



Inequalities in the tax burden borne by agricultural lands in Montana
by Howard H Lord

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:

1. The laws of Montana require that, "all taxable property must be assessed at its full cash value", and the State Board of Equalization has been established with the authority, "to do all things necessary to secure a fair, Just and equitable valuation of all taxable property among counties, between different classes of property and between Individual tax payers*."
2. Inequalities arising from unequal levies among counties and school districts are as damaging and as unjust as those arising from unequal assessments. The tax per acre ensures the combined effect of these two sources of inequalities.
3. The only "fair, Just and equitable" system of assessing and taxing agricultural land is a system based upon the productivity and hence upon the tax paying ability of the land.
4. The most important inequalities are among the grades of land, fourth grade farm land is overburdened more than any other grade with a tax amounting to more than 400 per cent of its tax paying ability; third grade farm land is second with a tax amounting to about 330 per cent of its ability to pay. Second grade farm land carries its Just burden of taxes while first grade farm land pays only about 75 per cent of its ability to pay. With the exception of first grade grazing all grades of grazing land carry a tax burden averaging about 250 per cent of their ability to pay. first grade grazing land pays a tax that is 175 per cent of its tax paying ability.
5. The second most important group of inequalities is that among the counties. The tax on third grade farm land varies from 10 cents per acre in Toole and Blaine Counties to as high as 32 cents per acre in Daniels and Judith Basin Counties.
6. There are less important yet significant inequalities among individual properties, among school districts, among ownership classes and among lands of the same grade devoted to different uses.
7. Generally speaking, inequalities are due to the following causes: (1) lack of an adequate system of assessing farm lands; (2) failure on the part of government officials to appreciate the significance of tax inequalities; (3) lack of information and data in the hands of land owners upon which they might base a claim for tax readjustment; (4) over expansion of social services in areas of low grade soil; and (5) over capitalization of farm and ranch real estate.
6. Inequalities in the tax burden are one of the causes contributing to 'the large amount of farm tax delinquency in Montana.
6. Equalisation of tax burdens is a necessary part of a constructive land utilization program because in many instances the present taxes are higher than the land could pay in any conceivable type of production.

10. The results of this study indicate the need, in Montana, of a system of assessing and taxing farm lands on the basis of their ability to pay.

11. Two plans have been proposed, both based upon a scientific soil survey and an objective determination of the best use of the land, by which Montana farm lands might be assessed and taxed according to their ability to pay.

INEQUALITIES IN THE TAX BURDEN BORNE
BY AGRICULTURAL LANDS IN MONTANA

by

HOWARD H. LORD

A THESIS

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Approved:

R. R. Remme

In Charge of Major Work

R. R. Remme

Chairman Examining Committee

F. B. Colver

Chairman Graduate Committee

Bozeman, Montana
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TABLE OF CONTENTS

	Page
Summary and Conclusions	3
Section	
I. Introduction	5
Purpose of Investigation	6
II. Method of The Investigation	6
The Montana Soil Survey--The Basis for Measuring Inequalities	9
Source of Data	12
Limitations of Data	13
III. Value and Tax Paying Ability of Different Grades of Montana Land	13
IV. Analysis of Inequalities	17
Inequalities Among Grades of Land	19
Inequalities Among Individual Properties	22
Inequalities Among School Districts	22
Inequalities Among Counties	25
Inequalities Among Ownership Classes	27
Inequalities Between Lands Devoted to Farming and Those Devoted to Grazing	30
V. Social and Economic Effects of Inequalities	30
VI. Proposals for Setting Up a System of Assessing and Taxing Farm Lands According to Their Ability to Pay	35
The County Plan	37
The State Plan	38

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SUMMARY AND CONCLUSIONS

1. The laws of Montana require that, "all taxable property must be assessed at its full cash value", and the State Board of Equalization has been established with the authority, "to do all things necessary to secure a fair, just and equitable valuation of all taxable property among counties, between different classes of property and between individual tax payers".

2. Inequalities arising from unequal levies among counties and school districts are as damaging and as unjust as those arising from unequal assessments. The tax per acre measures the combined effect of these two sources of inequalities.

3. The only "fair, just and equitable" system of assessing and taxing agricultural land is a system based upon the productivity and hence upon the tax paying ability of the land.

4. The most important inequalities are among the grades of land. Fourth grade farm land is overburdened more than any other grade with a tax amounting to more than 400 per cent of its tax paying ability; third grade farm land is second with a tax amounting to about 330 per cent of its ability to pay. Second grade farm land carries its just burden of taxes while first grade farm land pays only about 75 per cent of its ability to pay. With the exception of first grade grazing all grades of grazing land carry a tax burden averaging about 250 per cent of their ability to pay. First grade grazing land pays a tax that is 175 per cent of its tax paying ability.

5. The second most important group of inequalities is that among

the counties. The tax on third grade farm land varies from 10 cents per acre in Toole and Blaine Counties to as high as 32 cents per acre in Daniels and Judith Basin Counties.

6. There are less important yet significant inequalities among individual properties, among school districts, among ownership classes and among lands of the same grade devoted to different uses.

7. Generally speaking, inequalities are due to the following causes: (1) lack of an adequate system of assessing farm lands; (2) failure on the part of government officials to appreciate the significance of tax inequalities; (3) lack of information and data in the hands of land owners upon which they might base a claim for tax readjustment; (4) over expansion of social services in areas of low grade soil; and (5) over capitalization of farm and ranch real estate.

8. Inequalities in the tax burden are one of the causes contributing to the large amount of farm tax delinquency in Montana.

9. Equalization of tax burdens is a necessary part of a constructive land utilization program because in many instances the present taxes are higher than the land could pay in any conceivable type of production.

10. The results of this study indicate the need, in Montana, of a system of assessing and taxing farm lands on the basis of their ability to pay.

11. Two plans have been proposed, both based upon a scientific soil survey and an objective determination of the best use of the land, by which Montana farm lands might be assessed and taxed according to their ability to pay.

INEQUALITIES IN THE TAX BURDEN BORNE BY AGRICULTURAL LANDS IN MONTANA

I. INTRODUCTION

The amount of taxes paid by Montana taxpayers has more than trebled in the past sixteen years. During the same period the population of the state has remained almost stationary and property values have decreased by 400,000,000 dollars. (2) The largest part of this increased revenue is derived from taxes on the sale of gasoline, liquor, and other commodities. But, with this increase in sales taxes there has been no corresponding decrease in the property tax. Property taxes have remained the same, in spite of the fact that the value of the property has decreased by 400,000,000 dollars.

What does this mean to the owner of agricultural land in Montana? It means this: As a consumer he must pay his share of the increased sales taxes and as a property owner he must continue to carry the same burden of property tax. Moreover, he must pay this increased tax from a decreased farm income. "In 1933 it took nearly twice as much wheat to pay the average tax per acre on Montana farm real estate as it took in 1913, three times as much lamb, and about one and a half times as much wool".(3) Hence, the tax burden carried by the Montana farm owner has not only trebled, but his ability to pay has decreased to such an extent that farm taxes are probably four or five times more difficult to pay now than they were sixteen years ago.

The best evidence that a readjustment is needed in Montana farm taxes is the fact that many farm owners have either refused or been unable to pay their taxes. By the end of 1936 approximately 3,500,000 acres of

farm land will have been taken by counties through tax deed. (2) Such large-scale delinquency is not only a problem from the standpoint of decreased public revenue, but it is ample evidence that the tax load on Montana farm land is either too great or that it is not distributed according to the ability of the land to pay; or as is most probably the case the burden is both too great and unequally distributed.

Purpose of the Investigation.

This investigation is designed: (1) To analyze and determine the extent of inequalities in the taxation of agricultural lands in Montana; (2) to discover the nature and cause of such inequalities as may exist by a thorough study of the operation of the prevailing method of assessment and taxation; and (3) to study the tax and assessment problem with a view toward finding facts upon which to base recommendations for a more equitable system of taxation.

II. METHOD OF THE INVESTIGATION

The philosophy underlying the method used in this study as well as the method itself is so different from the approach used in previous studies dealing with tax inequalities that it will require somewhat detailed explanation. The following discussion is presented with a two-fold purpose: (1) To acquaint the reader with the method used in the study in order that he may better understand and evaluate the results; and (2) to justify, if possible, the basic premises upon which the statistical results are based.

Previous studies of the inequalities in the taxation of agricultural

lands have confined themselves to the inequalities in assessments. In most cases the inequalities in assessments have been based upon the sale value of the property. Investigations of this type based upon the unequal relationship between assessed valuations and sale value rest firmly on the time tried and legally supported premise that inequalities in assessment are the only inequalities and unequal levies among different minor civil divisions and among counties are not inequalities because they have the support of the law and custom. The use of the sale value of property as the basis of inequality assumes that the play of economic forces will cause land to be sold for its "true" value. So much for other methods.

The property tax system now operating in Montana was put into effect in 1919 and is known as the Montana classified property tax. This system was put into effect with the specified purpose of obtaining a more equitable distribution of the tax burden among different economic groups and different kinds of property. In this connection the law states as follows, "all taxable property must be assessed at its full cash value". ^{1/} A State Board of Equalization was also created and delegated with the authority, "to do all things necessary to secure a fair, just and equitable valuation of all taxable property among countries, between different classes of property and between individual taxpayers". (4) Legally then, all agricultural land in Montana should be assessed according to its "full cash value". A study of farm tax inequalities in Montana measuring the disparity between sale value and assessed value would show the departures

^{1/} "Full cash value" is defined as the amount at which the property would be taken in payment for a just debt from a solvent debtor.

from the intent of the law. The question might be raised, however: would such a study bring to light the real inequalities in the tax burden on Montana farm lands? Let us consider the merits of sale value as a basis of assessing agricultural land for taxation. In the first place the sale value is known for only a small proportion of the total farm land. Circumstances other than the merits of the property may and often do effect the sale price. Furthermore, how are lands to be assessed that have never been sold? There has never been a detailed and accurate inventory taken of Montana's land resources for assessment purposes. Sale value does not necessarily reflect the true merit of farm land. At any given time the sale value is known for only a very small part of the total land to be assessed. Therefore, the only conclusion that can be drawn is that sale value is entirely inadequate as a basis of assessing farm land or for determining the real inequalities in assessments.

Now let us consider the measure of only assessed value without considering differences in the rate of levy as a measurement of tax inequalities. In the eyes of the law, inequalities in assessments are the only inequalities. Thus, unequal tax burdens arising from the different rate of levy among counties and school districts are justified under the present law. The philosophy underlying such a system is the carry over from the days of the horse and buggy when the majority of the people were born, lived, and died within one small community. In the culture where it developed the small area tax base was well adapted, but today with our enlarged community growing out of the developments in transportation and

communication, the school district, the county and in some cases the state is too small a unit for levying taxes. People do not use only the roads within their own school district or even their own county or state. Today they travel over a much wider area. The gasoline tax now providing revenue for road construction in Montana and other states is a tax conceived to meet the modern conditions of travel. Unfortunately we have made no such progress in our system of deriving revenue for the support of our primary and secondary schools. Taxes for the support of our local school systems are still levied upon a school district and, in the case of the county high school, on a county base. The effect of such a system of taxation is that those who are unfortunate enough to own property in a district where there are children to be sent to school must pay for their education while in this modern age, not they as individuals, but the entire society over a nation-wide area derive the benefits of an educated citizenry. Furthermore, the children requiring education are not evenly distributed throughout the country nor are they distributed according to the value of the property. There may be and often is a concentration of children in poor agricultural areas. The land owners in that area pay for the education of the children while land owners in adjoining school districts, where there are no children, do not bear the burden of educating the on-coming generation.

The Montana Soil Survey--The Basis for Measuring Inequalities.

The measurement of inequalities in this investigation is based upon the Montana soil survey and land classification. This survey has been com-

pleted in only 21 counties and the study is therefore limited to the area shown in Figure 1. The area represented is quite large and is quite typical of the part of Montana east of the continental divide. Thus the results of this study should be applicable to more than three-fourths of the agricultural lands in Montana.

A soil survey is essentially a scientific inventory of the soil resources in any area. The reconnaissance survey, upon which this study is based, furnishes information in regard to: (1) Soil resources, (2) adaptability of the topography to agriculture, and (3) the carrying capacity of the different soil areas for livestock. ^{2/}

In using the soil survey as a basis of determining inequalities in taxation certain factors effecting the value of land are not taken into consideration. For example, nearness to schools, towns, markets and improved roads is not considered in evaluating the land solely on the basis of the soil survey. Although these factors should be given their proper weight in assessing agricultural land they have been omitted from this study because of the difficulty in measuring their effect statistically. Furthermore, although these factors do effect the value of the land as a place to live they do not materially effect its ability to pay taxes. ^{3/}

Another question that might be raised in connection with the use of the soil survey land classification as a basis for determining the pre-

^{2/} For Land Classification see Sec. I. Appendix.

^{3/} The land used in this study was devoted either to dry land farming or to grazing and generally speaking had no other important alternative uses. In these uses the productivity of the land as determined by the soil survey is by far a more important criteria of its value than the location or other factors.

