23.4 cents computed from productivity, when capitalized, at five per cent gives \$4.64 as the value of the land. Thus, we have a case of land valued at \$8.11 appraised to lease at 8.8 cents, or a little more than one per cent, as compared to a productivity sales value of \$4.64 appraised to lease at 23.4 cents per acre, or a return of five per cent. This same comparison can be followed through for the analysis of Fergus and Valley counties also.

The book value of Chouteau County lands is \$6.24. The sales appraisal of \$8.11 would show a nice margin of profit, if it could be realized. The productivity sales value is only \$4.64 which is a substantial reduction from the book value. In Fergus and Valley Counties, the productivity value shows a margin of profit over the book value, even though the productivity value is lower than the sales appraisal of the State Land Office. In Custer, the productivity value is approximately one-third the book value. This study substantiates the findings of Renne and Lord ^{68/} that the poorer grades of land tend to be over-valued.

^{68/} Renne, R. R., and Lord, H. H. Assessment of Montana Farm Lands, Bulletin 348, Montana Agricultural Experiment Station, October 1937.

PART VII. SPECIAL PROBLEMS OF ADMINISTRATION

Who Leases State Lands?

The Enabling Act provided that State lands should be leased in quantities not exceeding one section to any one person or company. ^{69/} When that section of the Act was adopted in 1889, it was, no doubt, the intention to discourage the concentrating of state lands in few hands and to encourage, if possible, the widest possible dissemination into family-sized units.

It was soon found, however, that there were effective ways of circumventing the law. There were few restrictions on who might lease the land. Accordingly, all of the lessee's relatives as well as the hired men, were eligible for State land leases. All of these leases, when put together, made tracts of considerable size. The personnel of the State Land Office would conveniently record all of the leases together under the designation of "Mr. Blank's Unit".

Thus, the law was so ineffective that no surprise was felt when it was repealed, permitting citizens of the United States 21 years of age, or the head of a family, to lease State lands in any quantity.

The extent of non-resident holdings of state land is negligible, so whatever benefits accrue to the lessees are confined to residents of Montana.

Table XIII shows that 116 operators lease approximately 1,000,000 acres and that the average lease-hold of this group is more than 8,500 acres.

^{69/} Enabling Act, Section 11.

This acreage represents over 26 per cent of the total of all lands leased during 1940. Ninety-three lessees of tracts ranging in size from 2 sections to 2,999 acres, lease approximately 200,000 acres, or an average of over 2,100 acres each. Thus, it will be seen that 209 lessees, or slightly more than three per cent, control a total of almost 1,200,000 acres, or more than 31 per cent, of all the state lands under lease.

TABLE XIII. MONTANA STATE AGRICULTURAL AND GRAZING LEASES
BY SIZE OF HOLDINGS, 1940

Size of Lease Tracts	<i>Acreage</i> Average Leased	Number of Leases	Average Lease Holding (Acres	Per Cent of all Lands Leased	Per Cent of all Leases
All leases	3,808,457.80	6,675	571	100	100
Under 1280	2,619,295.04	6,466	405.08	68.78	96.87
1280 - 2999	197,360.26	93	2,122.75	5.18	1.39
3000 - up	991,802.50	116	8,550.02	26.04	1.74

Competitive Bidding

When lease rates were established for the rental of State owned lands ^{70/} it was no doubt intended that competitive bidding should be the determining factor in placing the final lease rate upon all lands, and also in determining who should rent the land. Actually, however, competition plays a very minor part in the leasing of state lands. In a total of over 10,000 leases examined, it was found that less than seven per

^{70/} Revised Codes of Montana, 1935, Chapter 160, Sec. 1805.25.

cent 71/ had been let through competition. Provision is made so that any qualified 72/ person may contest the renewal of a lease at any time before the 30-day period immediately preceding its renewal. He then obtains the privilege of entering into actual competition for the lease. Whether or not the prospective lessee is notified of the date of competition or whether or not he fails to respond, once he is notified, the fact remains that whoever secures a lease risks only about seven chances out of one hundred of having his renewal contested.

Among the reasons for the failure of competitive bidding may be enumerated:

- 1.- Reluctance on the part of one neighbor to compete against another for a lease at "auction" bidding.
- 2.- Unwillingness to incur expense of a trip to Helena should oral bidding be indicated.
- 3.- Inadvisability of leaving early spring operations to employees in order to participate in the bidding. 73/
- 4.- Discrimination against the operator of a family-sized farm.

Should competitive bidding then, be eliminated entirely or should the system be changed?

71/ 10,484 leases examined. 703 competitions.

72/ Sec. 1805.23, Chapter 160, Twenty-one years of age or head of family.

73/ Employees of State Land Office report that under the present system where bidding is usually done in the spring when roads are bad and there is storm danger, lessees tell of leaving heavy farm work (care of young stock, etc.) to their wives.

Competition For Grazing Leases

The Forest Service has eliminated competitive bidding for grazing privileges on National and State forests. Likewise, it has no part in the distribution of grazing privileges in a grazing district. In fact, it is hardly conceivable that competition through oral bidding has a part in any program of leasing if conservation of resources is of any considerable importance. Bidding beyond the worth of a tract of land is apt to lead to abuses. The lessee who bids more than the land is worth "just to show a neighbor" may in two years do the land more damage than five years of conservative management can restore.

Even the advanced prices secured under a system of competitive bidding do not add materially to rental returns. It would appear to be the practice to pay the higher rental only as long as the competitor remains interested. When the danger of competition has passed, the lease is cancelled and usually renewed at the minimum rate. If the lease is not thus renewed, even the competitor may no longer want the land. He may be sullen or may not have actually wanted it in the first place. Again, other people may associate an unduly high rent with the land, or may be afraid of becoming involved in a neighborhood quarrel. Consequently, the land lies unproductive and open to trespass, often for years.

When bonds ^{74/} were required of all lessees of state lands, it was not

^{74/} Section 1884, Revised Codes of Montana, 1921.

"Each lessee within 24 hours after leasing any land, shall pay to the register with first year's rental, and shall deliver to him, a good and sufficient bond, executed by the said lessee and two sureties and approved by the treasurer of the county in which the land is situated; the condition of

possible to cancel a lease in this manner because a faithful performance of the conditions of the contract was required. There are still a few advocates of the bonding provision, even though it seems discriminatory in its operation. Perhaps a reference to a Biblical passage will explain the objection -- "To him who hath shall be given . . ." Certainly it is more difficult for the man of limited means to obtain sureties than for the well-to-do, even though the need for the poor man is greater and in his hands the land would make a greater contribution to society.

