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BURNETT, George Wesley, Jr., 1944-
MONTANA BECOMES A LANDLORD: A STUDY OF
STATE LAND SELECTION.

The University of Oklahoma, Ph.D., 1976
Social Geography

Xerox University Microfilms, Ann Arbor, Michigan 48106

THE UNIVERSITY OF OKLAHOMA

GRADUATE COLLEGE

MONTANA BECOMES A LANDLORD

A STUDY OF STATE LAND SELECTION

A DISSERTATION

SUBMITTED TO THE GRADUATE FACULTY

in partial fulfillment of the requirements for the

degree of

DOCTOR OF PHILOSOPHY

BY

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Norman, Oklahoma

1976

MONTANA BECOMES A LANDLORD
A STUDY OF STATE LAND SELECTION

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PREFACE

Between 1970 and 1972 I was employed as a government research librarian with the Montana State Library. During that period my major responsibility entailed assisting as a librarian those who engaged in research, planning, policy formulation, and legal drafting. The major problem before these *ad hoc* planning groups was to guide Montana in attempting to guard a nearly pristine landscape from rape by impending and long overdue modernization. The task immersed me in a body of literature which pivoted around geography, law, history, and conservation, and the disorder of this literature incited me to further study.

I sought that study in the formalized atmosphere of the Department of Geography at the University of Oklahoma. There, Dr. James Bohland directed my study of rural settlement geography and strongly encouraged me to include in my program the formal study of law. Professor Harold Young of the School of Law at the University of Oklahoma directed this inquiry. In his lectures on the law of real property, Professor Young made it abundantly clear that common law was essentially synonymous with land law and that common law tied land to history. The authority to use and convey land rests in the land's history or "chain of title," and when the chain lacks perfection dilemmas result which are resolved through reference to the resolution of similar historical crises. Even where the burden of history on land is overruled by newly evolved pressures, any

revolutionary act is undertaken only with serious consideration.

Professor Young's emphasis upon the relationship of land to history led me to inquire more deeply into the history of the American institutions of property. Dr. Norman Crockett of the Department of History, the University of Oklahoma, guided my efforts on this portion of my graduate education.

By this point my studies focused on the point at which traditional geographic inquiry merges with law and history. Only an intriguing research problem was lacking, and even this began to emerge. U. S. Bureau of Land Management maps of western American states reveal a peculiar landlord controlling up to millions of acres of land in each state. This landlord is the state itself. Why do the states own this land? How do they use and manage it? What effect has it had upon land use and the land tenure of others? What effect might it have upon land use and land tenure?

Fundamental to these questions, however, was a salient problem which first had to be addressed. What could conceivably explain the distribution, generally regular as a checkerboard, of the state lands? A survey of state enabling acts answered both the question of why these lands are owned by the states and why the expected ownership pattern is regular. The lands were given to new states by the federal government to subsidize the cost of public institution development during the turbulent frontier period. The lands are regularly distributed because, with a few exceptions, the lands were given according to such a pattern.

The explanation to the distributional question presented the fundamental research problem before this study. The exceptions to the regular distribution are great enough to suggest that the state enabling acts did not operate in fact as their language suggests. The research question then became, "If the state enabling legislation did not provide explanation for the modern distribution of state lands, what factors did?"

Indeed, multitudinous, rather than singular, forms of the law acted as variables in determining the modern distribution of state lands. There was the law and policy dictated by Congress to the states; the law and policy which the states evolved; the law and policy which the states delegated to politicians; and the law and policy which politicians delegated to bureaucrats. Indeed, in this study this hierarchical legal structure is assumed as a conceptual model from the outset so that the major research task is one of explaining its operation rather than empirically deriving or testing its existence.

In the state under study, Montana, the pivotal source of power in shaping the modern distribution of the estate was the political decision-maker. The politician, in implementing the laws and policies of others, possessed delegated authority in his own right, could interpret laws when necessary irrespective of their context or intent; and so long as he could avert public wrath and judicial review, act as if he were above law. With such power, the politician could make either a glorious success or shambles of an important portion of national land policy, the state land grants.

Again in the case of Montana, politicians appear to have used their power in the best interests of the state as those interests were understood at the time of decision-making. Still, possessing almost limitless power, Montana's politicians could have made relative success into absolute failure by substituting only a little selfishness for selflessness.

If the politician's power was frightening, the chaotic socioeconomic landscape upon which he deployed this power was terrifying. In the chaos of the hour, the decision-maker had little alternative but "to do something, even something wrong." With uncertain laws, little data, and abundant advice, it is a wonder indeed that Montana's politicians sought at all the public good.

The temptation in Montana is to laud the politicians but criticize the system in which they made their decisions. Specifically, the system is criticized on two grounds. First, those who wrote the laws did so with more respect for tradition than for the socioeconomic environment in which administrators actually operated. Law, a form of theory, was segregated from reality and the result was to sow the seeds of potential disaster. Second, the decision-maker was delegated power but made accountable only through the most absurdly difficult processes. Lack of accountability handed the decision-maker the instrument needed to convert potential disaster into history. That Montana's politicians chose not to reap the crop is laudable but not comforting.

The conclusion for the modern administration of politico-legal systems is that such innovations as "administrative account-

ability" and "legislative research" are utterly necessary to sound legal constructions and as instruments which protect the decision-maker from weakness both in his own character and in society's.