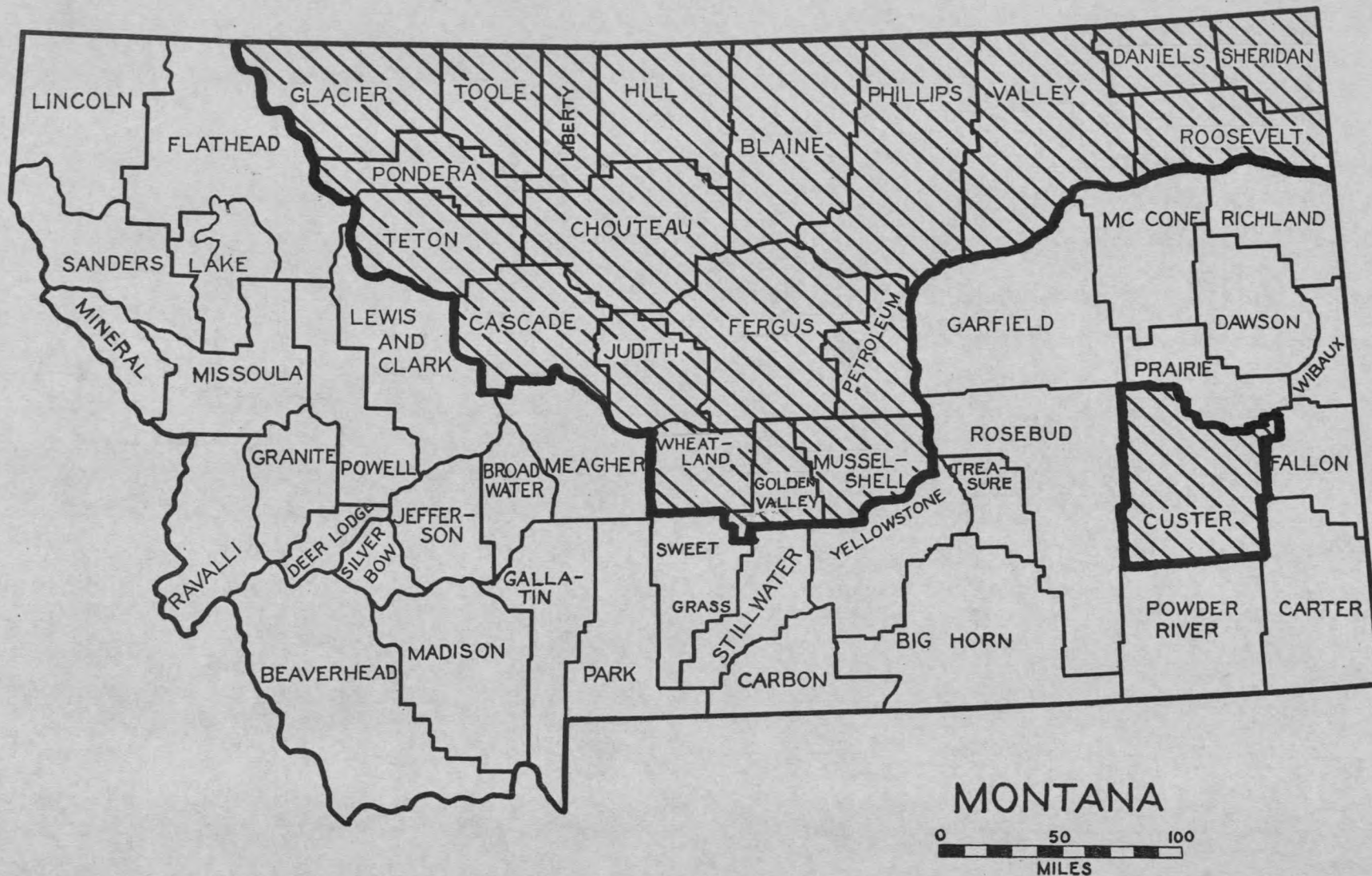


Figure 1. MAP OF MONTANA SHOWING THE 21 COUNTIES COVERED IN THIS STUDY.

sence of inequalities is the accuracy of the survey itself. Part of the survey was completed about eight years ago and it is known that some of the land has deteriorated physically since that time. Furthermore, in many areas the reconnaissance survey is more general than would be needed to provide a basis for equal assessments. In spite of all of these questions that may be raised regarding the use of the Montana soil survey as the sole criteria for determining inequalities, it still is the best information available for measuring the true value of the land over a large area, and will serve adequately to bring to light the more important inequalities under the present system.

Source of Data.

Data relative to the tax burden borne by each parcel of land was obtained from assessment and delinquency records in the files of the Department of Agricultural Economics, Montana Agricultural Experiment Station. These records represent all tracts of Montana farm land that have been delinquent in recent years. Since these records represent more than three-fourths of the agricultural land within the area studied they provide a good cross section of the various classes and grades of land to be sampled. These records give the number of acres, the legal description, the owner, the value and the tax paid for each parcel of land. Since the inequalities are caused jointly by unequal assessments and unequal levies these two factors have been measured concurrently in terms of the tax paid per acre. Inequalities in assessment have also been measured in all cases and may be found in Table VI of the Appendix.

Limitations of Data.

The size of sample used in the investigation was limited by two factors : (1) The number of parcels of land that were available having only one grade of land within their boundaries; and (2) the amount of data that could be assimilated and analyzed within the time available.

About 3000 separate parcels of land averaging about 350 acres per parcel were used in the study. The sample was taken as nearly as possible at random; the only limitation being that each parcel selected could represent only one grade of land. The assessed valuation and tax upon each parcel were available for a period varying from one to six years during the period 1928 to 1933. The average parcel of land used in the study was represented in about four years of that period. Since there were variations in the assessed valuation and tax from year to year the data were analyzed both by years and for the entire period. However, since the important inequalities continued without exception over the entire period, the results of the study have been presented for the six year period rather than for any single year.

III. VALUE AND TAX PAYING ABILITY OF DIFFERENT GRADES OF MONTANA LAND

It has been necessary in many cases to compare the tax and the assessed valuation on one grade of land with that of another. This could not be done without having some notion as to the relative value and relative tax paying ability of the different grades. The following table shows the relative value and relative tax paying ability of each grade of land.

Table I. VALUE AND TAX PAYING ABILITY OF EACH GRADE OF LAND. ^{4/}

	Value Per Acre	Tax Paying Ability Per Acre
Farm land:		
First Grade	\$20.00 per acre	40 cents per acre
Second "	11.50 " "	23 " " "
Third "	3.00 " "	6 " " "
Fourth "	1.50 " "	3 " " "
Crazing Land:		
First Grade	3.75 per acre	7½ cents per acre
Second "	3.00 " "	6 " " "
Third "	2.00 " "	4 " " "
Fourth "	1.50 " "	3 " " "
Fifth "	1.00 " "	2 " " "

^{4/} c.f. p. 14-16.

The valuation and estimated tax paying ability of first and second grade farm land is based upon their earning capacity in wheat production. Since third and fourth grade farm land do not return a net profit in wheat production at prevailing prices, their value and tax paying ability has been determined along with that of all grades of grazing land by their value as grazing lands.

The relative value and tax paying ability of grazing lands has been published in Montana Bulletin No. 311, Readjusting Montana's Agriculture by M. H. Saunderson. The following quotation explains the method used in computing these values.

"The annual land lease values on a cow or ewe basis of \$4.00 and \$5.00 a cow and \$1.00 to \$1.25 a ewe, applied to these grades of land and their grazing capacity, give a basis for the determination of lease values for different grades of lands;

Lease value of first grade range land, 18 to 22 cents per acre
" " " second " " " 12 to 17 " " "
" " " third " " " 9 to 11 " " "
" " " fourth " " " 7 to 8 " " "
" " " fifth " " " 4 to 6 " " "

"A comparable investment value per acre for these five grades of range lands, based upon a total investment of \$50.00 to \$60.00 per cow and \$12.00 to \$15.00 per ewe in land and improvements, would be :

First grade range land	\$2.50	to	\$3.50
Second " " "	1.50	to	2.50
Third " " "	1.00	to	1.50
Fourth " " "	.75	to	1.00
Fifth " " "	.50	to	.75

"These investment values for range lands are based upon a land tax situation that would not take more than one-third of the annual lease value of such lands. Such an annual tax rate upon these five different grades of range land would amount to:"

On first grade range land	6 cents	to	7 $\frac{1}{2}$ cents	an acre
On second " " "	4	"	6	" " "
On third " " "	3	"	4	" " "
On fourth " " "	2	"	3	" " "
On fifth " " "	1	"	2	" " "

A basis for the relative value and relative tax paying ability of the various grades of farm lands is found in an unpublished study conducted by the Department of Agricultural Economics, Montana State College. The results of the study show the comparative net income from growing wheat on the four grades of farm land.

Table II. - COSTS AND NET RETURNS PER ACRE ON VARIOUS GRADES OF FARM LAND: 800 ACRES ALTERNATE CROP AND SUMMER FALLOW SYSTEM: WHEAT 75 CENTS PER BUSHEL

Farm Land	Bushels Per Acre	Gross Income	Total Cost	Net Profit or Loss	Value Per Acre	Tax Paying Ability Per Acre
First Grade	22	\$16.50	\$10.62	\$5.98	\$20.00	\$.40
Second "	18	13.50	10.07	3.43	11.50	.23
Third "	14	10.50	9.52	.98	3.00	.06
Fourth "	11	8.25	9.02	-.77	1.50	.03

An 800 acre set up is probably somewhat larger and is a more efficient sized unit than is typical of Montana wheat farms. Also the assumed yield per acre is higher for all grades of land than their historical record would justify. Neither of these factors, however, has any effect upon the relationship between the net profits to be made on the different grades of land.

The figures representing the tax paying ability of the various grades of land, as shown in Table II, are derived as follows. A value of \$20.00 per acre has been assumed for first grade farm land. This is the valuation used in computing the land charge used in the cost study cited. On the basis of this valuation the tax paying ability of number one farm land was set at 40 cents per acre. Forty cents is 2 per cent of the assumed valuation of \$20.00 per acre. Two per cent of the valuation was chosen as a just tax for two reasons: (1) The Federal Land Bank has established precedent in this connection by refusing to make loans where the tax is greater than 2 per cent of the appraised valuation, and (2) the tax paying ability of the five grades of grazing land is approximately 2 per cent of their value.

The relative tax paying ability of second and third grade farm land has been determined in the same way as in the case of number one. A tax of 23 cents and 6 cents respectively on second and third grade farming bears the same relationship to the net profits to be made raising wheat on those grades of land, as the tax on number one farm land bears to the profits to be made on that grade of land.

There is no net profit to be made by raising wheat on fourth grade farm land. See Table II. Since it has no tax paying ability as farm land,

it can be taxed only as grazing land. The value of fourth grade farm land for grazing purposes will vary widely, depending upon whether or not the land has been tilled, and in case of land that has been tilled and since abandoned, the extent to which the forage cover has returned. The carrying capacity of these lands will range from that of third grade grazing down to that of fifth grade grazing. On an average, the tax paying ability of fourth grade farming land will probably not be above 3 cents an acre.

With the relative tax paying ability as a base it is possible to compare one grade of land with another in terms of the per cent the actual tax paid is of the tax paying ability for the same grade of land. If any parcel of land is paying a tax amounting to 100 per cent of its tax paying ability, it is paying a tax in a just proportion to its productivity; if the tax paid is 200 per cent of its tax paying ability then the tax burden is just twice as large as the tax paying ability of the land, and so on. ^{5/}

IV. ANALYSIS OF INEQUALITIES

Inequalities Among Grades of Land.

Figure 2 shows the assessed valuation of each grade of land in terms of the per cent the assessed valuation is of the valuation based upon its productivity. Figure 3 gives about the same picture except that it shows the tax paid in per cent of the tax paying ability. Comparing the two charts it will be noticed that the inequalities in tax paid per acre are

^{5/} By referring to Table II of the Appendix the reader may convert the "tax paid in per cent of tax paying ability" into the actual tax paid, and from Table III of the Appendix the "assessed valuation in per cent of production value" may be converted into actual assessed value.

PER CENT

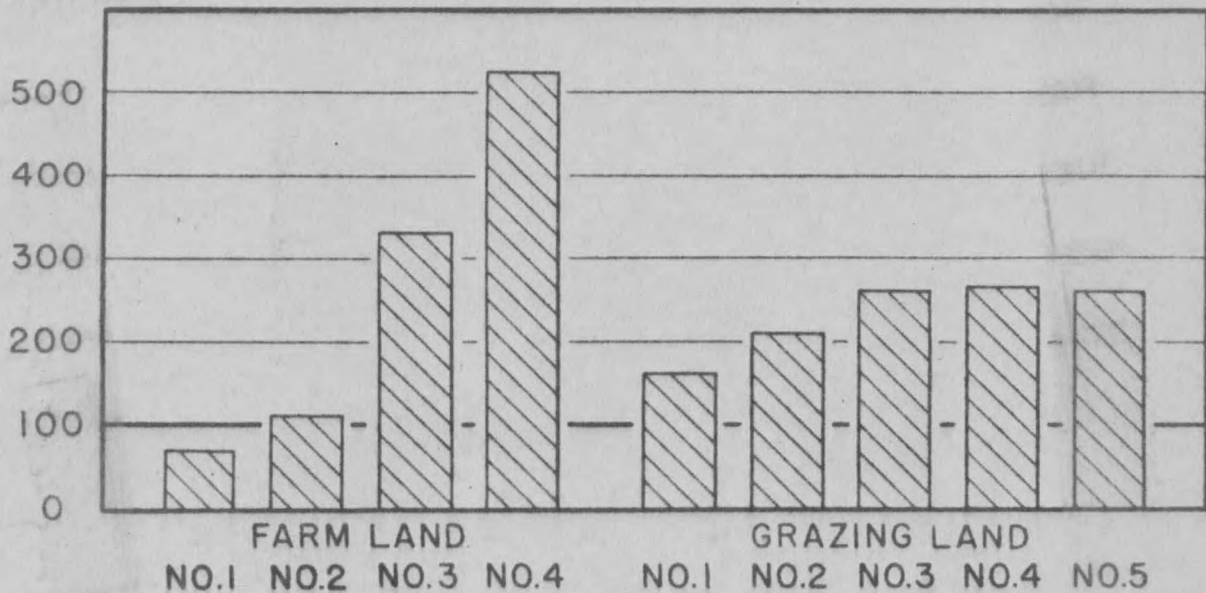


Figure 2. INEQUALITIES IN ASSESSMENTS AMONG GRADES OF LAND
Assessed Value in Per Cent of Production Value
(Source of Data, Table IX. Appendix)