Bonds may be required at the discretion of the Board 75/ and might well be used in the case of leases that were let through competitive bidding, in order to compel a fulfillment of the contract terms.

At present sealed bidding is the rule unless one of the competitors asks for oral bidding, which is held in the State Land Department in Helena. Participation in the oral bidding works a hardship on the man who must leave his work drive long distances and incur the expense of making an appearance to protect his leasehold. Often all of the neighborhood animosities and ill feelings flare up in the excitement of competition. In the heat of anger, or the spirit of defiance, the bid offered, or met, is out of all proportion to the value of the land. In spite of the apparent imperfections of competitive bidding, it seems highly imperative that some means be available for determining who shall secure the lease and how

such bond being that such lessee will keep and perform all the covenants and agreements contained in the lease."

This provision, in about the same form, was in effect from the beginning of statehood until 1927, when it was repealed.

75/ Section 1805.29, Chapter 160, Revised Codes of Montana.

much is to be paid if the state is to secure the largest possible lease returns.

Sealed bids offer a possible solution and possess the following advantages:

- 1.- They would keep bids from going too high. The lessee would bid only an amount calmly and deliberately determined in his own home.
- 2.- They would keep down dissention and animosities in the neighborhood and tend to promote neighborhood harmony.
- 3.- They would result in a greater number of competitions. Many prospective lessees would submit bids if not compelled to bid orally.
- 4.- A trip to Helena to enter a bid would not be necessary. The cost of the trip would be saved and no time would be lost.
- 5.- The State would receive greater returns, not so high, perhaps, as from the man who sought to "show his neighbor", but more consistently high, for he would be more inclined to hold a lease so acquired.
- 6.- The operator of a "family-sized" unit could compete for leases on more nearly equal terms.

It would seem desirable, if the present lessee so desired to allow him to retain the lease at the highest bid offered. The Crow Indian Agency, for example, does not protect its lessees in this manner and a lessee can, and often does, find that he has lost his lease and has no alternative but to sell his livestock.

Competition for Agricultural Leases

Almost ninety-two per cent of the acreage under lease for agricultural purposes is leased on the crop-share basis. The usual share is one-fifth

of the crop delivered at the market. When competition arises, bids are usually made for a greater share of the crop, as for one-fourth, one-third and in a few cases as high as one-half.

The only cash outlay under this plan of leasing is for the fee of \$2.50 paid for the lease. There are no further payments until the crop is harvested when the State receives its share of the crop. If, for any reason, there is no crop, there is no rental obligation. Land Office records reveal many cases of pretty consistent failures, but because the lease is on a crop-share basis, if there is no crop, there is no cause for cancellation of the lease.

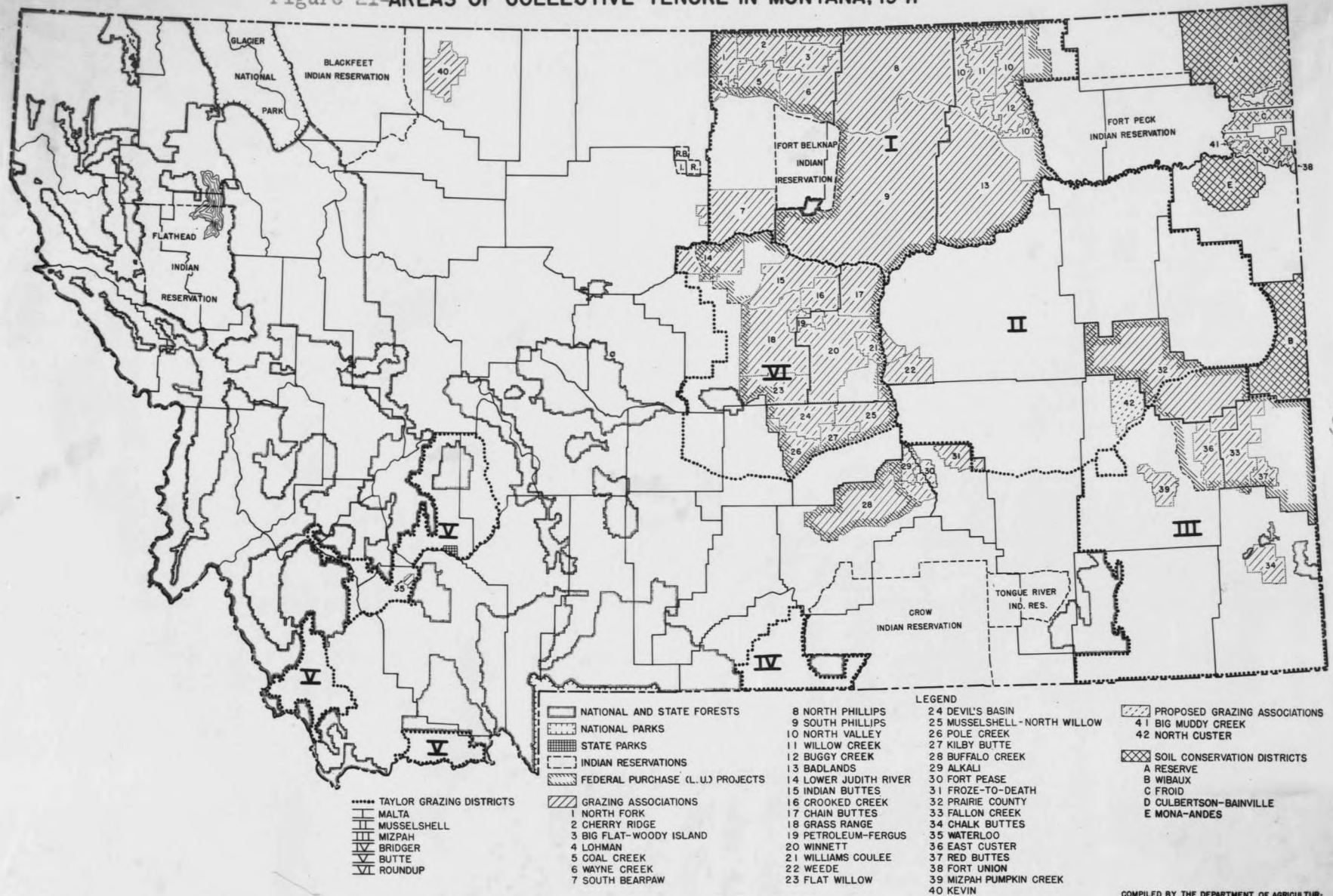
It would seem desirable, once the proper crop-share had been established for each grade of land, that instead of bidding an increased share of the crop, a competitor should be compelled to raise the bid as a cash bonus or even as an outright cash bid. This bonus would be paid each year the lease is in effect and would provide a lever to remove tenants who consistently report crop failures in the neighborhood where crops are being raised.