This study has been accomplished only through the encouragement of my graduate committee: Drs. James Bohland, Richard Nostrand, Norman Crockett, Christopher Smith, and Thomas Wilbanks. Additionally, Professor Harold Young has encouraged my pursuit of the subject.

The selection of Montana as a study area was based in part upon the excellent state land records in Montana and for this minor administrative miracle unknown former state land administrators are thanked. The records would be little, however, without the support of the Montana Department of State Land and Investments. For their assistance, patience, and guidance, I thank the former Commissioner, Mr. Ted Schwinden, and the present Acting Commissioner, Mr. Leo Berry. Further, the state land department of several western states, particularly New Mexico and Oklahoma, are thanked for assisting me in final selection of the study state, Montana.

The contribution of Mr. Dick Lewis in construction of the cartographic presentations in this study are acknowledged. My wife, Karen, and children, Karl Oskar and Molly Kathleen, have been tolerant to an excess. To these and many others not mentioned I offer my grateful thanks.

THE BIBLIOGRAPHY--TECHNICAL NOTES

The central research question has required the consideration of a wide variety of literature generally foreign to scholarly geographic consideration. For brevity, the nature and citation of this literature are discussed here rather than in the text of the study *per se*. Of greatest concern is the primary archival and formal legal literature.

Throughout the text an internal scientific citation system is employed. Only secondary sources are included in the "Bibliography." Standard legal sources are treated as primary sources, cited according to acceptable methods in the legal profession, and not included in the bibliography. Annual reports of Montana's state officials and agencies are, as a matter of convenience, treated as secondary sources and listed under "Montana" in the text and bibliography. No complete collection of official and agency reports is known to exist. The combined collections of the Library and Archives of the Montana Historical Society and the Montana State Library make the most complete collection available.

In addition to standard legal sources, the data for this study came from three primary sources. The first is the *Minutes* of the Montana Board of State Land Commissioners maintained by the Montana Department of State Lands and Investments in Helena. The *Minutes* contain a brief record of each official meeting of the Montana Board of State Land Commissioners. In the text of this

study, reference is made to the *Minutes* with the date of the particular meeting noted.

The second primary source is the records of correspondence and agreements in the files of the Montana Department of State Lands. Citation of this source describes the document as completely as possible and notes the file where it is maintained. No descriptive information is given in the citation if the descriptive information necessary to identify the document is obvious from the text.

The third source of primary data is the collected papers of the Governors of Montana maintained by the Library and Archives of the Montana Historical Society. A cited document is described as far as possible, and the collection, box, and folder where the document is maintained is given. The designation is followed by "MHS" (i.e., 35a-136-27 MHS). Again no information is given if the citation is obvious from the immediately preceeding text.

Dates of land selection and acquisition were obtained from the records used to document the chain of title to Montana grant lands. These technical records are maintained by the Montana Department of State Lands and Investments. No reference to these technical legal records are given in this study.

MONTANA BECOMES A LANDLORD
A STUDY OF STATE LAND SELECTION

CHAPTER I

STATE LAND ESTATES: A PROBLEMATIC DISTRIBUTION

Congress requires that each state formally acknowledge federal sovereignty over unsettled land prior to admission to the Union. In exchange, Congress traditionally gives land to the new states for the support of public institutions and vital improvements. Known as grant lands, these land gifts must be managed as a sacred trust to produce revenue for the support of beneficiaries, the land-grant institutions.

The spatial distribution of the land-grant estates in seventeen western states is a variable contributing to revenue producing capacity. Today, the estates' spatial distributions are nearly immutable. This has not always been the case. Under the general land disposal laws of the United States, state officials possessed substantial latitude in the selection and acquisition of estate lands so that the policies and laws affecting land selection and acquisition amounted to management of the distribution of the state lands.

The objective of this study is to analyze the body of policy and law which affected the spatial pattern of state-land estates. Specifically, policies and laws are analyzed through study of the geographic patterns of state grant lands and through the decision-making institutions and processes that contributed to the evolution

of state-land ownership patterns. I have attempted to meet these objectives by seeking answers to the following questions:

1. What has been the general nature of the administrative structure in which land selection and acquisition decisions were made?
2. What locational decisions were permitted to be made by state administrators, and what locational decisions were dictated through the federal land grants?
3. What were the policies and objectives subscribed to by state administrators as they made the locational decisions implicit in land selection?
4. What were the conflicts which the state administrators encountered in making state land selections under various policies, and how did these conflicts influence either policy or state land-selection decisions?

This chapter examines the rationale of the research objective. Chapter II conceptually examines the question of the administrative structure in which land selections were made. Identification of important locational decisions made by state officials necessitates, in Chapter III, identification of state lands which have been subject to important decisions, and in Chapter IV, the dating of those decisions. Through the primary sources, Chapter V examines the federal-state land conflicts which have enhanced the state's freedom to select land. Chapter VI examines the objectives to which state officials subscribed in making land selections and the local conflicts encountered in meeting those objectives.

Chapter VII summarizes the findings of this study.