PER CENT

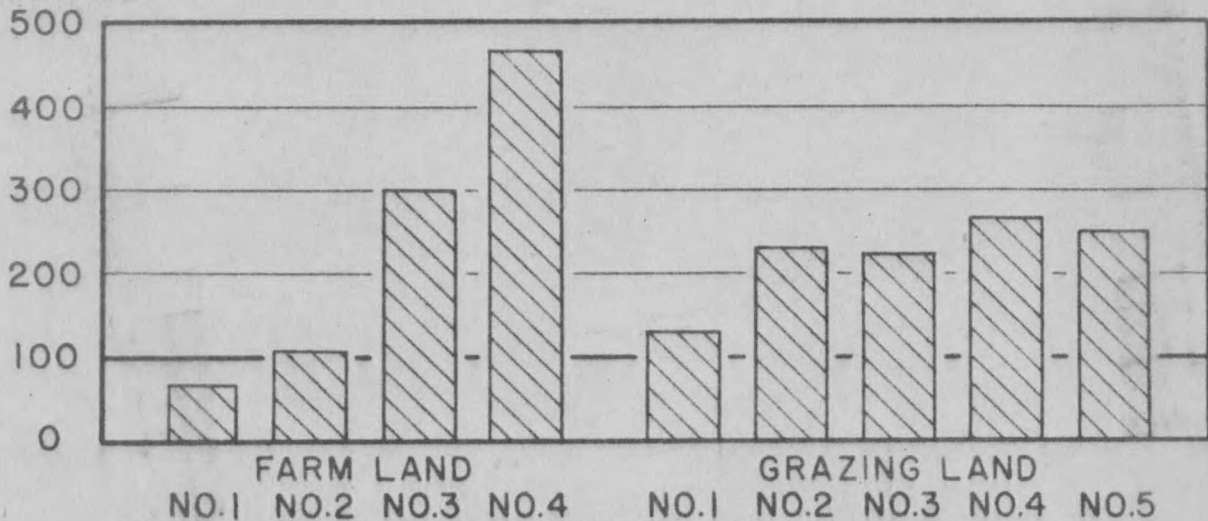


Figure 3. INEQUALITIES IN THE TAX BURDEN AMONG GRADES OF LAND
Tax Paid in Per Cent of Tax Paying Ability
(Source of Data, Table IX. Appendix)

not quite as great as the inequalities in the assessed valuation. In other words, the rate of levy has tended to correct the inequalities in assessed valuation. The most salient fact brought out by these two charts is the inequality in the tax burden among the grades of land. First grade farm land is not carrying its full share of the tax burden. Second grade farm land is carrying just about its just load, while third grade farm land is paying a tax amounting to 300 per cent of its tax paying ability. Fourth grade farm land is still further out of line with a tax burden amounting to more than 450 per cent of its ability to pay. First grade grazing land is paying only a little above its ability to pay but second, third, fourth, and fifth grade grazing are all paying a tax that is well over 200 per cent of their tax paying ability.

Figures 4 and 5 show the distribution of farming and grazing lands among inequality groupings. Notice the total number of acres and the amount of each grade of land, coming within each grouping. These charts show not only the intensity of inequalities among grades of land but also the number of acres that are affected.

Some of the factors that may be responsible for these great inequalities in the tax burden among grades of land are: (1) Failure on the part of government officials to appreciate the significance of tax inequalities; (2) lack of information and data in the hands of land owners upon which they might base a claim for tax readjustment, (3) inability of assessors to determine the production value of farming and grazing lands, (4) over expansion of social service in areas of low grade soil, and (5) over capitalization of farm and ranch real estate.

THOUSANDS
OF ACRES

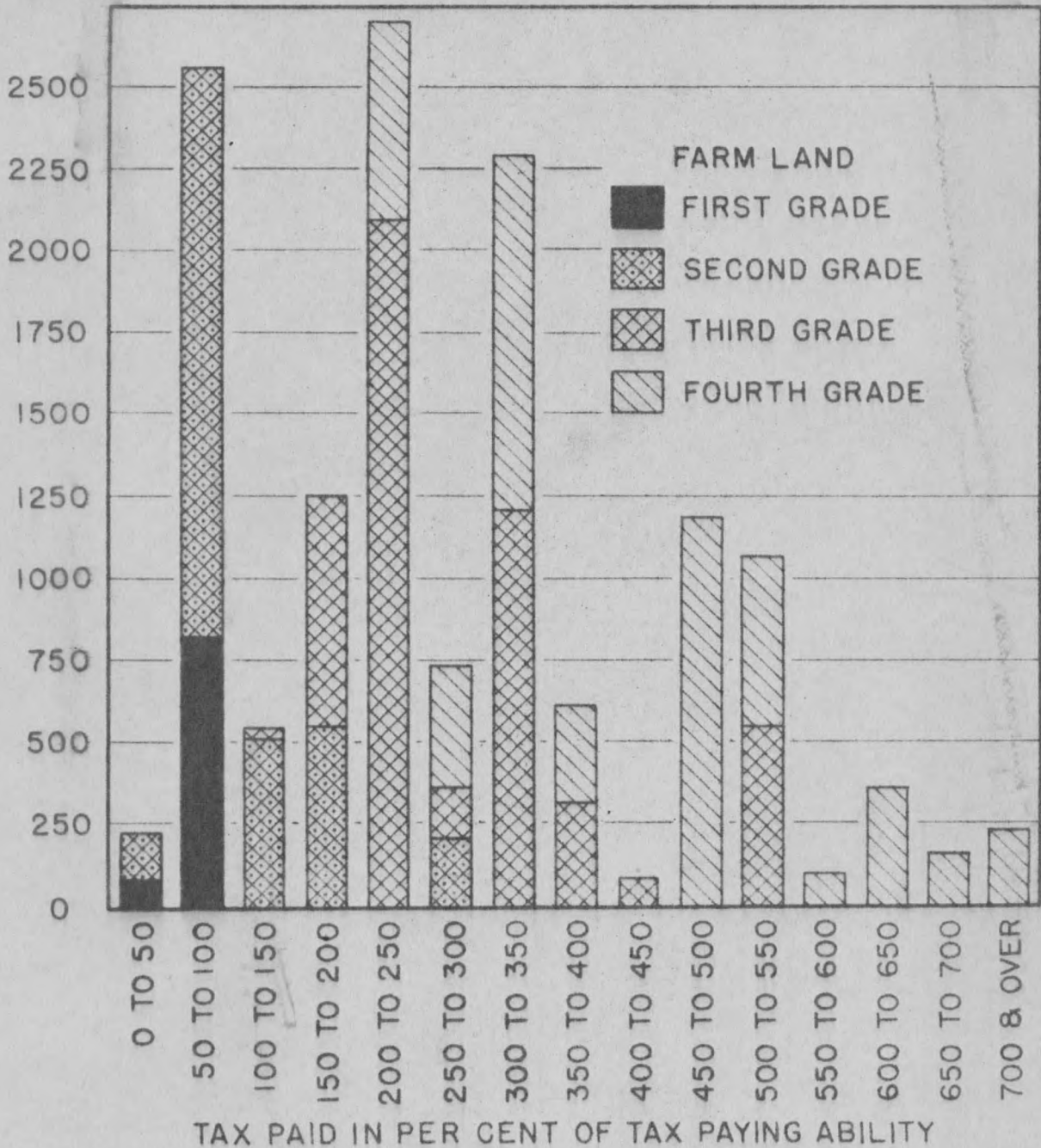


Figure 4. ACRES OF FARM LAND IN 21 COUNTIES BY INEQUALITY GROUPS
(Source of Data, Table IV Appendix)

THOUSANDS
OF ACRES

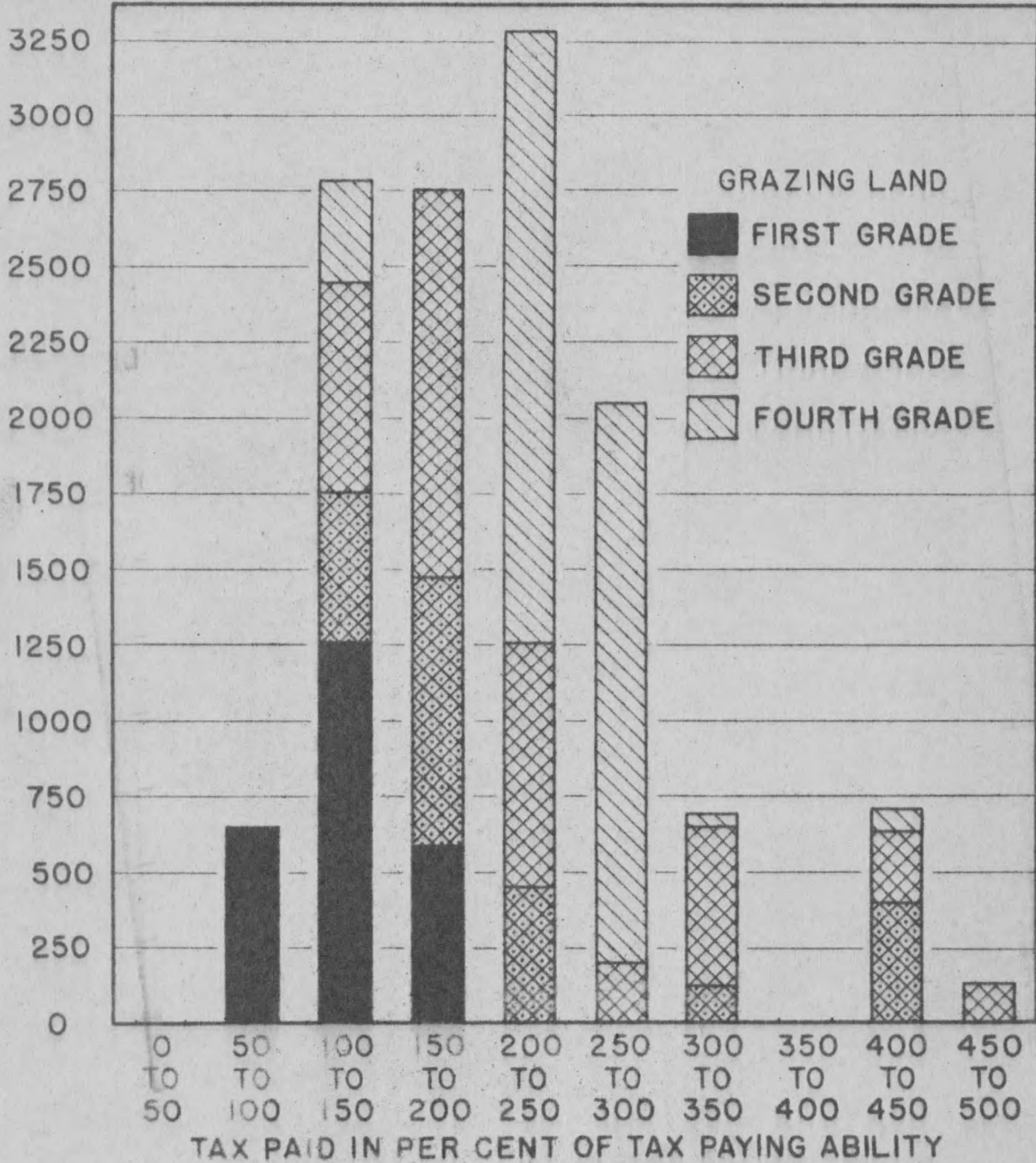


Figure 5. ACRES OF GRAZING LAND IN 21 COUNTIES BY INEQUALITY GROUPS
(Source of Data, Table IV Appendix)

Inequalities Among Individual Properties.

Although inequalities among individual properties do not lend themselves to such sweeping conclusions regarding their nature and cause as do those among different grades of land, they are, nevertheless, of great importance. Figure 6 illustrates the inequalities among individual properties in Fergus County. The total sample of farm land taken in Fergus County is grouped into inequality classes. The classes are expressed in terms of the tax paid in per cent of the tax paying ability. Farmers on first grade farm land are paying from below 50 per cent to above 200 per cent of the tax paying ability of their land. There are still greater inequalities among the individual owners on the lower grades of land. Farmers on second grade land pay from 50 to 400 per cent of their just tax; and those on third grade pay from 50 to more than 700 per cent of the actual tax paying ability of the land they are farming. In other words farmers on third grade land are paying a tax that varies from 6 to more than 42 cents an acre.

It is hard to explain such extreme inequalities among individual parcels of land of the same grade. Some of the more important factors are probably: (1) Indifference of county assessors, (2) inability of assessors to make accurate assessments, and (3) inability of farmers to know or offer proof that they are carrying an unjust burden of taxes.

Inequalities Among School Districts.

There are appreciable inequalities in the taxation of the same grade of land within different school districts. Figure 7 illustrates the varia-

NUMBER OF
ACRES IN SAMPLE

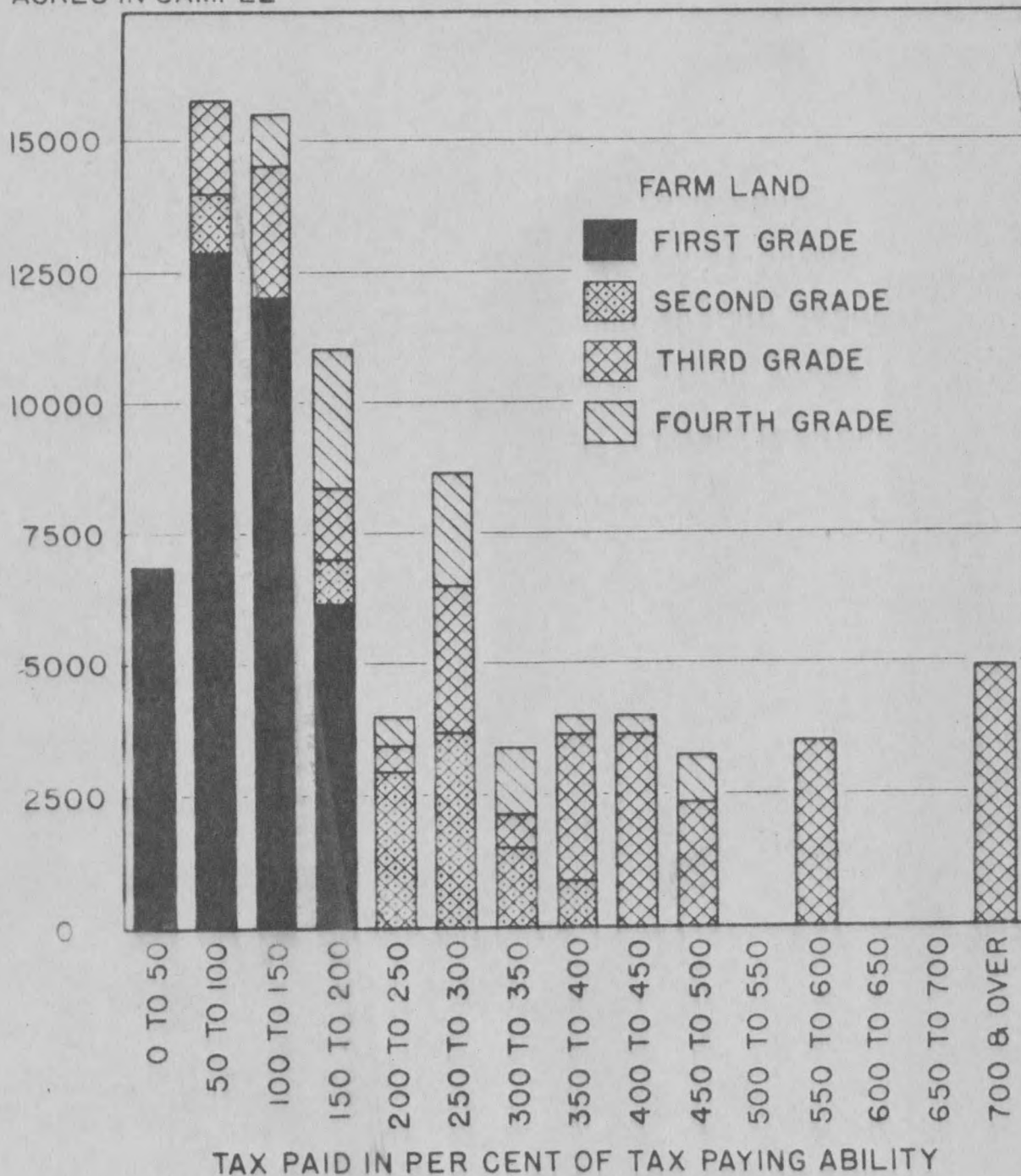


Figure 6. INEQUALITIES AMONG INDIVIDUAL TRACTS OF LAND IN FERGUS COUNTY
(Source of Data, Table V Appendix)