Grazing Districts

Grazing districts of Montana operate under the Grass Conservation Act of 1939. This law created the State Grass Conservation Commission, composed of five members, which participates in the organization of grazing districts and has limited supervisory powers over a district's directors.

Acknowledgement is made to Eva Janet Smith, competition clerk, State Land Office for many of the ideas on competitive bidding.

Figure 21-AREAS OF COLLECTIVE TENURE IN MONTANA, 1941



COMPILED BY THE DEPARTMENT OF AGRICULTURAL ECONOMICS, MONTANA STATE COLLEGE, IN COOPERATION WITH THE LAND ECONOMICS DIVISION, B.A.E., U.S.D.A. JANUARY 15, 1941, WITH THE ASSISTANCE OF W.P.A. PROJECT Q.R. 165-1-91-83, W.P. 3360 NEG. E 9 B

A group of stockmen who wish to form a grazing district must make application to the Commission, which then holds a public hearing on the matter and either grants or denies a permit to organize the district. Which action they take depends principally upon whether it seems likely that the district will be able to lease enough land and secure enough members to control, with the lands of its own members, more than 50 per cent of its area. The districts are cooperative organizations existing for a definite period but not to exceed 40 years; they can exercise no powers of local legislation; membership is voluntary and limited to persons engaged in the livestock business. An unusual provision of the Grass Conservation Act requires districts to lease, at a reasonable rental, all state land within their boundaries and not otherwise disposed of, whenever offered to them by the State Board of Land Commissioners; and the Grass Conservation Commission is charged with the duty of requiring the districts' compliance. 76/

Advantages

Committed definitely to a policy of conservation, the districts are in a position, through long-term leases and collective tenure, to inaugurate as some of the principal benefits of grazing districts:

- 1.- Conservation of resources through conservative stocking, deferred and rotational grazing.
- 2.- Better utilization of range through the use of fences and water development.
- 3.- Uniform livestock management practices, permitting

the use of higher quality sires, and consequently the marketing of more uniform quality of livestock.

- 4.- Creation of adequate reserves thus eliminating or greatly alleviating the more extreme hazards.

There is no question that any grazing district is in a position to be of considerable value to the livestock interests and to land-holding agencies as well, if properly administered.

Disadvantages

Against these advantages may be listed the following disadvantages of grazing districts as administered at the present time in Montana.

- 1.- Because of the excessively low rentals, all incentive to purchase state owned land is removed.
- 2.- Because group pressure has been used to accomplish purposes, whether desirable or undesirable.
- 3.- Because rentals established for grazing districts have been used in securing individual leases.

Certainly there is no incentive to own lands when they can be leased from the State at rentals such as have been quite uniformly obtained by grazing districts. This result was anticipated by I. M. Brandjord, former Commissioner of State lands, 77/ while A. F. Vass of Wyoming contends that, "Land investment is so important that a poor manager using tax-free

77/ "It is likely that the administration of grazing districts under the Taylor Grazing Act will be such as to remove the incentive to purchase the state owned lands within these districts. If so, the enactment of the Taylor Grazing bill would result in a material and permanent impairment of the value of lands already granted to the State of Montana. To some extent it would tend to defeat the very end and purpose for which the Federal land grants were made to our state." ...Report of Commissioner of State Lands and Investments, 1934.

land has a better chance of making a fair rate of interest than the efficient manager on over-taxed, privately owned land." 76/

As a grazing district is required by law to lease all state lands within its boundaries not otherwise disposed of, it has been supposed that much idle land would be brought under lease.

Working on the assumption that any tract of land might be vacant for a year or so at a time, a study was made of the state lands in Phillips County to determine just how much unleased land would be brought under lease through the provisions of the Grass Conservation Act. Accordingly, only those tracts which had been consistently not leased for a period of five years were considered. It was found that there was in excess of 45,000 acres (45,586.48) in that county alone which had returned no revenue during the period 1931 through 1935. However, with the advent of agitation for the formation of a grazing district, many leases were either cancelled or allowed to lapse. Instead of having 45,000 acres of unleased land as in the five year period mentioned, over 47,000 acres (47,431.15) remained unleased for the greater part of the second five year period of this study. The net result is that approximately 2,000 more acres had a record of five years of idleness during the latter part of the decade (i.e. during the formation of the grazing district) than during the fore part. Much of the land on which leases were dropped is still unleased. One large operator who had been consistently leasing over 19,000 acres for several years previous to 1936 has, since that time, been paying state land rental on little

76/ Vass, A. F., American Cattle Producer, Vol. XXL, May 1940, page 3.

more than 3,800 acres. According to the records of the County Assessor, this operator averaged four animal units more during the years 1939-40 than during the years 1935-36. 79/

Although group pressure may be disclaimed by the grazing associations, and particularly by the South Phillips Association, there are many indications that it has been present. Witness the following illustration. Even though the state land within the South Phillips District has been used for a number of years and a rental of approximately three cents per acre agreed upon, the lease has never been signed, notwithstanding the fact that a productivity rating places the rental value of the land at seven cents per acre.

Instead of accepting the lease at the rate originally agreed upon, the association has countered with another proposition whereby the district is to be divided into three zones: the first zone, comprising approximately one-third of the area, to be leased at three cents per acre; the second zone at two cents, and the third, at one cent per acre. The average rental would be 1.7 cents per acre and the total revenue from state lands within the district would be \$1189.00. It is also proposed to begin payments as of the current year even though this land has been under control of the district and subject to use by its members for several years.

<u>79/</u>	<u>Year</u>	<u>Animal Units</u>		
	1935	5206		
	1936	4100	Average 1935-36	4658
	1937	1108		
	1938	3199		
	1939	4340		
	1940	4948	Average 1939-40	4662

The findings of this study as to the productivity value of the State lands within the two grazing districts of Phillips County were at so great a variance with the proposed rate that an additional check seemed desirable. Accordingly, the findings of the range survey conducted by the Agricultural Adjustment Administration were used. This survey shows a carrying capacity for the state lands within the district of 16,704 animal months. Computed at a rental value of 33 cents ^{80/} per animal month, the total rental value of state lands within the district would be over \$5,500.00 or eight cents per acre which agrees quite closely with the productivity value (figure 21).