The Rationale for the Research Objective

State lands have hardly been noticed, much less studied in any depth. Durrenberger (1972), encountering the problematic state lands in a study of the Colorado Plateau, has probably made the most extensive geographical observation of state lands. To Durrenberger, land tenure and fragmentation on the Colorado Plateau is hopelessly complex, and he attributes much of the condition to conflicting, inconsistent, and ill-conceived federal land policies. The state land grants were simply the last straw in this chain of events. Durrenberger (1972, p. 232) states:

The difficulties created by these [federal land disposal and reservation] policies might have been solved had it not been for yet another set of policies adopted by the federal government. The states had been given sections 1, 16, 32, and 36 of every township for school purposes, and were given authority to select several million more acres for other purposes. Because of the late date at which they achieved statehood, Arizona and New Mexico have had a difficult time finding enough land from which to make their selections, and in 1971 they had not completed their task. Both states adopted policies which have tended to keep these lands in state ownership, leasing rather than selling the land. Conflicts were inevitable when individuals, corporations, government agencies, and Indian tribes were all acquiring land at virtually the same time, and some still have not been settled.

Indeed, state land tenure conflicts have not been resolved in many western states, and there is evidence that the conflicts are worsening. For example, much of the American West is becoming the energy storehouse for the nation. Yet energy development, with all that attends it, cannot be viewed without reservation. The advance of rural subdivision, tourism, recreation, and closure of

private lands to the public are contributing to a mounting land crisis in the American West. The land crisis has inspired political criticism of land institutions as well as experimentation with new politico-legal formulations which may be, at best, viewed as innovative, and, at worst, as radical aberrations of Anglo-American real property traditions. That the state lands contribute to land tenure complexity in the West cannot be doubted, but the lands also present an opportunity for the states to formulate a new land ethic. Yet before it is assumed that state lands are a cure-all for land problems, we must realize that scholars have devoted much attention to state lands, and the results reveal a dismal history of state land management.

The major literature on state lands has been reviewed and synthesized by Gates (1968, pp. 285-340). It is necessary to re-evaluate a portion of this literature in the context of this study. The first scholar to study state lands, Knight (1885), exposed the tragic abuse of grant lands in the Old Northwest. In 1902, Schafer ably traced land grant concepts into colonial history. Orfield's (1915) classic study traced land grant concepts into the obscurity of the middle ages and simultaneously revealed abuse upon abuse of Minnesota's state lands. Typically, for example, lumber companies would buy northern Minnesota timber lands "on time," make a single payment, strip the timber, and default on further payments. One jurisdiction learned little from another--Anderson (1940, p. 98) found similar practices in Montana as late as 1909.

The Depression, which was accompanied by substantial

interest in land, generated a plethora of state land studies. Most, searching for theft and crime, concerned aspects of financial management. Two studies conducted in Montana are worth further notice, however. Anderson (1940) rendered a valuable service by simply summarizing the state land administrative practices in Montana. Murray (1942) examined the similarity of Montana state land rental rates to rental rates on private land. Cole (1968, 1966) asked the same question of Colorado's state lands. Both concluded that state lands have been rented for less than similar private lands and pointed to this as an example of poor management and abuse of state lands.

Lokken (1942) and Sheldon (1936) studied land administration in Iowa and Nebraska, respectively. Both studies reinforce the annals of state land abuse. Typically, Iowa and Nebraska sold their lands to settlers at the same price as federal homesteads except that, unlike federal homesteads, the states offered credit. The low sale price, and the fact that lands tended to be sold at the same price through time, has been concluded to be an abuse of state lands. Congress, aware of this, placed minimum sale prices on lands granted to subsequent states. The unreasonably high minimum sales price kept land in state administration until management experience was attained and officials became seasoned landlords. Durrenberger's (1972, p. 232) observation that the states have adopted policies ". . . which have tended to keep these lands in state ownership . . ." must be contested--the policies were forced on, rather than adopted by, the states.

Even with this measure of protection, the lands could be selected to gain control of vital topographic features to the advantage of specialized leasees. Mosk (1943), for example, found that New Mexico state land selections gave large ranchers *de facto* control of substantial tracts of the public domain. The practice is similar to the private selection of forest lieu lands in the Sand Hills of Nebraska which McIntosh (1974) described. The critical difference is that private land selection in the Sand Hills of Nebraska involved only the private abuse of a poorly written law, while the conditions described by Mosk in New Mexico required state assistance in land selections which, if not criminal in the letter of the law, were at least ill-advised.

Gladen's (1970) study of Arizona state lands completes the list of relevant studies. Gladen summarizes a century and a half of criminal and near-criminal abuse of state lands. The abuses vary from vanishing accounting ledgers to state exploitation of its own estate culminating in a monumental U. S. Supreme Court case, (*Lassors v. Arizona Highway Department*, 385 U.S. 458, 460; 17 L.Ed.2d 515 [1967]).

The academic literature indicates that the states have been incapable of managing land. But is this a fair conclusion? With the exception of Anderson's (1940) study, all of the scholars described poor management and selection. None studied in depth the system which produced the poor management, and none realized that previous land administrators lacked complete knowledge of future events. I think a sounder approach is to assume the position

of previous decision-makers and to seek to understand the process which led to seemingly unfortunate decisions. This approach permits a glimpse of the decision-making process itself without requiring any *a priori* evaluation of the decisions which that process generated.

Such a view of decision-making is needed if the institutional organization which engenders errors is to be altered. The need for greater understanding of the decision-making processes, rather than evaluation of the decisions *per se*, should be obvious to anyone who has attempted to enter the literature of decision-making at the state level.