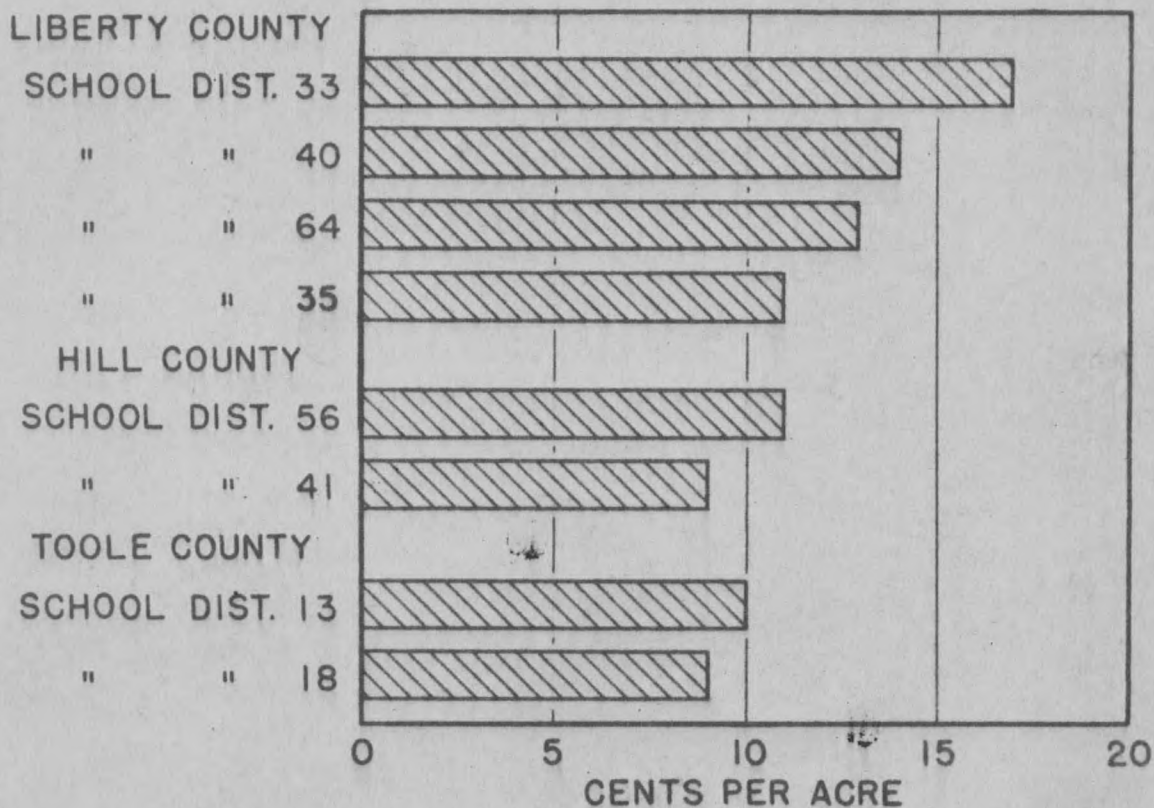


Figure 7. INEQUALITIES IN TAXATION AMONG SCHOOL DISTRICTS IN SELECTED COUNTIES:
Based on Fourth Grade Farm Land
(Source of data, Table VII Appendix)

tion in the tax paid per acre on fourth grade farm land in four different school districts in Liberty County and in two school districts each in Hill and Toole Counties. Liberty County affords the best illustration of the variation in the tax burden on the same grade of land in the same county but in different school districts. The difference in the tax burden on fourth grade land in different school districts in Liberty County ranges from 17 cents per acre in school district 33, to 11 cents per acre in school district 35. This is one of the minor types of inequalities, but it is nevertheless of some importance.

Variations among school districts are caused in a large degree by the following factors: (1) Variation in assessed valuation among individual properties in different school districts, (2) difference in levy among the school districts, and (3) the use of land in different school districts. ^{6/}

Inequalities Among Counties.

Second in importance only to the inequalities among grades of land are the inequalities among counties. Figure 8 shows the variation in the tax paid per acre on third grade farm land in twelve different counties. Notice that the tax varies from 10 cents per acre in Toole and Blaine Counties to as high as 32 cents per acre in Daniels and Judith Basin Counties. If six cents per acre is the just tax on third grade farm land, farmers on third grade farm land in Daniels and Judith Basin Counties are paying about 500 per cent of their just tax load.

^{6/} See Figure 11.

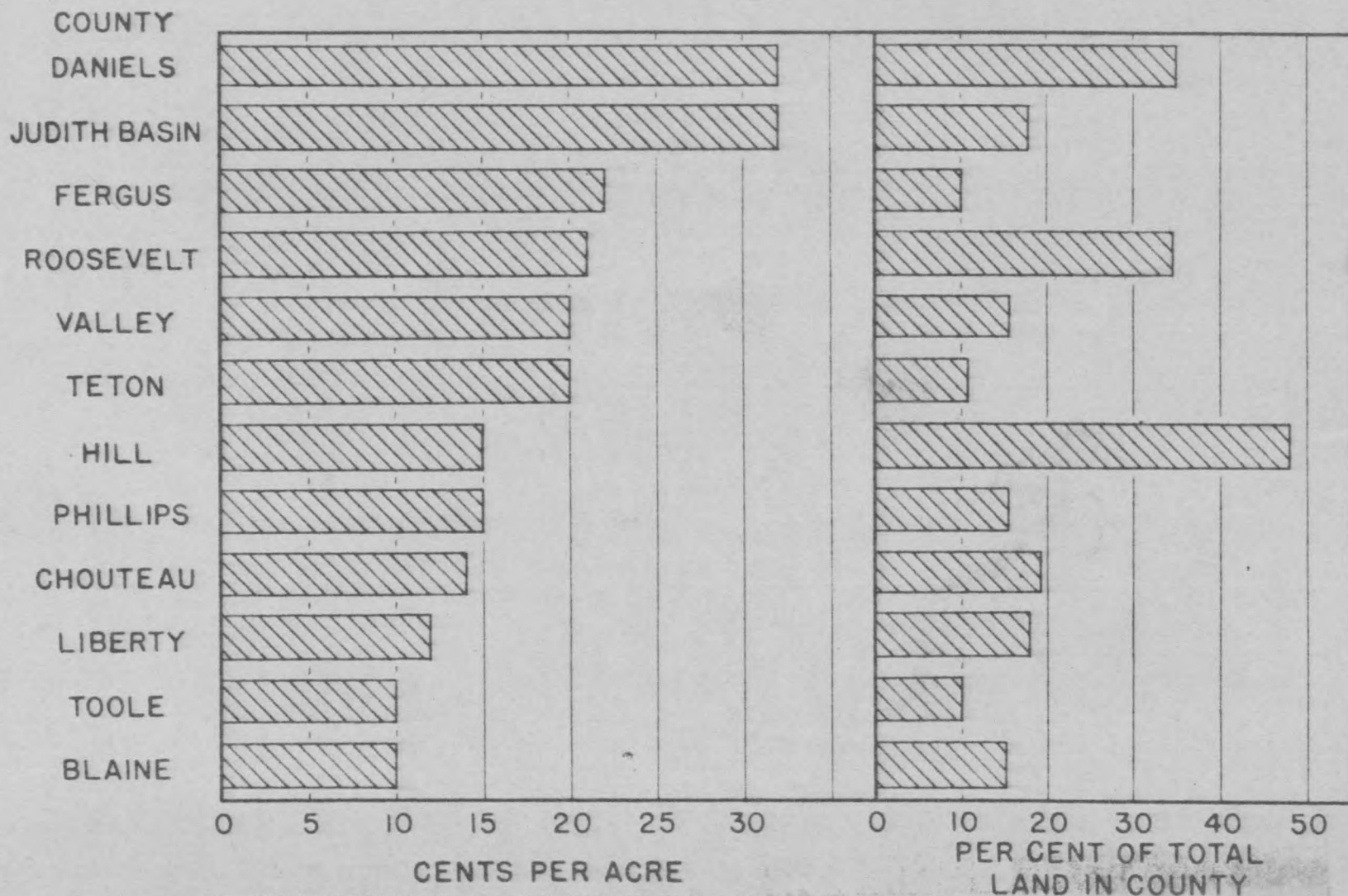


Figure 8. INEQUALITIES IN THE TAX BURDEN ON THIRD GRADE FARM LAND IN DIFFERENT COUNTIES
 (Source of Data, Table VI Appendix)

Figure 9 shows a comparison of the tax burden borne by farm land in Chouteau and Judith Basin Counties and the average tax burden borne by farm land in the 21 counties used in the study. On an average farm lands in Judith Basin County pay twice as great a tax as the same grades in Chouteau County and more than a third greater tax than is paid by the average of the 21 counties.

There are several factors causing the variation in the taxation of the same grade of land in different counties. Some of the more important causes are: (1) Difference in public expenditures among counties, (2) difference in the assessed valuation of the lands in different counties, resulting from the difference in judgment and methods among county assessors; (3) the variation in the quality of land among counties; and (4) failure of the State Board of Equalization to accomplish its purpose of equalizing the assessment of farm land among counties.

Inequalities Among Ownership Classes.

The entire sample used in this study was divided into three ownership classes: resident owned, non-resident owned, and corporate owned. ^{7/} Figure 10 shows the inequalities among the three ownership classes. Non-resident owners in all cases except that of first grade farm land pay an average of about three cents less tax per acre than the resident owners. The tax on resident owned land is higher for all grades of farm land than for either non-resident or corporate owned land, but on grazing land except

^{7/} Land classified as corporate owned is held by banks, loan companies, and railroads and does not include incorporated livestock companies.

GRADES OF FARM LAND

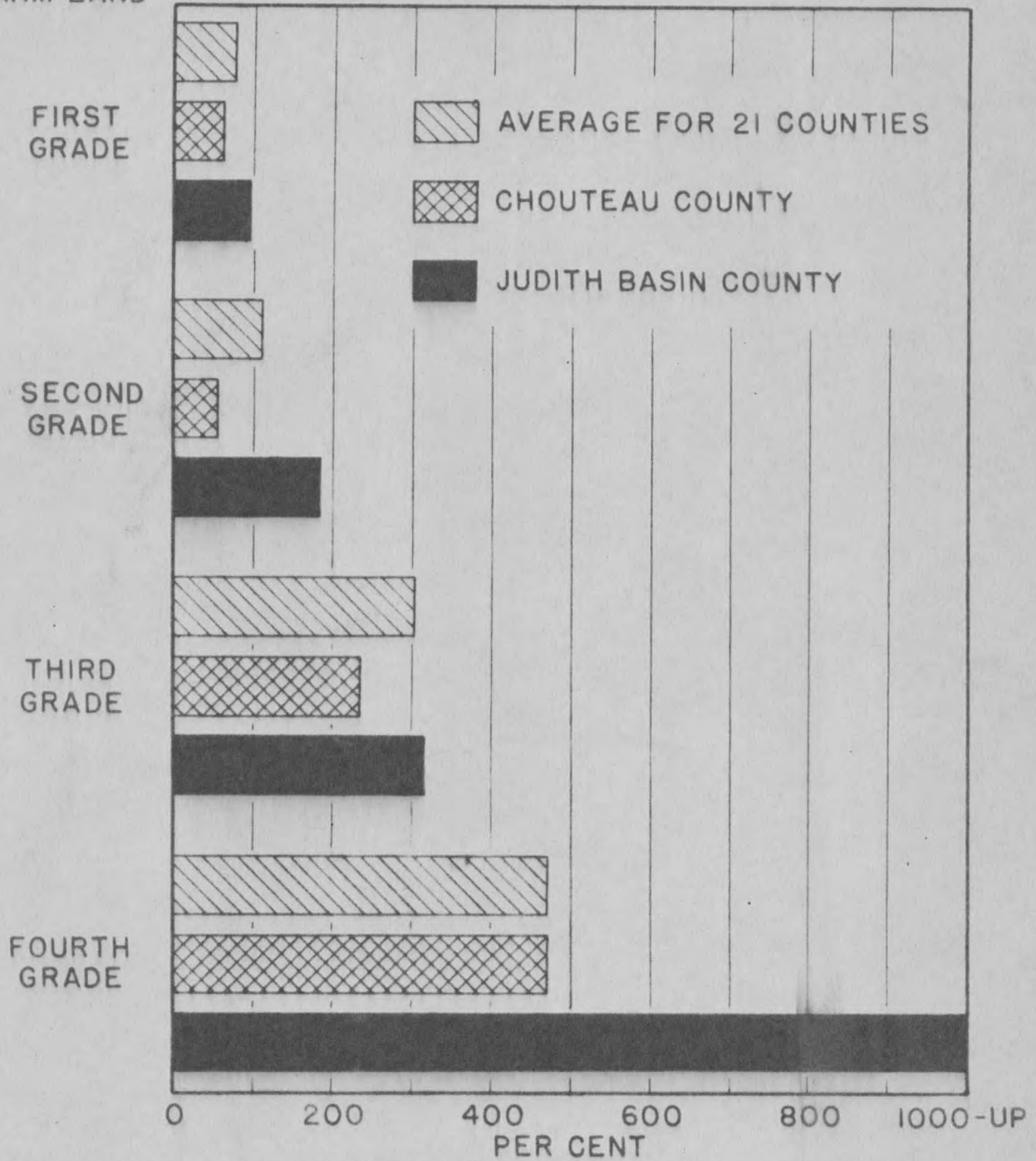


Figure 9. COMPARISON OF TAX BURDEN IN SELECTED COUNTIES WITH AVERAGE FOR GROUP
Tax Paid in Per Cent of Tax Paying Ability
(Source of Data, Table VI Appendix)