TABLE XIV. COMPARISON OF GRAZING COSTS ON STATE LANDS OF PHILLIPS COUNTY ACCORDING TO DIFFERENT APPRAISALS 1931 - 1940 INCLUSIVE

Grant Lands	Total Acres	Original Rate per Acre	Rate as Set by Legislature	Productivity per acre	Grazing District Rate	Rate AAA Range Survey
North Phillips District	27,235.92	0.133	0.066	0.116	0.03	0.092
South Phillips District	67,869.72	0.088	0.044	0.07	0.0285 ^{a/}	0.08

^{a/} Original rate agreed upon. Subsequent rate offered 0.017. See text preceding.

Values computed from the soil survey productivity index and from farm management studies, show a value for the district of over \$4,800 or approximately seven cents per acre. In view of these findings from two

^{80/} Saunderson, M. H., Some Materials Relating to Livestock and Land Valuation, Montana Agricultural Experiment Station, Mimeo.

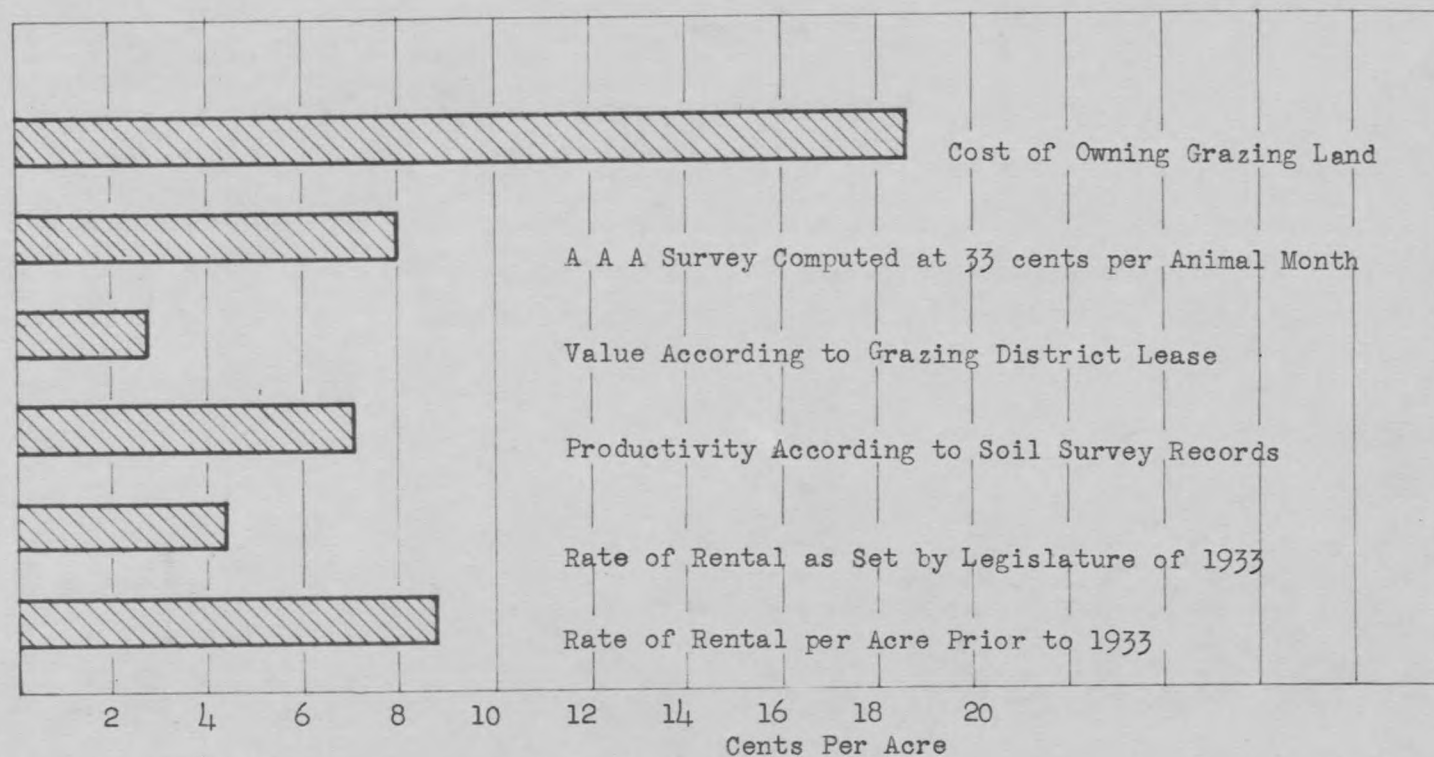


Figure 22.--Grazing Costs of Privately Owned Land in South Phillips County Grazing District as Compared to State Land Rentals under Different Appraisals 1940

entirely independent and reliable sources, it seems that group pressure must share the responsibility for reducing rentals to so unreasonable a basis.

A Two Price System

Many a merchant has been discredited in an attempt to maintain a two price system, one for his customers and the other for his friends. Just as the merchant encountered dissatisfaction and distrust, so will the State Board of Land Commissioners encounter the same as long as it maintains one rental for grazing districts and another for the individual rancher leasing lands within the district.

Lease 27752 in the files of the State Land Office provides an example of the difficulties that are being encountered. The correspondence filed with the lease shows the "jockeying" that was done to secure the individual lease at a rental rate that was supposedly available only to a grazing district. As a result of executing this lease at the given rates, the school fund loses \$335.00 during the term of this lease.

Rental values which are clearly less than earning capacity of the land have been established for grazing districts. The additional revenue that was obtainable by bringing additional land under lease has been completely nullified by the lower rentals that have been established for all lands leased to the grazing district.

Section 16, Township 34 north, Range 29 east has paid rentals of \$1365.87 during the ten years of this study, an average of \$136.59 per year; yet if it becomes available for lease it can be had by a grazing

district for only \$20.00, according to the records of the State Land Office.

Section 36, Township 32 North, Range 33 East returned rentals of \$1485 cash, exclusive of one-third of the 1940 hay crop, for the period 1931-40 inclusive. This is an annual rental in cash of \$148.50 yet should it become available for least, it can be leased by a grazing district for \$40.00.

TABLE XV. APPRAISAL RATES PER ACRE OF SELECTED GRAZING DISTRICTS IN MONTANA

District	County	State Land Acres In District	Original Appraisal Per Acre (cents)	Productivity Rate Per Acre (cents)	Grazing District Rate Per Acre (cents)
Mispah-Pumpkin	Custer	5,760	6.25	5.2	3.13
Indian Butte	Fergus	13,520	7	5.6	2.6
Buggy-Creek	Valley	63,218	9.3	9.3	3.4
Bad Land	Valley	42,867	10	5.4	1
Willow Creek	Valley	8,200	10.4	8.7	2.8
North Phillips	Phillips	27,236	13	11.6	3
South Phillips	Phillips	67,870	9	7	2.85 ^{a/}

^{a/} Unsigned lease is made out for this amount; however, if present proposal of the association is accepted this figure will be changed to 1.7 cents per acre.