Beyond the problem of decision-making at the state level is the more general question of public decision-making. The application of systems modeling to decision-making has been notably unsuccessful, while game theory has produced slightly better results since it recognizes the crisis nature of each decision. It is precisely the crisis oriented decision-making process described by game theory that the *National Environmental Policy Act of 1969* (83 Stat. 852) and various similar state laws seek to thwart. Yet these laws, which require decision-makers to search broadly into the future to evaluate the potential consequences of their deeds, do not substantially alter the decision-making process. The success of any law which seeks to alter decision-making without altering the decision-making system is doubtful. This research permits a long range empirically based review of the public decision-making process and the tools necessary to sustain it. Such empirical research is necessary if we are to alter the decision-making processes.

The Geographic Study of Law and Public Policy

The major issue in this research is to analyze the policy and decision-making process which affected the spatial distribution of state estates. The data necessary to adequately conduct the research include technical legal doctrines and principles. It is fair to ask if analysis of such material is not more properly conducted by legal scholars and political scientists rather than geographers. It is my conviction that geographers have effectively inquired into the spatial efficacy of law and public policy, a sub-field which I am calling geographical jurisprudence. Further, geographical jurisprudence is logical and necessary to the development of at least one of the widely accepted and well established themes of geographical research and inquiry--namely, the "man-land" or "ecological" theme.

In order to understand the contribution of geographers to jurisprudence, it is necessary to understand the nature of jurisprudence. Jurisprudence is the science of law. Traditionally, it is formal, abstract, and without concern for "questions of moral or political policy" (Black, 1968, p. 992). In practice, however, legal systems, often seeking to implement political, religious and moral philosophies, are concerned with questions of moral and political policy. The dilemma for American law is that the underlying political philosophy is amoral so that the legal system must be amoral. Without a predetermined moral order to enforce, the objective of the legal system is uncertain.

The easiest substitute for moral order is social order. By

this approach the legal system seeks to implement social objectives. Those who subscribe to this line of thought are known as legal positivists (Davitt, 1959), and to them there is an obvious need for a system of jurisprudence which measures the efficacy of the legal order's social impact. The resultant field of inquiry is sociological jurisprudence. Legal positivism is beset with logical dilemmas and is not easily applied without producing questionable results; but to social scientists sociological jurisprudence is imperative, and may be pursued without concern for the philosophical and logical quandaries which generated it.

While legal positivism was emerging, geographers were defining the domain and research goals of their own discipline. Among the lines of inquiry which emerged was the "man-land" (Pattison, 1964) or "ecological" (Taaffe, 1974) theme. The goal of this approach is understanding the functional relationships between man and his landscape. This tradition is not the only acceptable approach to geography, but it is intellectually productive and consequently well-established. Employment of the ecological theme creates recognition of the importance of law in explaining the functional relationship between man and the land.

The early geographer to give best expression to the link of geography to law was Whittlesey who wrote (1939, p. 588):

The legal forms which guide most human activities may vary considerably without doing violence to human living. At the same time they may produce contrasts on man's use of identical environments. Variations in culture patterns in uniform environments on opposite sides of a political boundary are common, and prove the possibility of modifying the landscape by political means. The operation of law can be traced only

through patient study of the incidence of individual laws. Few such studies have been made.

The methodology suggested by Whittlesey is beset with difficulties. Law is part of culture so that similar cultures are likely to have similar laws while different cultures have different laws. But, can differential use of "uniform environments" be attributed either to laws specifically or political processes generally in isolation from the rest of the contrasting or similar culture? Even if the problem of isolating law from culture could be solved, most modern cultures possess voluminous legal structures, so that it is difficult to isolate a single law as producing a landscape characteristic. Nonetheless, Whittlesey clearly understood the need to analyze law as a cultural and social variable shaping and reflecting man's relationship to the land.

Since 1939, several powerful and persuasive contributions to geographical jurisprudence have emerged. American land law, because it so clearly influences the relationship of man to his land, provided a fruitful area of inquiry. Pattison (1957) conducted research into the origin and evolution of the grid survey system, while Thrower (1966) compared landscape development under the grid and meets-and-bounds survey system. Johnson (1957) has attempted to measure directly certain implications of the grid survey system. She found that the quarter section, the usual basic unit of settlement, could be geometrically adapted to various environmental circumstances. Despite this flexibility, the quarter section restricted the degree to which environmentally sound decisions could be made. McIntosh (1974; 1975) directed his inquiry at the impact of various

land disposal laws rather than the impact of the survey *per se*. The Pattison, Thrower, Johnson and McIntosh studies represent a valuable contribution to understanding the relationship between American land law and the evolution of settlement patterns.

Patterns other than land distribution also became subject to the inquiry of geographical jurisprudence. McManis (1965), for example, studied the regional economic impacts of the U. S. embargoes associated with the Napoleonic Wars and found valid reasons for regional disobedience to the embargoes. Steiner (1966) reviewed the impact of federal land ownership on the shape of the southern California metropolitan area. Brown (1972) asked why reversal of judicial opinion on segregated housing had no impact. He found that the procedures of the real estate industry constituted an effective barrier to the implementation of judicial intent. O'Riordan (1969) asked why implementation of a British water resource management law was not as intended. He found that the bureaucrats responsible for the administration of the law redefined the law in terms that suited local needs. Agriculture, a highly regulated industry, likewise has come under consideration. An example is Raitz's (1971) study of the protected Wisconsin tobacco farmers. Other obvious studies in geographical jurisprudence are Sommers and Gade, 1971; Boal, 1970; Alexander, 1968; Large, 1957; and Hamming, 1958.