CENTS
PER ACRE
30

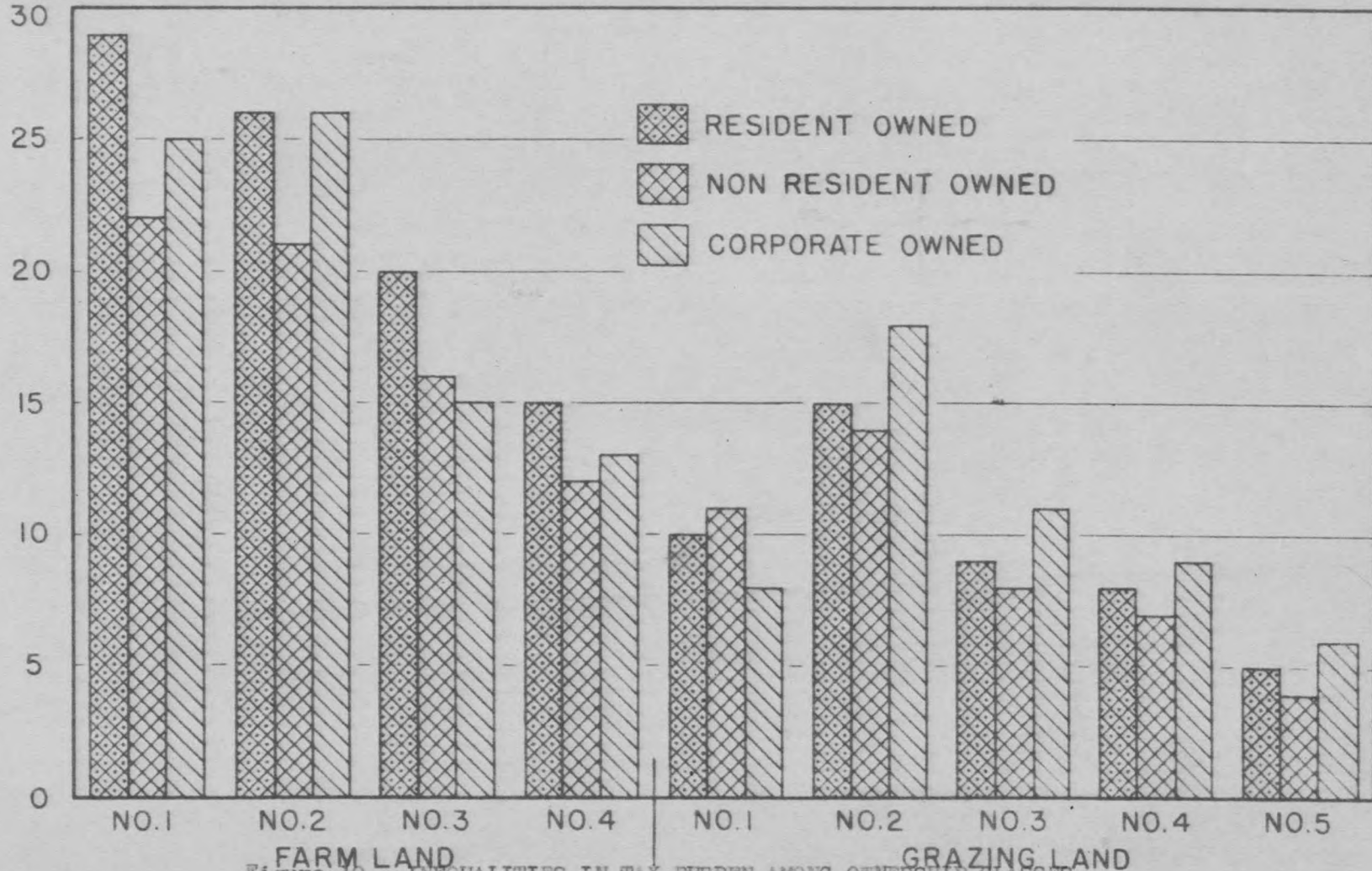


Figure 10. INEQUALITIES IN TAX BURDEN AMONG OWNERSHIP CLASSES
(Source of Data, Table VIII Appendix)

in the case of first grade grazing the corporate owned lands pay the highest tax. On all grades of grazing land except first grade, there is a consistent relationship between the tax paid by all three classes of owners. Although this difference in tax upon different types of owners is probably of some significance, it does not compare in importance with the inequalities existing among the different grades of land and among the different counties.

Inequalities Between Lands Devoted to Farming and Those Devoted to Grazing.

Lands that are farmed usually pay a higher tax than those of the same grade devoted to grazing (see Figure 11). Fourth grade farm land in Fergus and Teton Counties pays twice as great a tax when it is farmed as when grazed. The same tendency is evident in a sample of second and third grade grazing land taken from several counties. This inequality is probably due to the inability of county assessors to distinguish between land that should be graded as farm land and that fit only for grazing. Consequently lands that are farmed are taxed as farm land regardless of the quality of the soil.

V. SOCIAL AND ECONOMIC EFFECTS OF INEQUALITIES

The over-load of taxes upon third and fourth grade farm land has resulted in large scale tax delinquency in those grades of land (see Figures 12 and 13). A comparison of these figures brings out the prevalence of tax delinquency in those counties having a high percentage of third and fourth grade land. The second most important type of inequality is in the difference in the tax burden among the counties. Judith Basin County carries a tax approximately a third higher than the average of the 21 counties (see Figure 9).

PER CENT

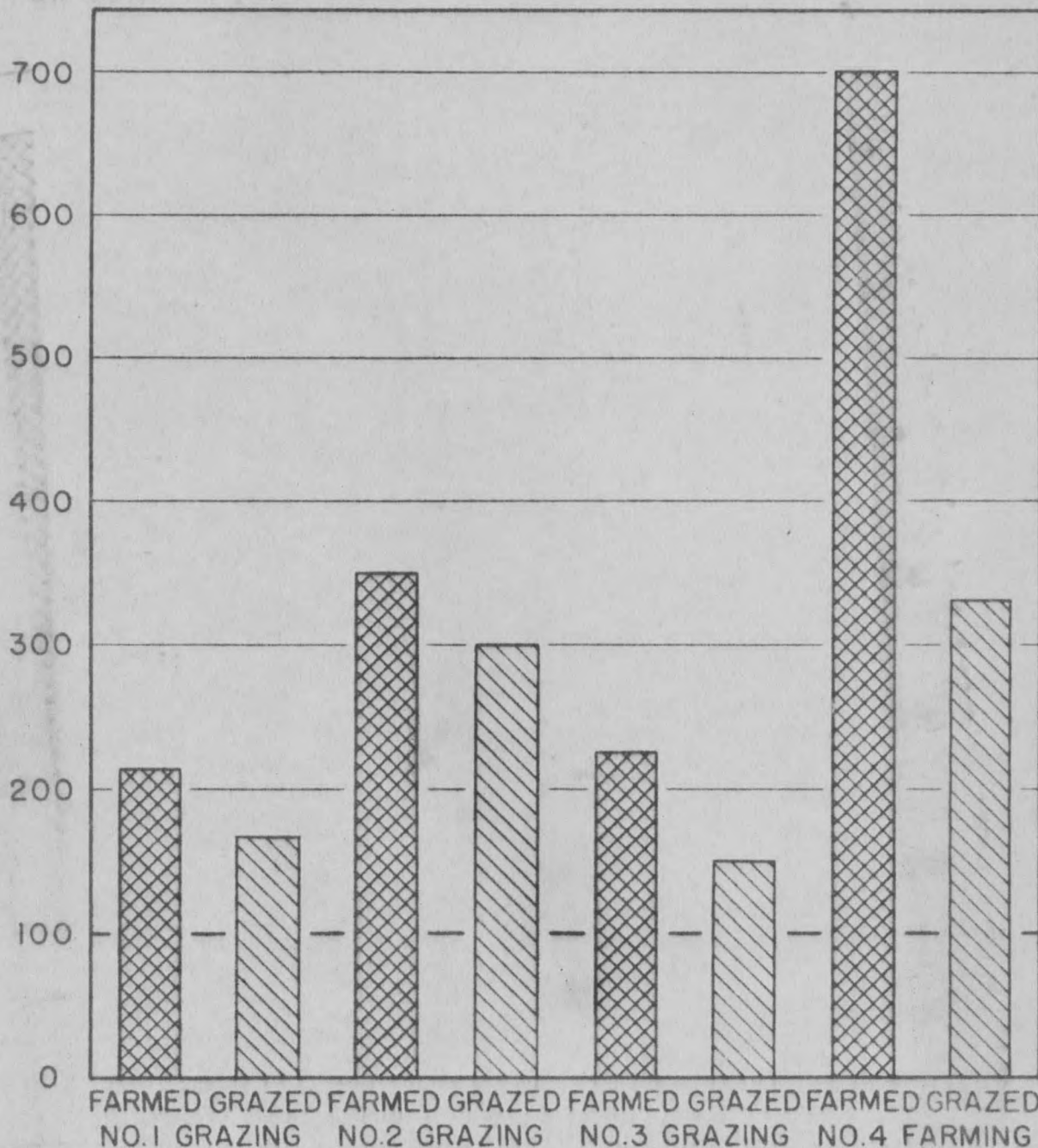


Figure 11. INEQUALITIES BETWEEN TYPES OF LAND
Tax Paid in Per Cent of Tax Paying Ability
(Source of Data, Table I - Appendix)

MONTANA

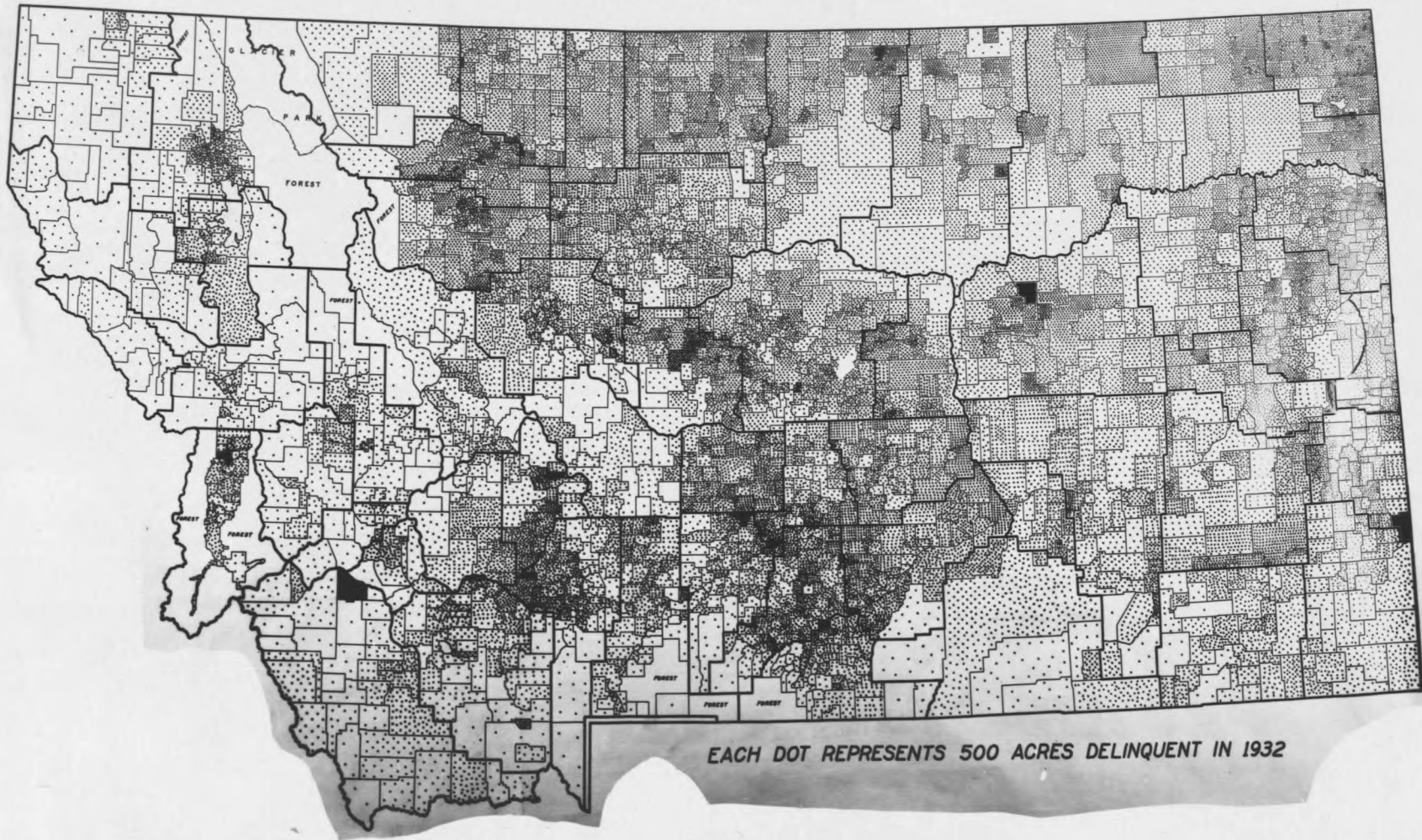
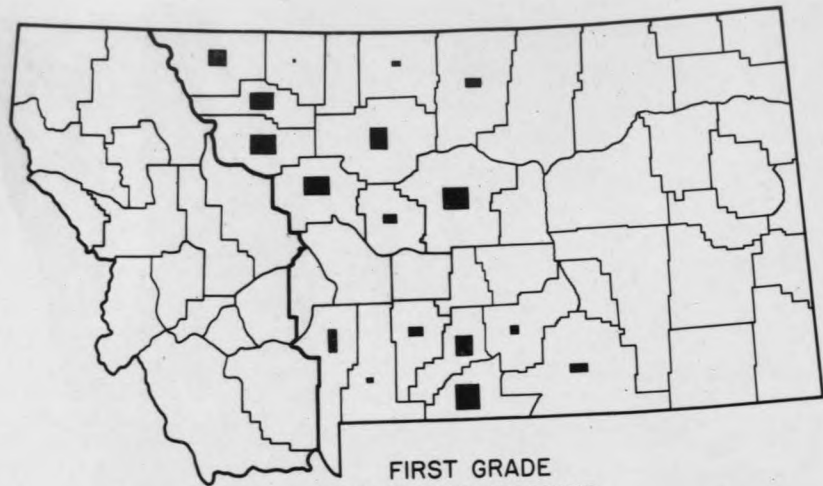
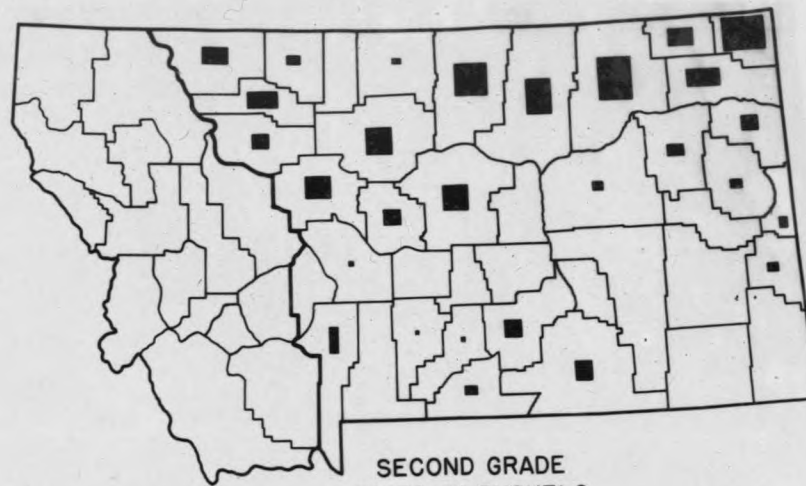