Table XV shows that the low rentals enjoyed by the Phillips County districts are not confined to those districts alone. The other districts

listed, taken from counties studied, reveal a somewhat similar situation.

A Comparison of Rentals 81/

Indian Lands

Montana has six Indian Reservations in the Great Plains area of the State. They are quite widely scattered (see Figure 22) and, in general, should have grazing conditions more or less similar to the counties which have been studied.

TABLE XVI. ACREAGE LEASED AND RENTAL OBTAINED
BY MONTANA INDIAN AGENCIES, 1941

Agency	Acreage	Ave. Rate Per Acre
Fort Belknap	567,990.00	.08
Fort Peck	529,291.00	.0624
Crow	1,095,651.00	.118
Blackfeet	920,115.00	.15
Tongue River	402,952.00	.12
Rocky Boy's	10,700.00	.075
	3,526,699.00	.12

It will be seen from Table XVI that the combined Indian Agencies actually have more grazing land under lease (3,526,699.00 acres) than the Department of State Land and Investments (3,437,242.00 acres) and that they obtain an average rental value of 12 cents as compared to 5.4 cents, or 2.2 times more than the rental obtained by the State. Some contend that the Indian lands have higher carrying capacity. This is a moot question and, in the absence of a range survey, no satisfactory answers

81/ Correspondence on file from Indian Agencies and Counties.

can be given. However, it is doubtful if Indian lands are worth on an average more than twice as much as state lands.

The Fort Belknap Agency, lying adjacent to Phillips County, leased out during the 1941 season, over one-half million acres at an average of eight cents per acre, as compared to less than three cents paid by grazing associations in Phillips County. This Agency has raised its rentals to a minimum of 12 cents per acre for the current season. Appendix v.

The Fort Peck Agency is contiguous to Valley county. This agency rents more than one-half million acres at an average of .0625 per acre, while the Buggy Creek Association in Valley County leases a little more than 63,000 acres of state land for 3.4 cents per acre. The Bad Land Association leases over 42,000 acres at one cent per acre; the Willow Creek, 8,200 at 2.8 cents; and the North Valley, a little more than 10,000 at 2.92 cents per acre.

Rocky Boy's Agency leases 10,700 acres at rental's ranging from five to ten cents per acre. The Blackfeet Agency obtains 15 cents for tribal lands while the Tongue River and Crow Agencies lease for 12 and 14.8 cents, respectively. The Crow Agency has approximately 30 per cent as much land leased out for grazing as does the State of Montana, and gets almost three times (2.74) as much per acre.

County Lands

In comparing the rentals of state lands with tax deed land acquired by the counties, it must be kept in mind that state lands are distributed on a regular pattern and have as much opportunity to secure good land as to

secure the poorer land, while as a general rule, it is the poorer and less desirable land that reverts to the county by way of tax deed. It would then be expected that state lands would average higher in lease value than county lands.

Valley County leases 31,000 acres to the North Valley Cooperative Grazing Association at four cents per acre while the State leases 10,468.32 acres, scattered throughout the district for an average of 2.92 cents. For smaller tracts, Valley County receives 6.5 cents as compared to a productivity value for grazing lands in the county of 8.5 cents.

Fergus County permits the lessee to select lands at a rental of five cents per acre and charges four cents per acre to a grazing district when all unleased lands within the district are leased by the Association. The Indian Butte Cooperative Grazing Association in that county pays an average of 2.6 cents to the State for 13,520 acres. The average productivity rental value of grazing lands within the county is 7.5 cents.

Custer County has established the following rates for leases on county owned land.

	<u>Rate per year</u> <u>Per Section</u>
Less than one section, at the rate of	\$ 140.00
One to three sections, " " " "	30.00
Four or more sections, " " " "	25.00

The Mizpah-Pumpkin Cooperative Grazing Association leases nine sections of state land at \$20.00 per section while the average productivity of grazing lands within the county is seven cents per acre or \$14.80 per section.

Phillips County alone, among all counties studied, seems not to be able to lease its lands to any better advantage than the State. A total of

510,000 acres of Phillips County tax deed land leases for three cents per acre which approximates very closely the rate paid by the two grazing associations to the State. The productivity rental value for the County averages about eight cents per acre.

Chouteau County leases approximately 14,000 acres at seven cents per acre. This average value is higher than that received by any other county and slightly in excess of the average rental received for state grazing lands within the county. However, it is approximately only one-half what the rental value should be according to productivity.

PART VIII. PLAN FOR ADMINISTRATION OF STATE LANDS

Need For Policy

In general, the Public Land Policy throughout the nation has been to get publicly-owned lands into private ownership as rapidly as possible. This is one of the reasons for the failure to develop a more adequate system of managing state owned lands. After more than half a century, Montana is administering 98.5 per cent as much acreage as was contained in the original grant. These fifty-three years have covered a period of westward expansion, homesteading and land booms. It is unlikely that the State will again experience such a demand for land. The State is in the land business to stay and it is imperative that a sound policy for the future administration of this land be formulated as soon as possible. It has been shown that indecision has characterized the administration of these lands in the past. The State Board of Land Commissioners has the

responsibility of managing this resource in such a way as to secure the maximum revenue for the public treasury compatible with sound land use and successful agricultural practices.

An Inventory Needed

The first essential in an intelligent and successful administration of any business is a careful inventory of resources. Once this is made, a plan of management can be formulated. Likewise, the first essential in a successful administration of state lands is a reliable inventory.

It would seem then that a system of classification based, not upon present use, but upon some feature more permanent and lasting, should be the first step. The merits of soil classification based upon the inherent productivity of the soil have been shown. Using productivity as a basis, the number of acres of each grade of farm land can be determined, as well as the number of acres of each grade of grazing. Lands chiefly valuable for mineral, gravel, and recreation can also be classified as such.

Such an inventory need not be costly or require a great deal of time. Many agencies have compiled accurate data covering land over a large part of the State. Aerial photographs are available for many counties. Range surveys have been made by men trained and experienced in that work. Soil survey data have been obtained and mapped by a trained and experienced force. By no means the least valuable source of existing information that has been compiled, is that obtained by local land use planning committees. Teton and Fergus Counties have found that they can obtain a reliable up-to-date inventory of all their lands, at comparatively small cost and a

minimum of field work, by the use of existing records.