Empirically based studies such as these, attributable as much to a real concern for public issues as the philosophical dictates of the discipline, are now common in geography, and becoming

more so. The literature indicates that geographers have long felt the need to address questions of morality and political policy; however, the paucity of those in the profession, and uncertain methodological procedures and fundamental concepts have kept geographical jurisprudence restricted to small projects on the periphery of major social concerns. However, methodological innovations combined with new concepts have placed geographers with jurisprudential concerns on more certain intellectual ground. Possibly the most important conceptual innovations have been offered by Cox (1972). Cox envisions that effects emanate from bounded space, and that these effects may either be beneficial or detrimental to surrounding bounded space. Law and policy may be employed to direct the flow of these emanations to other bounded space and, consequently, to other segments of society occupying that space.

Using variations on these conceptual themes, Cox (1973) and Harvey (1972) studied the relationship of policy and law to a broad range of urban problems. Both found that the current system of bounding space combines with urban policies and laws to concentrate the negative effects of land use in discrete geographical areas. The result is that the system of urban policy and law reinforces segregation, poverty and ignorance in subtle though effective ways. With this knowledge, Cox (1973) was able to recommend specific and realistic policy and law alternatives which would reduce spatially distributed injustices without doing excessive violence to established legal and political systems. The studies by Cox (1973) and Harvey (1972) are quite unlike considerations of

the "individual laws" recommended by Whittlesey (1939, p. 588). Geographical jurisprudence has progressed a long way methodologically since 1939, and has proven what Whittlesey realized--the study of law and policy is necessary to a proper understanding of man's relationship to his total environment.

Conclusions

The research objective is to attain an understanding of the contribution of policy and law to the evolution of the distribution of state land estates. Pursuit of the research problem will contribute to an understanding of the complex land tenure and fragmentation in the American West at a time when that tenure and fragmentation appears to provide both frustrations and opportunities in solving major land use questions.

Review of the geographical literature reveals that geographers have contributed to understanding of politico-legal institutions. The need for an analysis of law's affect on land and space is implicit in one of the major research themes in geography.

CHAPTER II

THE NATIONAL LAND ALLOCATION STRUCTURE: A CONCEPTUALIZATION

My first research problem was to describe the administrative structure within which state land selection and acquisition decisions were made. One possible approach to this problem was to describe in detail the administrative structure of each state's bureaucracy. This approach was rejected, for it would reveal little about the decision-making process itself, and would engulf the study in details not pertinent to other research objectives. Instead, a general conceptual model of the administrative structure was the approach chosen. The purpose of this chapter is to develop such a conceptual understanding of state-land administrative structures.

The National Decision-Making Hierarchy

The American Revolution resulted in the creation of a sovereign who proceeded to establish policies through the exercise of sovereign authority. The sovereign arbitrarily willed perfect union, justice, domestic tranquility, common defense, general welfare and liberty (U. S. Const., Preamble). These policies are vague so to give them substance the sovereign delegated authority to three branches of government, the states, and the people. Delegation of authority necessary to expedite decision-making also decentralized

decision-making power and authority (Froman, 1967). Those institutions receiving sovereign-like authority through delegation and decentralization are termed sub-sovereigns. Many of the functions of the sub-sovereigns were, in turn, delegated to other sub-sovereigns, and in turn delegated to still other sub-sovereigns.

Such a hierarchy of authority is complex. No matter how complex, the first tier of the hierarchy dictates policy and law in the sense that other levels of the hierarchy must abide. The second tier of the hierarchy of delegated authority creates evolved policy and law, the policy and law which that level may alter or change at its will. A third tier is created through delegation by sub-sovereigns to lower sub-sovereigns, or "politicians" who create "political" policy, or that which is subject to some extent to review by higher sub-sovereigns. The three levels of authority are relative to the position of the institution in the hierarchy of decision-making. For example, to "We, the people," Congress is political and its policies and laws are political, but to those operating under Congressional mandate, Congressional law and policy is ultimate and absolute--it is dictated.

At any point in the hierarchy is the functionary, the bureaucrat, without authority to create policy or law, but responsible for its implementation. Though lacking authority, the bureaucrat has considerable power to influence the implementation of laws and policies through his professional paradigms, prejudices, and attitudes (O'Riordan, 1969). This informal and often unintended source of policy and law is referred to as bureaucratic policy and law.

The hierarchy of policy- and law-creating systems is graphically summarized in Figure 2.1. To any sub-sovereign, X, there exists a greater sub-sovereign, W. W grants to X authority and with it a certain body of dictated policy and law to which X must subscribe. Within his domain X may create an experimental body of policy and law which he may alter at his will. His policies evolve. Part of the evolved policy of X may be delegated to another sub-sovereign, Y. Since X need not recognize the sovereignty of Y, X views the policies and laws of Y as political rather than sovereign in nature. At any point in the hierarchy there are bureaucrats who implement policy and law without having direct authority to create it. However, the subtle influences of the bureaucracy on policy lead to the realization that bureaucratic policy exists.