Figure 12. MONTANA FARM TAX DELINQUENCY

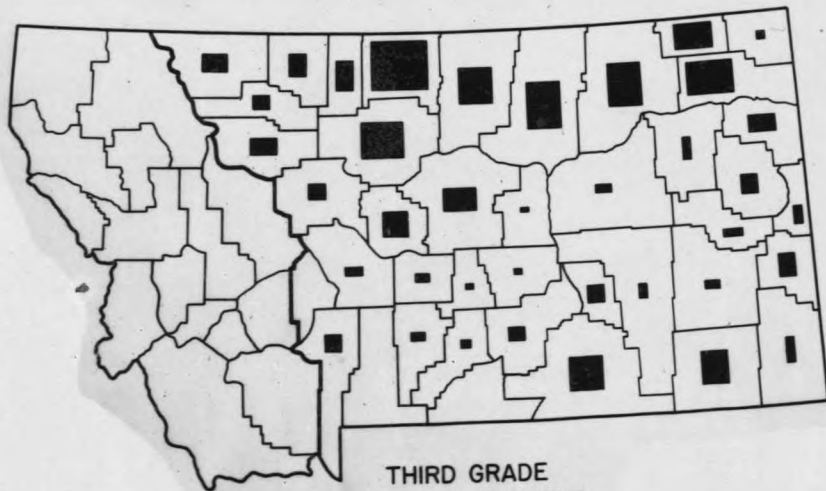
Compiled by - Department of Agricultural Economics, Montana Agricultural Experiment Station.



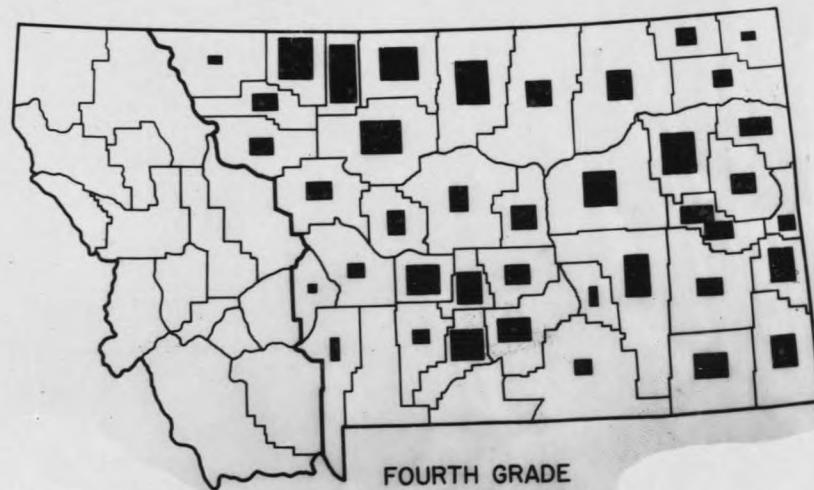
FIRST GRADE
22 BUSHELS OR MORE



SECOND GRADE
18 TO 21 BUSHELS



THIRD GRADE
12 TO 17 BUSHELS



FOURTH GRADE
8 TO 11 BUSHELS

Figure 13. PROPORTION OF EACH GRADE OF FARM LAND TO TOTAL AREA IN EACH COUNTY
Compiled by - Dept. of Agron. and Dept. of Ag. Econ., Mont. Exp. Sta., The Resettlement Admin. and
W.P.A. Cooperating.

Notice in Figure 12 the prevalence of tax delinquency in Judith Basin County. Such delinquency has far-reaching sociological and economic effects, such as; (1) increasing the tax burden on land remaining on the tax rolls and consequently (a) causing more delinquency due to excessive tax burdens, (b) discouraging private ownership of land, resulting in the exploitation of the land resources, because of lack of control and personal interest in the conservation of soil and plant life, and (c) inefficient farm organization, because the prohibitive tax makes it impossible for the farmer to own and thereby control sufficient land for an economic unit.

Tax delinquency is only one of the more obvious results of an unequally distributed tax burden. Certainly when the tax burden is greater than if justified by the productivity of the land, the money that pays the tax must be deducted from the money available for food, clothing, medical care, education, and recreation for the farmer's family. When such is the case the sociological effects of inequalities may be extremely damaging to society.

Equalization of tax burdens is a necessary part of any constructive land utilization program. The present assessments and levies were placed upon the land without determining its best use and productivity. The result has been that many lands that are assessed as high grade farm lands have proven to be suited only for grazing. If privately owned land of this type is to be reverted from its present condition into grazing, then the taxes must be reduced to a point where the land can be used profitably for grazing purposes. If such a reduction is not made land owners will allow

the land to go delinquent and to waste, rather than make an additional investment in the land in an effort to conserve and improve it.

VI. PROPOSALS FOR SETTING UP A SYSTEM OF ASSESSING AND TAXING FARM LANDS ACCORDING TO THEIR ABILITY TO PAY

A system of classifying farm land for assessment now in operation in McKenzie County, Western North Dakota has many features that deserve consideration in developing a plan applicable to Montana. ^{8/}

The following quotation presents the general features of the system operating in McKenzie County.

"Farming land is usually bought and sold in units of 40 acres, quarter sections, or sections, and taxes are generally levied on each 40-acre tract. Each farm is a unit by itself and its problems of management are small unit problems. Therefore, if the soil survey is to be an aid in the development of land utilization policies and in the classification of lands for the purpose of assessment and equalization of taxes it is necessary that the survey be sufficiently detailed to show the difference between these operating units. A generalized map has little value; in fact, it is quite misleading when used for the appraisal of land values or for determining the best utilization of any particular farm or tract of land."

"Rural land values and taxes on such land should be based upon the producing power of that land. In order to determine the appraisal of any particular tract of land having certain physical characteristics, such as soils, topography, and so on, the use to which this land is best adapted must be ascertained. A tract of land best suited for general farming should not be evaluated upon the basis of its grazing capacity; and land best suited for timber growing should not be evaluated on its potential crop production. After establishing the use group, the relative value of the various tracts within the use group can be ascertained."

"A determination of the use to which a piece of land is best fitted depends upon its physical characteristics and environment and the varied experiences of people using land of similar characteristics. This body of experience is not large in recently settled areas. As an agricultural area grows older, as economic conditions change, and as new agricultural

^{8/} The land resources and type of agriculture in McKenzie County are typical of the plains section of Montana.

techniques are introduced, the best use of the land changes. For this reason a permanent, all-time classification of land is impossible. This is particularly important to bear in mind in considering newly developed areas."

"The nature of the soil, the topography, and other physical features of the land are essentially permanent. From a knowledge of these conditions, together with present-day results of experience, the land classification can be made. If future changes make this classification inappropriate, it will be a comparatively simple matter to reclassify the land without the need of additional field mapping. Once the physical factors of the land are accurately mapped in detail, the land classification can be revised from time to time at comparatively small cost. But, if the land classification is made in the field on the basis of present economic conditions and present land use, revision of the classification will require that all the field work be done over again. It is, therefore, of the utmost importance to keep the permanent physical data sharply separate from transitory economic conditions."

"It is necessary to include all 'mappable' physical characteristics of the land in the survey which is to be used as a basis for the land classification. These include much more than the soil survey itself, although the soil map forms the cornerstone for the work. Some writers have mentioned a long list of factors which must be 'taken into consideration'. Some of these are not mappable, from any practical point of view. Take, for example, 'soil productivity', the only way to determine this factor would be by a system of controlled test plots on each piece of land. Obviously, such a suggestion is absurd. In order to keep costs within the realm of possibility and to insure uniformity of work, it is necessary that definite features be mapped, and in units that can be given rather strict description with as little personal interpretation as possible. The general nature of the country and the broad types of possible utilization will determine, somewhat, the nature of the information required, both for the land classification and for the study of land utilization."

"In general, the work of classification can be said to have the following consecutive steps: (1) accurate mapping, in detail, of the important physical features of the land; (2) determination of the use to which the various combinations of features are best adapted; and (3) the evaluation of each individual tract of land according to its capabilities within its use group." (1)

It will be noted that the method described in this paper takes no account of improvements on farms and ranches. Under the laws of North Dakota these improvements, such as buildings and fences, are exempt from

taxation. If this system were to be used in Montana, where improvements are subject to taxation, an assessment of them would need to be made and added to that of the land.

There are two distinct plans by which a system similar to that in McKenzie County could be set up in Montana. The plans would be similar in their general method but would differ in the scope of the undertaking and in their organization.

The County Plan.

This plan, as the name implies, is organized and set up entirely on a county basis. The steps involved in putting it into effect would be as follows:

- (1) The state legislature would need to authorize certain changes in the county assessor's office and method of assessment.
- (2) A detailed soil survey would be needed following in general the suggestions in the foregoing quotation.
- (3) A land use study of the county would be needed in order to determine the use to which the various tracts of land are best adapted, and to evaluate each individual tract of land according to its capabilities within this use.

A soil survey is a technical job and would have to be done by persons especially trained in that work. In Montana the necessary detailed survey might be done in cooperation with the State Experiment Station. A land use study to determine the best use and the valuation of each tract of land should at least be supervised by someone especially trained in that field.

Once the soil survey were completed and the best use and valuation of each tract of land determined, the system could be maintained efficiently by one or two trained men and would cost less than the present set up and the resulting assessments would be distributed within the county according to the ability of the land to pay.

The system as set up so far would correct inequalities insofar as they were caused by unequal assessments. What about inequalities caused by different levies among school districts? These inequalities are equally as unjust as those caused by unequal assessment and their results are equally as damaging.

Inequalities within a county due to an unequal rate of assessment could be removed by making the county the unit of taxation rather than the school district or other sub-division. Having equalized assessments by putting into operation a scientific system of evaluating lands according to their ability to pay, placing an equal levy over the entire county would mean that every farm within the county would bear its just share of the tax burden.

The State Plan.

The second suggested plan is much more nearly the ultimate in systems of taxing agricultural lands according to their ability to pay. This plan is state-wide in its application and is administered by a permanent state agency. Steps involved in setting up such a plan would be:

- (1) Authorization by the state legislature.
- (2) The creation of a commission with a technically trained staff

which would have the necessary authority and facilities to carry out the following steps in this plan.

(3) A state-wide soil survey following in general the suggestions presented in the preceding quotation.

(4) Provisions for a general soil survey at intervals of about every three years in order to detect any changes that may have occurred in the soil resources.

(5) The establishment and maintenance of a group of technically trained men whose duty it shall be: (a) To determine the best use of each tract of land and to make such changes in the best use from time to time as may become necessary or desirable as a result of changed circumstances, (b) to determine the value of each tract of land within its use group and make such changes in that valuation as may be made desirable by changed marketing conditions, price changes, extended drought or other factors.

An equalization of assessments throughout the state without changing the present units of levying taxes would mean that there would still be inequalities among school districts and among counties due to the difference in the rate of levy. Changing to a county unit in levying taxes would eliminate inequalities among school districts and the only inequalities remaining would be among the different counties. The only remaining step necessary to achieve a complete equalization of farm taxes throughout the state would be an equalization of the levy among the counties. That is to say, in order to achieve a complete equalization

of farm taxes in Montana the state would necessarily become the unit for levying farm taxes. Such a step has obvious advantages from the point of view of equalizing the farm tax burden. There are, however, many obstacles to overcome before such a change could be made.