Recent experience has indicated that when used for the purpose of base and area identification, location and picturization, aerial photographs contribute materially to the speed of mapping, and to the compilation of data necessary in land classification. An example of the accuracy of aerial photographs was demonstrated in an Agricultural Adjustment Administration project. Sixteen hundred and forty acres were measured from photographs, and later were accurately surveyed with tape and transit. When the figures were compared, it was found that those taken from the aerial photographs were less than three-tenths of one per cent in error. 82/

Determination Of Policy

Once in possession of basic data pertaining to the state lands, it should be possible for the State Board of Land Commissioners or any other agency to formulate a sound program of management. For example, a special advisory committee appointed by the Governor, and composed of a stockman, a farmer, an educator, an economist, and a range management specialist could render a useful service to the State in formulating a policy for future administration. Such an advisory committee would be only temporary and serve just long enough to complete a study. It should determine the relative advantages of selling or leasing. Perhaps, a part of the land should be sold so as to maintain a proper balance between real estate and the more liquid investments. A policy of one administration's favoring

82/ Ahrens, T. P., The Utilization of Aerial Photographs in Mapping and Studying Land Features, Land Use Planning Publication Number 6.

sale and the next favoring leasing is apt to lead to a situation where the policy is out of step with the interests of the State.

Five million acres or more in widely scattered tracts of land presents a real problem in efficient management. A study might reveal that 3,000,000 acres would be all of the land that should be administered and that efforts should be made to reduce the holdings of State lands to that amount.

Mortgage Land Policy

Approximately sixty years will be required to reimburse the State School Fund for the outstanding mortgage indebtedness if the rate of repayment of the past ten years prevails. That is, assuming that all of the mortgage lands will sell. No doubt a portion of these lands can be sold, some because they are worth the price in their physical productivity, others because they can be included advantageously with other holdings. However, there will still remain a large acreage, which under ordinary circumstances cannot be sold.

Are the schools of the State to wait upon an event which in all probability will never occur?

Here again, is work for an advisory committee. The acreage on which there is a possibility of finding a market within the next few years should be segregated from that on which the possibilities of paying out are more remote. The School Fund should then be reimbursed for the unsaleable lands. The average return on all state owned investments acquired during the year ending June 30, 1940, was slightly more than three per cent, while

the funds tied up in mortgage lands return, according to law, only two per cent. Assuming that one-half of the land, or approximately \$2,000,000 worth, is classed as not readily saleable, the school fund would then be reimbursed and profit by one per cent or \$20,000 per year.

More Responsibility For Fieldmen

Almost without exception, the past Commissioners of State Lands and Investments have recommended a larger field force for more efficient handling of state land resources. According to the most recent ^{83/}information, there were more than \$4,000,000 in outstanding farm loans; more than 6,600 farm leases, of which 1,615 were crop-share; 109 oil and gas leases; in all, more than 5,000,000 acres to administer. Yet, this immense business is conducted almost wholly through correspondence. "Unquestionably, considerable financial losses have resulted from the lack of fieldmen", according to Mr. I. M. Brandford, former Commissioner. ^{84/}

Fieldmen should be selected on the basis of their training and qualifications for the position rather than upon their party affiliations. These men should be well distributed about the State and given year around employment.

Forest lands comprise a considerable portion of the western part of Montana, so that the remaining farm and grazing lands could no doubt be efficiently administered from the State Land Office. The Great Plains

^{83/} Biennial Report, Commissioner of State Lands and Investments, 1940.

^{84/} Biennial Report, Commissioner of State Lands and Investments, 1932, page 8-9.

region, comprising approximately two-thirds of the State, is entitled to some consideration. It is unfair and discriminatory to residents of this part of the State to ask them to make the trip to Helena to transact their land business. Mr. Brandjord says:

"Experience has abundantly demonstrated that we cannot always render satisfactory service to prospective lessees through correspondence alone. The information as to what lands are available for leasing, the amount of rentals and the terms and conditions on which the lands may be leased, should be more easily available." 85/

Fieldmen might well be located at such centers as Wolf Point, Chester, Miles City, Big Timber and Lewistown. At such widely scattered points they would be available to give information on leases and sales. They could contact prospective lessees and could be instrumental in bringing considerable additional acreage under lease. They could be especially effective in making collections in the fall, checking on crop-share leases, and getting land under lease before operations start in the spring.

Consolidation Of Holdings

According to the original pattern of distribution, Montana should own sections 16 and 36 in every township in the state. However, squatters, homesteaders, Indian Reservations and other agencies have broken the uniformity of the pattern. Lieu lands were selected, parts of sections sold, mortgage lands acquired, so that today the state land holdings are widely scattered in tracts of varying sizes. The State has few alternatives in the leasing or sale of its lands. It is usually a lessee's market. "Some

85/ Biennial Report, Commissioner of State Lands and Investments, 1930, page 82.

private range can be used effectively without supplementary public range but little public range can be used without supplementary private range." ^{86/} Very few tracts of state land can be considered an economic unit in themselves and consequently must be leased to some one to supplement existing units. If many of these tracts could be consolidated into units of considerably larger acreage, the opportunities for leasing would, no doubt, be greater. Legal provisions for the accomplishment of this step are already available. ^{87/} The State Board of Land Commissioners is empowered to exchange lands with the "United States or any department thereof" provided that the State of Montana shall "receive lands of equal area and not inferior in value".

The State of Wyoming has worked toward a consolidation of its lands and according to Winifred S. Kienzle, Deputy Commissioner of Public Lands and Farm Loans, the practice has resulted in bringing a greater acreage under lease. He writes:

..."We have consolidated our land into units that we have felt were large enough to keep them from being vacant. In some cases, we have, with the consent of the lessee, traded isolated forty and eighty acre tracts for lands adjoining our State lands. While we can never, in all probability, have every acre leased, we have reduced our vacant acreage from 380,013.38 acres as of September 30, 1938 to 193,064.14 acres as of September 30, 1940. This reduction in vacant lands is due, we feel, mainly to our adherence to the policy of consolidation into larger units. Our difficulties

^{86/} Clawson, Marion, The Administration of Federal Range Lands, Quarterly Journal of Economics, Vol. LIII, May, 1939.

^{87/} Revised Codes of Montana, 1935. Chapter 160, Section 1905.19.

in the policy have been few and easily adjusted, and our lessees are well pleased to be able to secure solid workable units in preference to scattered forty and eighty acre tracts." 88/

The state lands in Montana are in larger tracts than those mentioned and yet considerable advantage could accrue to the State by consolidating acreage wherever possible.