Each level of authority is not responsible for issuing policy and law on all subjects. As the authority to create policy and law descends the hierarchy of sub-sovereigns, the population over which the sub-sovereign has authority becomes increasingly smaller and specialized. The boundaries of policy authority of a particular sub-sovereign are referred to as the scope of his policy. To the degree that the scope of policy coincides among sub-sovereigns, it is improperly partitioned, and intra-governmental conflicts arise. Protectionism by, and negotiation among, sub-sovereigns tends to reduce conflict to tolerable levels and, this failing, appeal is made to higher sub-sovereigns or the external judicial analysis.

To summarize, policy is the normative, arbitrary objectives

THE DECISION-MAKING STRUCTURE — A CONCEPTUALIZATION

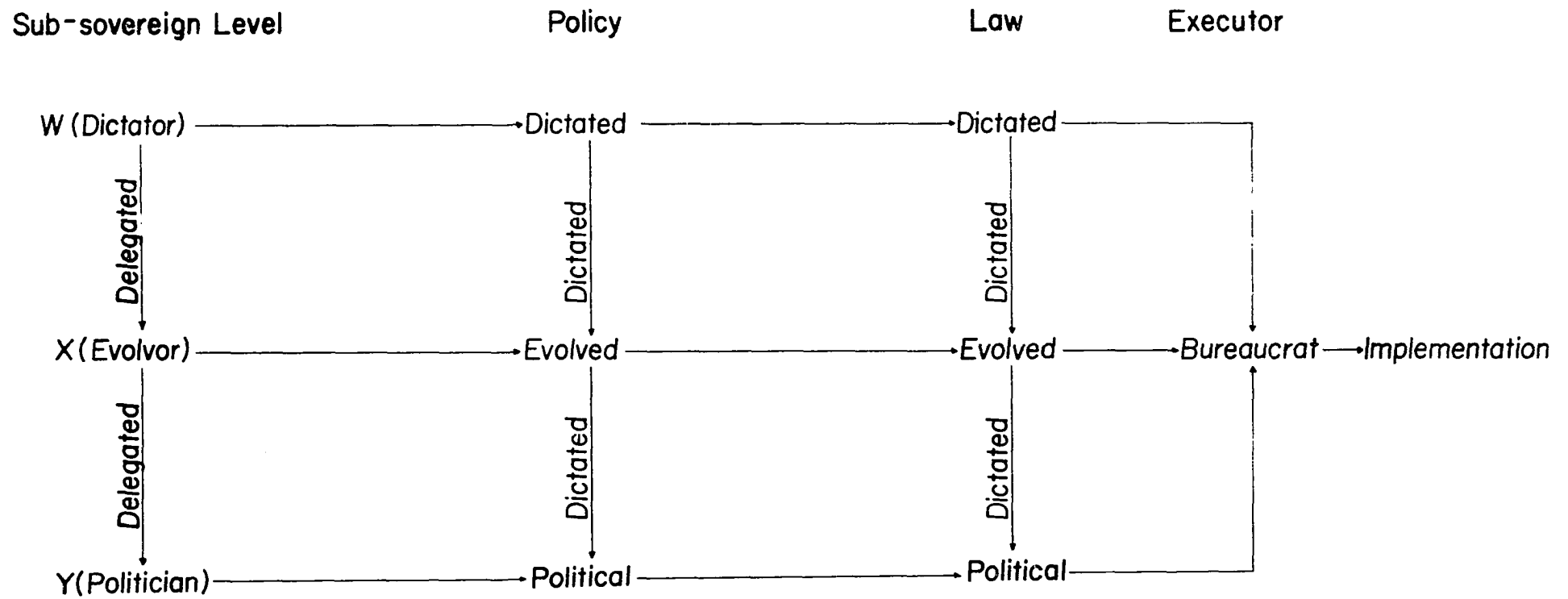


FIGURE 2 1

of the sovereign, while law is a tool effecting policy. Within American society the sovereign has delegated much of his authority to create policy and law to a hierarchy of sub-sovereigns each of whom has responsibility for policy and law making authority of limited scope. Ultimately, bureaucrats implement policies and laws. Decisions affecting the allocation of public land resources --the harvesting of national timber, the mining of national minerals, the allocation of water rights, and the disposal of the public domain--are made within this structure of decentralized and delegated authority.

Congressional Policy of Land Allocation

The United States came to possess a tremendous amount of land. Though the sovereign's authority over this land was acknowledged by the term "public domain," the particular sub-sovereign having management authority over the public domain was initially subject to debate. The responsibility, with a few important exceptions, was seized by Congress.