The state-wide plan of assessing farm land is clearly superior to the "county plan", not only because of its wider geographical scope but also because it would achieve a greater uniformity of assessments among counties, due to the centralized administration. The "county plan" would, however, be easier to put into effect and would be a great improvement over the present state of affairs. Furthermore, it is to be hoped that the example of the "county plan" in operation would lead the way to the final establishment of the "state plan".

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APPENDIX

Section I.

Land Classification

Farming Land

Graded as to yield of spring wheat on summer fallow.

First Grade Farm Land	22 bu. or over
Second " " "	16 to 21 bu.
Third " " "	12 to 15 bu.
Fourth " " "	8 to 11 bu.

Grazing Land

Graded as to acres per 1000 pound steer for ten month grazing period.

First Grade Grazing Land	18 acres or less
Second " " "	19 to 27 acres
Third " " "	18 to 37 acres
Fourth " " "	37 to 55 acres
Fifth " " "	56 acres or over

Table I. Appendix - SIZE OF SAMPLE AND TAX BURDEN BY DIFFERENT USE GROUPS

Grade of Land and Use Group	Acres in Sample	Assessed Value	Tax Levied	Value per Acre	Tax per Acre	Tax in per cent of Tax Paying Ability
First Grade Grazing						
Farmed	9,076	108,133	1,582	11.91	.17	227
Grazed	51,628	438,287	6,503	8.49	.13	173
Second Grade Grazing						
Farmed	56,568	478,472	12,098	8.46	.21	350
Grazed	30,872	204,526	5,427	6.62	.18	300
Third Grade Grazing						
Farmed	57,818	303,198	5,177	5.24	.09	225
Grazed	13,520	44,212	852	3.27	.06	150
Fourth Grade Farming						
Farmed	27,165	327,618	5,811	12.06	.21	700
Grazed	11,056	65,885	1,133	5.96	.10	333

Note - Following are the counties represented by each grade of land in the above table.

- First Grade Grazing - Cascade.
- Second " " - Sheridan, Roosevelt and Valley.
- Third " " - Roosevelt and Golden Valley.
- Fourth " " - Teton and Fergus.

Table II. Appendix - TAX PAID PER ACRE IN PER CENT OF TAX PAYING ABILITY

Per Cent of Tax Paying Ability	Tax Paid Per Acre							
	Farm Land				Crazing Land			
	No. 1	No. 2	No. 3	No. 4	No. 1	No. 2	No. 3	No. 4
	\$.40	\$.23	\$.06	\$.03	\$.075	\$.06	\$.04	\$.03
0 - 50	0 - 20	0-.12	0-.03	0-.015	0-.0375	0-.03	0-.02	0-.015
50 - 100	20 - 40	.12-.23	.03-.06	.015-.03	.0375-.075	.03-.06	.02-.04	.015-.03
100 - 150	40 - 60	.23-.35	.06-.09	.03-.045	.075-.1125	.06-.09	.04-.06	.03-.045
150 - 200	60 - 80	.35-.46	.09-.12	.045-.06	.1125-.15	.09-.12	.06-.08	.045-.06
200 - 250	-	.46-.58	.12-.15	.06-.075	.15-.1875	.12-.15	.08-.10	.06-.075
250 - 300	-	.58-.69	.15-.18	.075-.09	.1875-.225	.15-.18	.10-.12	.075-.09
300 - 350	-	-	.18-.21	.09-.105	.225-.2625	.18-.21	.12-.14	.09-.105
350 - 400	-	-	.21-.24	.105-.12	-	.21-.24	.14-.16	.105-.12
400 - 450	-	-	.24-.27	.12-.135	-	.24-.27	.16-.18	.12-.135
450 - 500	-	-	.27-.30	.135-.15	-	-	.18-.20	.135-.15
500 - 550	-	-	.30-.33	.15-.165	-	-	.20-.22	.15-.165
550 - 600	-	-	-	.165-.18	-	-	.22-.24	.165-.18
600 - 650	-	-	-	.18-.195	-	-	.24-.26	.18-.195
650 - 700	-	-	-	.195-.21	-	-	.26-.30	.195-.21
700 & Over	-	-	-	.21 & Over	-	-	.30 & Over	.21 & Over

Table III. Appendix - ASSESSED VALUE PER ACRE IN PER CENT OF PRODUCTION VALUE

Per Cent of Production Value	Assessed Valuation Per Acre							
	Farm Land				Crazing Land			
	No. 1	No. 2	No. 3	No. 4	No. 1	No. 2	No. 3	No. 4
100	\$20	\$11.50	\$3.00	\$1.50	\$3.75	\$3.00	\$2.00	\$1.50
0 - 50	0-10	0- 5.75	0- 1.50	0- .75	0- 1.87	0- 1.50	0- 1.00	0- .75
50 - 100	10-20	5.75-11.50	1.50- 3.00	.75- 1.50	1.87- 3.75	1.50- 3.00	1.00- 2.00	.75- 1.50
100 - 150	20-30	11.50-17.25	3.00- 4.50	1.50- 2.25	3.75- 5.62	3.00- 4.50	2.00- 3.00	1.50- 2.25
150 - 200	30-40	17.25-23.00	4.50- 6.00	2.25- 3.00	5.62- 7.50	4.50- 6.00	3.00- 4.00	2.25- 3.00
200 - 250	40-50	23.00-28.75	6.00- 7.50	3.00- 3.75	7.50- 9.38	6.00- 7.50	4.00- 5.00	3.00- 3.75
250 - 300	50-60	28.75-34.50	7.50- 9.00	3.75- 4.50	9.38-11.25	7.50- 9.00	5.00- 6.00	3.75- 4.50
300 - 350	60-70	34.50-40.25	9.00-10.50	4.50- 5.25	11.25-13.13	9.00-10.50	6.00- 7.00	4.50- 5.25
350 - 400	70-80	40.25-46.00	10.50-12.00	5.25- 6.00	13.13-15.00	10.50-12.00	7.00- 8.00	5.25- 6.00
400 - 450	-	-	12.00-13.50	6.00- 6.75	15.00-16.88	12.00-13.50	8.00- 9.00	6.00- 6.75
450 - 500	-	-	13.50-15.00	6.75- 7.50	16.88-18.75	13.50-15.00	9.00-10.00	6.75- 7.50
500 - 550	-	-	15.00-16.50	7.50- 8.25	18.75-20.63	15.00-16.50	10.00-11.00	7.50- 8.25
550 - 600	-	-	16.50-18.00	8.25- 9.00	20.63-22.50	16.50-18.00	11.00-12.00	8.25- 9.00
600 - 650	-	-	18.00-19.50	9.00- 9.75	22.50-24.38	18.00-19.50	12.00-13.00	9.00- 9.75
650 - 700	-	-	19.50-21.00	9.75-10.50	24.38-26.25	19.50-21.00	13.00-14.00	9.75-10.50
700 & Over	-	-	21.00& Over	10.50& Over	26.25& Over	21.00& Over	14.00& Over	10.50& Over

Table IV. Appendix - DISTRIBUTION OF EACH GRADE OF LAND AMONG INEQUALITY GROUPS:
Data Covers the Entire Area in the 21 Counties Studied

Tax Paid in Per Cent of Tax Pay- ing Ability	Farm Land				Crazing Land			
	No. 1	No. 2	No. 3	No. 4	No. 1	No. 2	No. 3	No. 4
0 - 50	85,248	140,544	-	-	-	-	-	-
50 - 100	819,384	1,684,469	-	-	650,408	-	-	-
100 - 150	-	503,892	15,158	-	1,252,234	507,251	696,576	320,192
150 - 200	-	551,072	701,266	-	591,503	887,326	1,264,231	-
200 - 250	-	-	2,094,560	684,347	-	450,181	817,976	2,033,470
250 - 300	-	208,457	156,672	389,346	-	-	213,853	1,847,422
300 - 350	-	-	1,206,387	1,087,893	-	121,671	522,858	35,237
350 - 400	-	-	302,351	311,717	-	-	-	-
400 - 450	-	-	87,652	-	-	401,341	225,283	78,821
450 - 500	-	-	-	1,183,832	-	-	121,671	-
500 - 550	-	-	546,228	518,402	-	-	-	-
550 - 600	-	-	-	110,592	-	-	-	-
600 - 650	-	-	-	358,477	-	-	-	-
650 - 700	-	-	-	156,342	-	-	-	-
700 & Over	-	-	-	243,344	-	-	-	-

Source: Unpublished data compiled by the Department of Agronomy, Montana Agricultural Experiment Station.

Table V. Appendix - FERGUS COUNTY: DISTRIBUTION OF SAMPLE AMONG INEQUALITY GROUPS

Tax Paid in Per Cent of Tax Paying Ability	Farm Land				Grazing Land			
	No. 1	No. 2	No. 3	No. 4	No. 1	No. 2	No. 3	No. 4
0 - 50	6,960	-	-	-	-	-	-	-
50 - 100	12,978	1,040	1,809	-	7,355	546	-	-
100 - 150	12,028	-	2,400	960	4,680	2,840	7,741	11,094
150 - 200	6,120	966	1,230	2,560	2,880	4,920	3,520	16,800
200 - 250	-	2,904	480	400	880	1,280	1,360	11,952
250 - 300	-	2,680	2,600	2,120	480	480	-	3,440
300 - 350	-	1,560	600	1,280	-	-	960	1,600
350 - 400	-	800	2,690	320	-	-	-	4,240
400 - 450	-	-	3,612	320	-	-	1,600	920
450 - 500	-	-	2,394	-	-	-	-	4,320
500 - 550	-	-	-	800	-	-	-	1,760
550 - 600	-	-	3,496	-	-	-	-	-
600 - 650	-	-	-	-	-	-	-	-
650 - 700	-	-	-	-	-	-	-	-
700 & Over	-	-	4,923	-	-	-	-	-

Table VI. Appendix - TAX BURDEN AND SIZE OF SAMPLE BY COUNTIES AND BY GRADES OF LAND

County and Grade	Acres in Sample	Assessed Value	Tax Levied	Value per Acre	Tax per Acre	Tax Paid in per cent of Tax Paying Ability
<u>Blaine:</u>						
First grade farming	-	-	-	-	-	-
Second " "	30,962	260,496	5,487	8.41	.18	78
Third " "	7,802	45,901	801	5.88	.10	167
Fourth " "	29,151	120,735	1,971	4.14	.07	233
First grade grazing	5,290	18,626	318	3.53	.06	80
Second " "	21,668	90,398	1,564	4.17	.07	117
Third " "	-	-	-	-	-	-
Fourth " "	-	-	-	-	-	-
Fifth " "	-	-	-	-	-	-
<u>Cascade:</u>						
First grade farming	37,718	923,959	13,918	24.50	.37	93
Second " "	28,309	461,417	7,192	16.30	.25	109
Third " "	14,324	276,976	3,919	19.34	.27	450
Fourth " "	13,910	183,964	2,656	13.23	.19	633
First grade grazing	60,984	554,550	8,177	9.09	.13	173
Second " "	2,672	24,054	376	9.00	.14	233
Third " "	2,732	32,570	487	11.92	.18	450
Fourth " "	640	3,685	60	5.76	.09	-
Fifth " "	-	-	-	-	-	-
<u>Chouteau:</u>						
First grade farming	24,947	296,396	5,638	11.88	.23	58
Second " "	33,703	269,040	4,314	7.98	.13	57
Third " "	56,650	517,074	6,425	9.13	.14	233
Fourth " "	56,092	471,630	7,846	8.41	.14	467

Table VI. Appendix - TAX BURDEN AND SIZE OF SAMPLE BY COUNTIES AND BY GRADES OF LAND CONT'D.

County and Grade	Acres in Sample	Assessed Value	Tax Levied	Value per Acre	Tax per Acre	Tax Paid in per cent of Tax Paying Ability
<u>Chouteau, Cont'd:</u>						
First grade grazing	2,644	15,344	231	5.80	.09	120
Second " "	7,560	44,457	777	5.88	.10	167
Third " "	30,935	235,207	4,053	7.60	.13	325
Fourth " "	10,222	50,398	853	4.93	.08	267
Fifth " "	2,200	3,631	56	1.65	.03	150
<u>Custer:</u>						
First grade farming	-	-	-	-	-	-
Second " "	-	-	-	-	-	-
Third " "	-	-	-	-	-	-
Fourth " "	7,835	40,066	664	5.11	.08	267
First grade grazing	-	-	-	-	-	-
Second " "	-	-	-	-	-	-
Third " "	30,749	124,996	1,837	4.07	.06	150
Fourth " "	17,750	60,520	874	3.41	.04	133
Fifth " "	51,679	111,044	1,743	2.15	.03	150
<u>Daniels:</u>						
First grade farming	-	-	-	-	-	-
Second " "	20,212	243,531	6,119	12.05	.30	130
Third " "	28,772	369,390	9,118	12.84	.32	533
Fourth " "	7,298	69,259	1,872	9.49	.26	867
First grade grazing	-	-	-	-	-	-
Second " "	7,440	50,340	1,388	6.77	.19	317
Third " "	6,020	43,113	1,166	7.16	.19	475
Fourth " "	-	-	-	-	-	-
Fifth " "	-	-	-	-	-	-

Table VI. Appendix - TAX BURDEN AND SIZE OF SAMPLE BY COUNTIES AND BY GRADES OF LAND, CONT'D.

County and Grade	Acres in Sample	Assessed Value	Tax Levied	Value per Acre	Tax per Acre	Tax Paid in per cent of Tax Paying Ability
<u>Fergus:</u>						
First grade farming	38,166	755,085	15,076	19.78	.40	100
Second " "	10,950	325,297	6,415	29.71	.59	257
Third " "	21,361	220,849	4,705	10.34	.22	367
Fourth " "	13,683	148,559	2,903	10.86	.21	700
First grade grazing	17,075	94,827	2,029	5.55	.12	160
Second " "	10,066	48,262	1,025	4.79	.10	167
Third " "	14,281	56,225	1,265	3.94	.09	225
Fourth " "	56,026	200,187	4,037	3.57	.07	233
Fifth " "	26,147	81,214	1,646	3.11	.06	300
<u>Glacier:</u>						
First grade farming	30,588	288,555	5,121	9.43	.17	43
Second " "	2,960	17,760	318	6.00	.11	48
Third " "	16,088	128,753	2,510	8.00	.16	267
Fourth " "	4,040	37,790	637	9.35	.16	533
First grade grazing	57,826	351,707	6,326	6.08	.09	120
Second " "	4,200	25,200	462	6.00	.11	183
Third " "	-	-	-	-	-	-
Fourth " "	-	-	-	-	-	-
Fifth " "	-	-	-	-	-	-
<u>Golden Valley:</u>						
First grade farming	-	-	-	-	-	-
Second " "	-	-	-	-	-	-
Third " "	5,410	44,960	456	8.31	.08	133
Fourth " "	15,950	113,829	2,337	7.14	.15	500

Table VI. Appendix - TAX BURDEN AND SIZE OF SAMPLE BY COUNTIES AND BY GRADES OF LAND, CONT'D.