Prompt Cancellation Of Leases

As already indicated, leases that are made in March and April will return 100 per cent of their value while for each succeeding month, the rentals will be increasingly less. It has also been shown that land not leased before the beginning of spring operations has slight chance of being leased for that year. Accordingly, if state lands are to return their maximum revenue they must be kept leased. Fieldmen working throughout the winter could determine to quite an extent just what leases were going to be relinquished and find new lessees before spring. If that procedure were followed, it would reduce the amount of rentals now lost because of failure to immediately make available to new lessees, leases that have been dropped. However, if proper diligence in this respect does not accomplish the desired result, it would seem advisable to set the date of delinquency ahead from February 28, possibly as much as two months, so that a longer period of time would be available to get all lands under lease before spring operations.

Office Procedure

The Land Office card as illustrated in Appendix ii is the most

88/ Letter dated April 13, 1942.

frequently consulted office record. It provides a wealth of information pertaining to the section in question once the location of the tract is determined. Inquiry as to the John Jones lease is countered with a question such as "What is the description of his land?" If the description is not readily available, it is then a problem of searching the lease books until some clue is obtained as to the lease number or description before any inquiry can be answered. Should the inquirer give the legal description, the card may not be in the file, as sometimes happens, then it again becomes a case of checking for the name under which the land is leased.

It quite frequently happens that a lessee will send his remittance in payment for his lease in the form of a check or bank draft with nothing to indicate his lease number or even his post office. Sometimes the postmark serves as a guide, other times, it is no help whatever. This means that the cashier must go through the index of each of the current lease books until the lease number is found. Under the five year leases of the past, that might necessitate searching as many as five books; under the ten year leases now being written, it might necessitate searching ten years' records, for a lease is recorded only on the date on which it is filed. This procedure is not only time consuming, but it causes needless wear and tear on the costly lease books.

It would seem that a card index system of names of lessees would be a valuable addition to the files of the office. Such a card would provide spaces for recording the lease numbers. When a lease is filed, a card would be made on which is recorded the lease number. When the lease expires or is cancelled, a line is drawn through the number and the new

number recorded. Such a system would have the following advantages:

- 1.- It would provide a convenient record of lessees.
- 2.- It would provide a two way index, furnishing inquirers names as well as descriptions.
- 3.- It would save wear and tear on costly lease books.
- 4.- It would be more convenient for the cashier to determine and identify remittances without having to search several books.
- 5.- Once a card was made it would serve for many years.

Such a card file would have been convenient in the past for five year leases. It will be almost a necessity in the future for the 10 year leases now being written.

An Unquestionable Record Is Desirable

After land appraisals have been established at considerable expense and formally approved by the State Board of Land Commissioners, they are entered in pencil upon the official cards. These cards are the most frequently consulted records and are those from which lease and sales values are determined. In some cases when a new appraisal is entered, the older entries are not erased. Aside from the possibility of having appraisals changed indiscriminately, there is also some confusion as to which is the current official appraisal.

It would seem desirable to have all appraisals entered with an official stamp on which the date of approval by the board is indicated. Such a procedure would eliminate any question as to the authenticity of the appraisal.

The Merit System

As citizens of the State, we elect a chief executive to administer the affairs of State. We pay for sound judgement and executive ability, yet through our "spoils" system demand much of our executive's time and energy in interviewing and appointing personnel for very minor positions. Not only do we hamper him in his efforts to give us a sound constructive administration, but we disrupt the routine and efficiency of many departments and offices.

A sound civil service or merit system should be inaugurated whose function it would be to set up standards for the different positions, examine applicants, and certify them to the chief executive when vacancies occur. Not only are the people who render efficient and conscientious service entitled to security of tenure, but such security is necessary to protect employees against political interference.

It seems particularly desirable that standards of education and training be established and that the men who are entrusted with evaluating state lands be examined as to their qualifications. A chain is no stronger than its weakest link. No matter how conscientious and efficient the administrative officers and personnel of the State Land Office may be, if their records are based on faulty and irresponsible appraisals, their efficiency is all for naught.

The men who are entrusted with this work should have a knowledge of soils, botany, range management and surveying. They should be able to meet the public, represent the State in a creditable manner, and be agile enough to carry on their duties under any circumstances.

A Sliding Scale Of Rentals

As the State of Montana grows older in years, there has come a realization of the erratic nature of the climate of the Great Plains area. Out of this realization have come adapted drought resistant strains of plant life, adapted machinery and of more recent years, adapted credit. This adaption has emerged from a purely climatic aspect to encompass the economic aspect as well.

Parity payments and crop insurance of the Agricultural Adjustment Administration are indications of the trend, as are Social Security and old-age benefits of our social program. Agencies extending intermediate and long-term credit have, of recent years, shown a disposition to lighten payments during periods of economic stress and drought years. However, in so doing, they expect that payments will be equalized during more prosperous times.

If the State Board of Land Commissioners had been empowered to reduce rentals during the economic depression of 1932, the problem of grazing rates on state lands would never have been taken before the legislature. Obviously, if they were empowered to reduce rentals during economic depressions they should be empowered to raise them during times of comparative prosperity in order to maintain a fair average rental. However, the matter of making adjustments on a sliding scale could not be left entirely to the discretion of the Board. They would be subjected to constant pressure by groups seeking to further their own interests. There must be some indicator, less subject to change than mere public opinion or the opinion of any group.

Lambs, wool and cattle are the principal source of income of stockmen who use the state lands of Montana. An index figure of these combined commodities could be determined for some period considered normal. This combined index figure could be used as a base price upon which to base calculations for future adjustments. A fluctuation of perhaps 20 per cent either above or below this index might be considered normal and any change would have to be greater than this before a change in grazing rentals would be permitted.

Let us suppose that the Federal Agricultural Statistician in Helena kept such an index. If the index number dropped more than 20 per cent below the base figure and remained there for the greater part of the year, the State Board of Land Commissioners would be empowered to reduce rentals for the succeeding year and continue the reductions in effect until the index figure came back into line again. Likewise, they would be empowered to increase rentals when the index of these three commodities reached a point 20 per cent above the base.

It must be recognized that high prices alone do not mean prosperity if costs are high compared to receipts. The prices of sheep, wool and cattle soared to great heights in 1919-20, but along with these prices went unprecedented feed and wage costs. Any index number, to be really accurate, would have to be weighted with such cost items.

This type of sliding scale has possibilities of serving a very useful purpose. Legal obstacles would have to be overcome but such a plan is deserving of careful consideration in the formulation of a sound policy for the administration of state lands in Montana.

APPENDIX 1.- FEDERAL LAND GRANTS TO THE STATE OF MONTANA

PUBLIC SCHOOL GRANT (Sec. 10 of Enabling Act)

This grant embraces sections 16 and 36 of each township of the state outside permanent national reservations, and makes provision for selecting lieu lands for such of these sections that have been lost to the state.