Congressional policy for the public lands dictated their orderly disposal. Part of that order required a rigid and systematic survey (Ordinance of May 20, 1785 in Commager, 1973, pp. 123-124). Once the land was surveyed Congress confronted two divergent possibilities. Land could be disposed of as a capital asset strengthening central government or land could be treated as a capital asset whose disposal stimulated social developments desired by Congress. In fact, Congress has never made a final choice between these two courses, but well into the 20th Century, Congress opted

generally for the latter policy (Salisbury, 1967). Friedman (1973, p. 203) summarizes:

The government did not choose to manage its land as a capital asset but to get rid of it in an orderly, fruitful way. A whole continent was sold or given away--to veterans, settlers, squatters, railroads, states, colleges, speculators, and land companies. On the surface, one sees in this policy the powerful influence of free enterprise and *laissez-faire*. The government possessed a resource of incalculable value; but it was determined to denationalize it as soon as possible. True, the land was sold for cash, but money was not to be used to aggrandize the government. Yet divestment was never the whole policy, nor ever the sole reason for policy. The professed social reason was not to make government weaker or smaller; but to create a country of free citizens, living independently on their land. Where strict market principles seemed to clash with this goal, these principles had to yield. Government was never merely a passive umpire of the market; it did more than chip the land into units and market it. It used land as a lever of policy.

Friedman sees the disposal of the public lands as a "lever of policy," and although he acknowledges that this necessitated the giving of land to a wide variety of those seeking lands, the central policy was to create "a country of free citizens, living independently on their land." Why then did Congress give land to institutions or persons other than actual settlers? The argument that the land donations ultimately served the yeoman's best interests is appealing when recipients were states, colleges, and railroads, but not when speculators and land companies were recipients. Bogue (1963) has argued that this inconsistency was based upon the fact that speculators and corporations could better serve the settlers than could the federal government, although Socolofsky (1968) found little grounds favoring this hypothesis in Nebraska.

Another point of view is to accept Friedman's argument that land disposal was designed as a "lever of policy," but to contest the idea that Congress subscribed to a singular policy of creating "a country of free citizens, living independently on their land." Certainly, Congress used land to better the lot of the yeoman. But it also used land to create colleges. The creation of farms and colleges may consequently be viewed as distinct rather than components of a single policy. If the policies and laws which led to land disposal served each other so much the better. If they did not then the advocates of the individual policies could be viewed as competitors whose task it was to convince a skeptical Congress of the importance of their program for public land disposal.

Partitioning of policy should have involved different processes depending upon whether Congress subscribed to a singular or multiple set of objectives in land disposal. If a singular policy existed, then Congress had to identify those land disposal methods which would most clearly benefit the yeoman. If several policies existed, then Congress had to identify those potential users it wished to assist and find a land disposal formula which would provide an optimum compromise between competing demands. The two problems suggest differing solutions, but since Congress lacked the methodology to solve optimization problems of any type, the only solution open to Congress, regardless of its philosophy of land disposal, was experimentation.

Experimental solutions to land allocation problems could

take two forms. One was fixed location formulation while the other was administrative competition. Fixed location formulation necessitated giving certain pre-identified lands to certain users. Railroads, states, Indians, and the military generally received large amounts of land through fixed locational formulation. The amount of land given through fixed location formulation was seldom based upon reason. Rather, it was simply the amount thought necessary to satisfy those demanding access to land through fixed locational formulation. Administrative competition necessitated identifying those parties to obtain land through administrative procedures and creating land disposal procedures by which they could obtain land. The parties would compete for the acquisition of land under the administrative procedures. Settlers, miners, and states received land through administrative competition. Competition was, consequently, limited to the private sector, except for the state.

In allocation of land resources through fixed locational formulation, Congress made a definitive and arbitrary allocation of land resources to a certain party. Although it may not have been the best solution, it was supposedly a definitive solution, thus implying the termination of competition for land in Congress. An error in the fixed locational grant, however, could lead to serious conflicts. In the administrative solution to land allocation, Congress did not attempt to terminate competition; it only sought, in passing on competition for land, to make the competition somewhat orderly.

State Grants in the Land Allocation System

Congress donated land to most states for the betterment of vital social institutions on the grounds of the "general welfare" clause of the Preamble to the *U. S. Constitution*. Whether Congress thought those social institutions were necessary for the betterment of the yeoman or for independent social causes has yet to be resolved. For example, the first state to actually receive lands for the development of common schools which had been reserved under the *Ordinance of May 20, 1785* (Commager, 1973, pp. 123-124) was Ohio. However, the reasons for the allocation do not appear to be directly related to the welfare of either the school children or the yeoman. Hoping to use western lands to extinguish debts, Congress demanded that Ohio not only recognize Congressional authority over unsettled Ohio lands, but agree that land disposed of by Congress in Ohio be exempt from taxes for five years. The result was that the cost of development of social institutions in Ohio fell on the earliest residents of the state. Statehood was consequently not palatable to Ohio. The land grant was therefore, in part, designed to encourage Ohio's entry into the Union with the exorbitant demands imposed by Congress.

Congress continued to use the land grants as a tool for achieving "manifest destiny" by encouraging a desire for statehood and the land that came with statehood among the territories. Consequently, the grants tended to become larger through time, particularly when the majority party in Congress needed new states admitted to the Union. As the dismal management record of the grant

lands became obvious, however, Congress imposed harsher management rules even as they granted larger estates. In this sense, Congress adhered to the intent of the grants irrespective of other policies effected through the grants.

Hence, an historical view of state land grants suggests that grants were indeed being used as a "lever of policy," but that the policy was complex rather than singular. Congress at once probably saw the grants as assisting the yeoman, as benefiting the institutions to which they were dedicated, and as a tool in achieving manifest destiny and building partisan political power (see Gates, 1968, pp. 285-340, for an excellent historical review of state land grants).