County and Grade	Acres in Sample	Assessed Value	Tax Levied	Value per Acre	Tax per Acre	Tax Paid in per cent of Tax Paying Ability
<u>Golden Valley, cont'd.</u>						
First grade grazing	-	-	-	-	-	-
Second " "	11,116	57,203	939	5.15	.08	133
Third " "	64,778	303,776	4,901	4.69	.08	200
Fourth " "	6,836	46,979	897	6.87	.13	433
Fifth " "	4,800	14,412	207	3.00	.04	200
<u>Hill:</u>						
First grade farming	-	-	-	-	-	-
Second " "	-	-	-	-	-	-
Third " "	96,731	1007,801	14,733	10.21	.15	250
Fourth " "	59,206	401,765	6,007	6.79	.10	333
First grade grazing	24,548	146,210	2,214	5.96	.09	120
Second " "	-	-	-	-	-	-
Third " "	17,107	121,790	1,828	7.12	.11	275
Fourth " "	-	-	-	-	-	-
Fifth " "	-	-	-	-	-	-
<u>Judith Basin:</u>						
First grade farming	8,291	217,059	3,048	26.18	.37	93
Second " "	41,117	1179,823	17,682	28.69	.43	187
Third " "	18,518	422,870	5,940	22.84	.32	533
Fourth " "	7,280	194,045	2,783	26.65	.38	1267
First grade grazing	23,486	196,323	2,400	8.36	.10	133
Second " "	-	-	-	-	-	-
Third " "	-	-	-	-	-	-
Fourth " "	-	-	-	-	-	-
Fifth " "	-	-	-	-	-	-

Table VI. Appendix - TAX BURDEN AND SIZE OF SAMPLE BY COUNTIES AND BY GRADES OF LAND, CONT'D.

County and Grade	Acres in Sample	Assessed Value	Tax Levied	Value per Acre	Tax per Acre	Tax Paid per cent of Tax Paying Ability
<u>Liberty:</u>						
First grade farming	-	-	-	-	-	-
Second " "	-	-	-	-	-	-
Third " "	22,382	150,492	2,765	6.72	.12	200
Fourth " "	101,928	720,187	13,938	7.07	.14	467
First grade grazing	25,882	108,340	2,585	4.19	.10	133
Second " "	5,488	26,142	541	5.13	.10	167
Third " "	10,496	65,737	1,358	6.26	.13	325
Fourth " "	-	-	-	-	-	-
Fifth " "	-	-	-	-	-	-
<u>Musselshell:</u>						
First grade farming	-	-	-	-	-	-
Second " "	-	-	-	-	-	-
Third " "	-	-	-	-	-	-
Fourth " "	-	-	-	-	-	-
First grade grazing	-	-	-	-	-	-
Second " "	11,600	55,427	1,353	4.78	.12	200
Third " "	48,761	140,845	3,620	2.89	.07	175
Fourth " "	57,701	188,055	4,476	3.26	.08	267
Fifth " "	-	-	-	-	-	-
<u>Petroleum:</u>						
First grade farming	-	-	-	-	-	-
Second " "	-	-	-	-	-	-
Third " "	3,840	53,079	905	13.82	.24	400
Fourth " "	6,114	34,624	628	5.66	.10	333

Table VI. Appendix - TAX BURDEN AND SIZE OF SAMPLE BY COUNTIES AND BY GRADES OF LAND, CONT'D.

County and Grade	Acres in Sample	Assessed Value	Tax Levied	Value per Acre	Tax per Acre	Tax Paid in per cent of Tax Paying Ability
<u>Petroleum, Cont'd.</u>						
First grade grazing	-	-	-	-	-	-
Second " "	2,280	14,158	205	6.21	.09	150
Third " "	13,722	56,792	951	4.14	.07	175
Fourth " "	13,066	66,730	1,185	5.10	.09	300
Fifth " "	10,359	33,360	600	3.22	.06	300
<u>Phillips:</u>						
First grade farming	-	-	-	-	-	-
Second " "	48,530	352,297	7,226	7.26	.15	65
Third " "	37,685	234,396	5,646	6.22	.15	250
Fourth " "	11,106	41,616	813	3.75	.07	233
First grade grazing	-	-	-	-	-	-
Second " "	14,754	76,637	1,687	5.19	.11	183
Third " "	-	-	-	-	-	-
Fourth " "	41,414	149,247	3,294	3.60	.08	267
Fifth " "	-	-	-	-	-	-
<u>Pondera:</u>						
First grade farming	-	-	-	-	-	-
Second " "	18,258	221,127	4,331	12.11	.24	104
Third " "	24,834	197,973	3,631	7.97	.15	250
Fourth " "	40,071	429,662	8,550	10.72	.21	700
First grade grazing	21,807	70,258	1,158	3.22	.05	67
Second " "	13,644	75,720	1,529	5.55	.11	183
Third " "	10,176	73,745	1,119	7.25	.11	275
Fourth " "	-	-	-	-	-	-
Fifth " "	-	-	-	-	-	-

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Table VI. Appendix - TAX BURDEN AND SIZE OF SAMPLE BY COUNTIES AND BY GRADES OF LAND, CONT'D.

County and Grade	Acres in Sample	Assessed Value	Tax Levied	Value per Acre	Tax per Acre	Tax Paid in per cent of Tax Paying Ability
<u>Roosevelt:</u>						
First grade farming	18,784	201,535	5,059	10.73	.27	68
Second " "	9,518	81,051	1,939	8.52	.20	87
Third " "	42,249	366,018	8,789	8.66	.21	350
Fourth " "	5,800	45,698	1,029	7.88	.18	600
First grade grazing	-	-	-	-	-	-
Second " "	14,060	83,307	1,938	5.93	.14	233
Third " "	6,560	43,639	1,148	6.65	.18	450
Fourth " "	-	-	-	-	-	-
Fifth " "	-	-	-	-	-	-
<u>Sheridan:</u>						
First grade farming	-	-	-	-	-	-
Second " "	57,210	853,795	20,904	14.92	.37	161
Third " "	1,920	20,103	422	10.47	.22	367
Fourth " "	2,700	25,012	517	9.26	.19	633
First grade grazing	-	-	-	-	-	-
Second " "	48,900	455,790	12,737	9.32	.26	433
Third " "	4,800	27,395	608	5.71	.13	325
Fourth " "	-	-	-	-	-	-
Fifth " "	-	-	-	-	-	-
<u>Teton:</u>						
First grade farming	15,272	201,411	3,415	13.19	.22	55
Second " "	9,840	121,495	2,021	12.35	.21	91
Third " "	13,236	158,809	2,649	12.00	.20	333
Fourth " "	24,538	244,942	4,041	9.98	.16	533

Table VI. Appendix - TAX BURDEN AND SIZE OF SAMPLE BY COUNTIES AND BY GRADES OF LAND, CONT'D.

County and Grade	Acres in Sample	Assessed Value	Tax Levied	Value per Acre	Tax per Acre	Tax Paid in per cent of Tax Paying Ability
<u>Teton, cont'd.</u>						
First grade grazing	6,558	29,298	410	4.47	.06	80
Second " "	1,760	15,441	236	8.77	.13	217
Third " "	2,560	9,814	139	3.83	.05	125
Fourth " "	-	-	-	-	-	-
Fifth " "	2,255	6,904	105	3.06	.05	250
<u>Toole:</u>						
First grade farming	-	-	-	-	-	-
Second " "	-	-	-	-	-	-
Third " "	38,980	258,429	3,778	6.63	.10	167
Fourth " "	66,426	429,207	6,371	6.46	.10	333
First grade grazing	25,166	120,988	1,768	4.81	.07	93
Second " "	-	-	-	-	-	-
Third " "	45,940	272,508	4,258	5.93	.09	225
Fourth " "	-	-	-	-	-	-
Fifth " "	-	-	-	-	-	-
<u>Valley:</u>						
First grade farming	29,200	280,972	6,349	9.62	.22	55
Second " "	67,469	566,781	10,923	8.40	.16	70
Third " "	71,036	723,048	14,102	10.18	.20	333
Fourth " "	7,084	33,647	613	4.75	.09	300
First grade grazing	-	-	-	-	-	-
Second " "	24,840	145,882	2,850	5.87	.11	183
Third " "	2,880	9,920	193	3.44	.08	200
Fourth " "	5,760	23,558	416	4.10	.07	233
Fifth " "	10,080	32,257	653	3.20	.06	300

Table VI. Appendix - TAX BURDEN AND SIZE OF SAMPLE BY COUNTIES AND BY GRADES OF LAND, CONT'D.

County and Grade	Acres in Sample	Assessed Value	Tax Levied	Value per Acre	Tax per Acre	Tax Paid in per cent of Tax Paying Ability
<u>Wheatland:</u>		\$	\$	\$	\$	
First grade farming	-	-	-	-	-	-
Second " "	-	-	-	-	-	-
Third " "	5,760	73,778	1,235	12.81	.21	350
Fourth " "	21,649	185,794	2,630	8.58	.12	400
First grade grazing	-	-	-	-	-	-
Second " "	17,960	119,705	1,705	6.67	.09	150
Third " "	20,506	123,521	1,735	6.02	.08	200
Fourth " "	15,776	113,854	1,534	7.22	.10	333
Fifth " "	-	-	-	-	-	-

Table VII. Appendix - SIZE OF SAMPLE AND TAX BURDEN FOR SELECTED SCHOOL DISTRICTS
Fourth Grade Farm Land

County and School District	Acres in Sample	Assessed Value	Tax Levied	Value per Acre	Tax per Acre	Tax in per cent of Tax Paying Ability
Liberty County						
School Dist. 38	13,742	\$ 98,307	\$ 5,900	\$ 8.17	\$.17	567
" " 40	13,436	97,439	1,931	7.25	.14	467
" " 64	13,160	97,365	1,735	7.40	.13	433
" " 35	16,770	98,542	1,875	5.88	.11	367
Hill County						
School Dist. 56	8,320	61,309	890	7.37	.11	367
" " 41	26,112	150,811	2,233	5.77	.09	300
Toole County						
School Dist. 13	10,240	71,494	1,057	6.98	.10	333
" " 18	14,374	85,938	1,226	5.98	.09	300

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Table VIII. Appendix - SIZE OF SAMPLE AND TAX BURDEN FOR ALL GRADES OF LAND BY OWNERSHIP CLASSES

Ownership Classes and Grades of Land	Acres in Sample	Assessed Value	Tax Levied	Value per Acre	Tax per Acre
<u>Resident Owned:</u>					
First grade farming	157,267	2,514,612	47,785	15.99	.29
Second " "	274,852	3,691,128	71,236	13.43	.26
Third " "	293,490	3,187,821	57,723	10.86	.20
Fourth " "	223,858	1,960,819	32,896	8.76	.15
First grade grazing	182,300	1,119,837	18,519	6.14	.10
Second " "	103,691	683,802	15,637	6.59	.15
Third " "	157,796	788,990	14,068	5.00	.09
Fourth " "	90,921	346,851	7,239	3.81	.08
Fifth " "	43,878	118,715	2,176	2.71	.05
<u>Non-Resident Owned:</u>					
First grade farming	22,632	260,673	5,042	11.52	.22
Second " "	45,564	480,613	9,345	10.55	.21
Third " "	135,716	1,255,193	21,843	9.25	.16
Fourth " "	133,074	975,087	15,936	7.33	.12
First grade grazing	64,167	452,009	6,984	7.04	.11
Second " "	32,556	228,215	4,524	7.01	.14
Third " "	114,705	574,456	9,406	5.01	.08
Fourth " "	73,809	234,825	4,732	3.18	.07
Fifth " "	40,456	93,914	1,590	2.32	.04

Table VIII. Appendix - SIZE OF SAMPLE AND TAX BURDEN FOR ALL GRADES OF LAND BY OWNERSHIP CLASSES, CONT'D.

Ownership Classes and Grades of Land	Acres in Sample	Assessed Value	Tax Levied	Value per Acre	Tax per Acre
<u>Corporate Owned:</u>					
First grade farming	14,696	172,688	3,695	11.75	.25
Second " "	46,444	620,653	12,028	14.66	.26
Third " "	79,480	736,436	12,080	9.28	.15
Fourth " "	93,034	619,319	10,561	7.46	.13
First grade grazing	19,509	115,095	1,475	5.90	.08
Second " "	25,911	184,881	4,536	7.14	.18
Third " "	40,970	254,815	4,617	6.22	.11
Fourth " "	31,469	133,461	2,748	4.24	.09
Fifth " "	5,043	16,620	279	3.30	.06

Table IX. Appendix - SUMMARY OF SIZE OF SAMPLE AND TAX BURDEN FOR 21 COUNTIES BY GRADES OF LAND

Grades of Land	Acres in Sample	Assessed Value	Tax Levied	Value per Acre	Tax per Acre	Tax in per cent of Tax Paying Ability	Assessed value in per cent of Production value.
First grade farming	202,966	3,164,972	57,624	15.59	.28	70	70
Second " "	379,038	4,953,910	94,871	13.07	.25	109	114
Third " "	529,578	5,270,699	94,529	9.95	.18	300	332
Fourth " "	501,861	3,971,761	68,806	7.91	.14	467	527
First grade grazing	271,616	1,706,471	27,596	6.28	.10	133	167
Second " "	220,008	1,410,113	31,312	6.41	.14	233	214
Third " "	333,003	1,741,593	30,666	5.23	.09	225	262
Fourth " "	225,211	903,213	17,626	4.01	.08	267	267
Fifth " "	107,520	282,822	5,010	2.63	.05	250	263

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lands in Montana.

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