Total grant about

5,188,000

STATE UNIVERSITY GRANTS

Section 11 of Enabling Act grants seventy-two sections, to be sold for not less than \$10 per acre, the proceeds to constitute a permanent fund, "the income thereof to be used exclusively for university purposes;" total grant 46,080

The Act of Congress approved March 9, 1904, (33 Stat. 64) grants the south half and the south half of the north half of Sec. 26, Twp. 13 N, of Rge. 19 W. adjoining the original campus "for university purposes;" 480

The Act of Congress of March 3, 1905, (33 Stat. L. 1080) grants 160 acres for a biological station; this land has been selected on Blue Bay on the Flathead Lake.

160

Total

46,720

AGRICULTURAL COLLEGE GRANTS

Sec. 16 of Enabling Act Grants (This is really the Merrill Grant made applicable to Montana)	90,000	
Sec. 17 of Enabling Act makes an additional grant of	<u>50,000</u>	
Total		140,000

STATE SCHOOL OF MINES

Sec. 17 Enabling Act	100,000
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STATE NORMAL SCHOOLS

Sec. 17 Enabling Act	100,000
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REFORM SCHOOL

Sec. 17 Enabling Act	50,000
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DEAF AND DUMB ASYLUM

Sec. 17 Enabling Act	50,000
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PUBLIC BUILDINGS AT THE STATE CAPITOL

Sec. 12 Enabling Act	32,000	
Sec. 17 Enabling Act	<u>150,000</u>	
Total		<u>182,000</u>
Total of all grants		5,856,720

APPENDIX II. GROSS INCOME AND OPERATING COSTS OF MONTANA
 DRY FARM LANDS, 600 ACRE UNITS

Alternate Summer-fallow Crop System

	<u>13 bu.</u>	<u>16 bu.</u>	<u>19 bu.</u>
Gross income per crop acre, \$.70 per bu.	\$9.10	\$11.20	\$13.30
Operating costs per acre,			
Hired labor	.10	.10	.10
Gasoline at \$.16 per gal.	1.08	1.08	1.08
Oil @ .20 per quart	.20	.20	.20
Repairs on equipment	.66	.66	.66
Taxes on equipment	.10	.10	.10
Hauling fuel and supplies	.56	.56	.56
Farmer's errands	.29	.29	.29
Seed per acre	.70	.70	.70
Hauling grain	.65	.80	.95
Miscellaneous	.25	.25	.25
Deprec. on equipment	1.53	1.53	1.53
Interest on Machinery	.40	.40	.40
Taxes on land (2 years)*	.20	.50	.80
Operations labor income			
\$600 ÷ 300 acres	2.00	2.00	2.00
Total cost per acre (2 years)	8.62	9.07	9.52
Net income to land (2 years)	.48	2.13	3.61
Net income to land (each year)	.24	1.06	1.80

* Approximate based on 60 mills (approximate state average) On a taxable valuation based on the above productivity valuations.

Grant

Acres 640

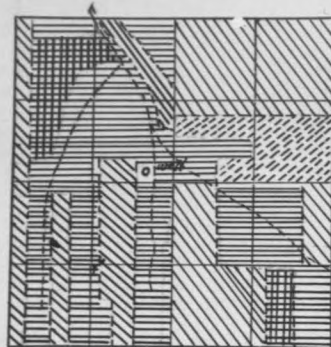
County Richland

Sec. 16

Twp. 24N

Rng. 54E

FORM 200

SHOW WATER, HILLS, IMPROVEMENTS, POLE LINES,
WAGON OR RAILROADS, CANALS AND DITCHES

Approximate Altitude 2000
 Meadow or Alfalfa 40 A
 Grain 268 A
 Summer-fallow 56 A
 Plowed 56 A
 Grazing 276 A
 Stubble 276 A

DESCRIPTION

CLASSIFICATION

APPRAISAL

Grazing
LeaseAgr.
Lease

Sale

MISCELLANEOUS

NE $\frac{1}{4}$ NE $\frac{1}{4}$

Agr, Graz.

64⁰⁰

8.00

Nearest R. R. Station is Enid

distant about 10 miles S

NW $\frac{1}{4}$ SW $\frac{1}{4}$ SE $\frac{1}{4}$ NE $\frac{1}{4}$ NW $\frac{1}{4}$ Agr, Graz. 64⁰⁰

7.00

NW $\frac{1}{4}$ SW $\frac{1}{4}$ SE $\frac{1}{4}$ NE $\frac{1}{4}$ SW $\frac{1}{4}$ Agr, Graz 64⁰⁰

7.00

NW $\frac{1}{4}$ SW $\frac{1}{4}$ SE $\frac{1}{4}$ NE $\frac{1}{4}$ SE $\frac{1}{4}$ Agr. Graz 64⁰⁰

7.00

NW $\frac{1}{4}$ SW $\frac{1}{4}$ SE $\frac{1}{4}$

Date made 6/11/41 By Paul Leonhardy Deputy

Approved by H.C. Biering 1941-Sept. 26

Approved by Board State Land Agent

Transcribed to Office Record by

M.B./I.H.

Checked by
T.S. HenryNE $\frac{1}{4}$ NW $\frac{1}{4}$ SW $\frac{1}{4}$ SE $\frac{1}{4}$

Surface Light Rolling

Rolling

Do

Do

Soil Medium Clay Loam

Do

Do

Do

Water None

Well
small supply

None

Any indications of
Coal, Oil, Gas or Other Minerals? None

Do

Do

Do

Meadow, how much? None

Do

Do

Do

Improvement and value

480 rods 3 w. fence 75.00

480 rods, 3 w. fence 75.00

1 frame house 12x16x9 75.00

1 frame Granary 14x16x9 75.00

1-16 ft dug Well 25.00

480 rods 3 w. fence 75.00 320 rods 3 w. fence 50.00

APPENDIX v

Rates

Advertisement November 1941, American Cattle Producer
Sale of Grazing Privileges

Sealed proposals for grazing privileges on approximately 440,000 acres of grazing lands of the Fort Belknap Indian Reservation, under the permit plan will be received at the office of the Superintendent until 2:00 P.M. on December 1, 1941 for the three year period commencing May 1, 1942 and expiring April 30, 1945.

Grazing lands consist of eighteen well grassed units varying from 10,000 to 50,000 acres with carrying capacities of 400 to 2,000 cow units year-long, ratio of cattle to sheep is one to four. Proposed to award privileges to highest bidder. Minimum rental is 12 cents per acre.

Please communicate with Superintendent for copies of advertisement, description of ranges, maps, and all other information.

Fort Belknap Indian Reservation
Harlem

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