State land grants were given in two ways. The fixed locational formulation, so many sections per township, was designed to reduce conflicts and competition. These lands are termed in place grant lands or, since such lands were exclusively dedicated to the support of common schools, school lands. The second was by administrative competition and involved acreage which was selected and acquired as best the state could. These lands are termed in quantity grant lands. Because of various factors some in place grant lands were acquired as if they were in quantity lands, that is, subject to competition. These lands are known as in lieu or lieu grant lands and are dedicated, like the in place lands, to public school support. The in quantity grant lands, in contrast, are entrusted to the support of a variety of public institutions.¹

¹The terms in place, in quantity, and in lieu or lieu are used throughout this study. The term "school land" refers to the combined in place and in lieu grants. The terms are derived directly from the language of the land grant instruments which are discussed in more detail in Chapter III.

A number of important questions can be asked about each of these types of lands. How much of the in place grant was actually subject to competitive acquisition factors? Once the amount of land actually selected in competitive markets is known, interest turns to the techniques by which this land was selected and acquired. Where were the lands acquired and how were they acquired?

Fundamentally, the state political hierarchy had two problems in acquiring land. First, lands which would show a profit for the beneficiaries was a major goal. Second, since lands which would satisfy the first criterion would also be attractive to other potential users, the political hierarchy had to face the possibility that competition would break into actual conflict. In short, the political decision-making system faced a "mini-max" problem: minimize potential conflict and maximize potential economic return.

The expected solution to that problem was a compromise which may have appeared unsatisfactory to any number of observers. How was it solved? What lands were acquired? What compromises did the state make? What decisions were too sacred to permit compromise? How were conflicts, once unavoidable, resolved? What could be negotiated and what was too important for negotiation?

The upper tier of the policy hierarchy which initially had to address these questions was Congress which dictated certain procedures and rules to the states. Given the dictated policy, the states (sub-sovereign) could experiment with the administration of their lands. The evolved policies of the states included the delegation of power to a politically based board. Beneath the board was the bureaucracy which executed the policies. It is certain that

the intermix of the four bodies of policy (dictated, evolved, political and bureaucratic) found a solution to the "mini-max" problem, or the lands would never have been acquired; however, the manner in which the solution was derived, and its influence on the geographic distribution of state lands, is the focus of this investigation.

A Conceptualization of State Land Selection Processes

In attempting to find the characteristics of the "mini-max" solution to state land selection and acquisition problems, relevant policy and legal statements could be reviewed. This method would be somewhat inadequate, however. It assumes that all policy and law-like statements are a matter of record and clearly understandable. This is unacceptable, since policy is seldom a matter of record and the impact of recorded law is difficult to interpret. It is naive to assume that the meaning of a legal statement is similar to those who merely read it and those who must execute it. Any sound inquiry into the impact of policy must accept these two limitations: the absence of complete information about policy, and the inability to determine *a priori* the practical meaning of seemingly clear legal statements. One technique would be to limit consideration to the efficacy of very small portions of the legal-political literature. This, however, would mitigate the difficulties only to a limited degree. It might be easier to construct studies by this method, but their contribution to the understanding of legal systems would be minimal.

Most geographical studies which have contributed to sound understanding of political-legal systems have looked first at the distribution of a phenomenon and then to the laws and other socio-economic factors which brought about that distribution. Fortunately, the organization of the current state land estates permits, with a few difficulties, such an approach. If it is possible to know what lands were acquired at any given time, then it is possible to associate their acquisition with the policies and laws which existed at the time of selection, and where important policies are not a matter of record, to infer their existence from the behavior of decision makers.

The current absolute distribution of state lands is known in great detail. The dates of acquisition of these state lands, because of the burden of history or the chain of title (Cribbet, Fritz and Johnson, 1972, pp. 724-746), are also known. Conceptually, therefore, it may be stated that:

$$\text{Current Estate} = \sum_{I=1}^n L \quad (2.1)$$

Where:

L = state land acquisition at time n ,

n = the length of time over which lands have been accumulated, expressed in discrete time units ordered chronologically.

Selection at any one time period, n , can be expressed as:

$$L_n = f(w_1 DP_n + w_2 EP_n + w_3 PP_n + w_4 BP_n) \quad (2.2)$$

Where:

- n = a given time period,
- DP = the content of dictated policy,
- EP = the content of evolved policy,
- PP = the content of political policy,
- BP = the content of bureaucratic policy,
- w = the relative weights defining the potency of the content of each category of policy.

Though stated in mathematical terms, a mathematical solution to Equations 2.1 and 2.2 is impractical at present because most of the independent variables are not quantifiable. The formulas, however, reflect the conceptual organization of policy administration described in Figure 2.1 and can be used to organize a discussion of the processes which led to state land selection and acquisition (Figure 2.2).

To elaborate on Figure 2.2, at a time n_1 four bodies of policy combined to dictate the decisions made in an administrative process called "selection and acquisition of state land." At the conclusion of this process land was brought into the state's estate. At time n_2 slightly different policies were called upon again leading to selection and acquisition of state land, but this time the lands acquired in time n_2 must be added to the estate already acquired in time n_1 . When this process has been repeated through all possible time periods there emerges a modern state land estate representing the sum of acquisitions through time. If the modern estate can be broken into regional components determined by the

STATE LAND SELECTION STRUCTURE

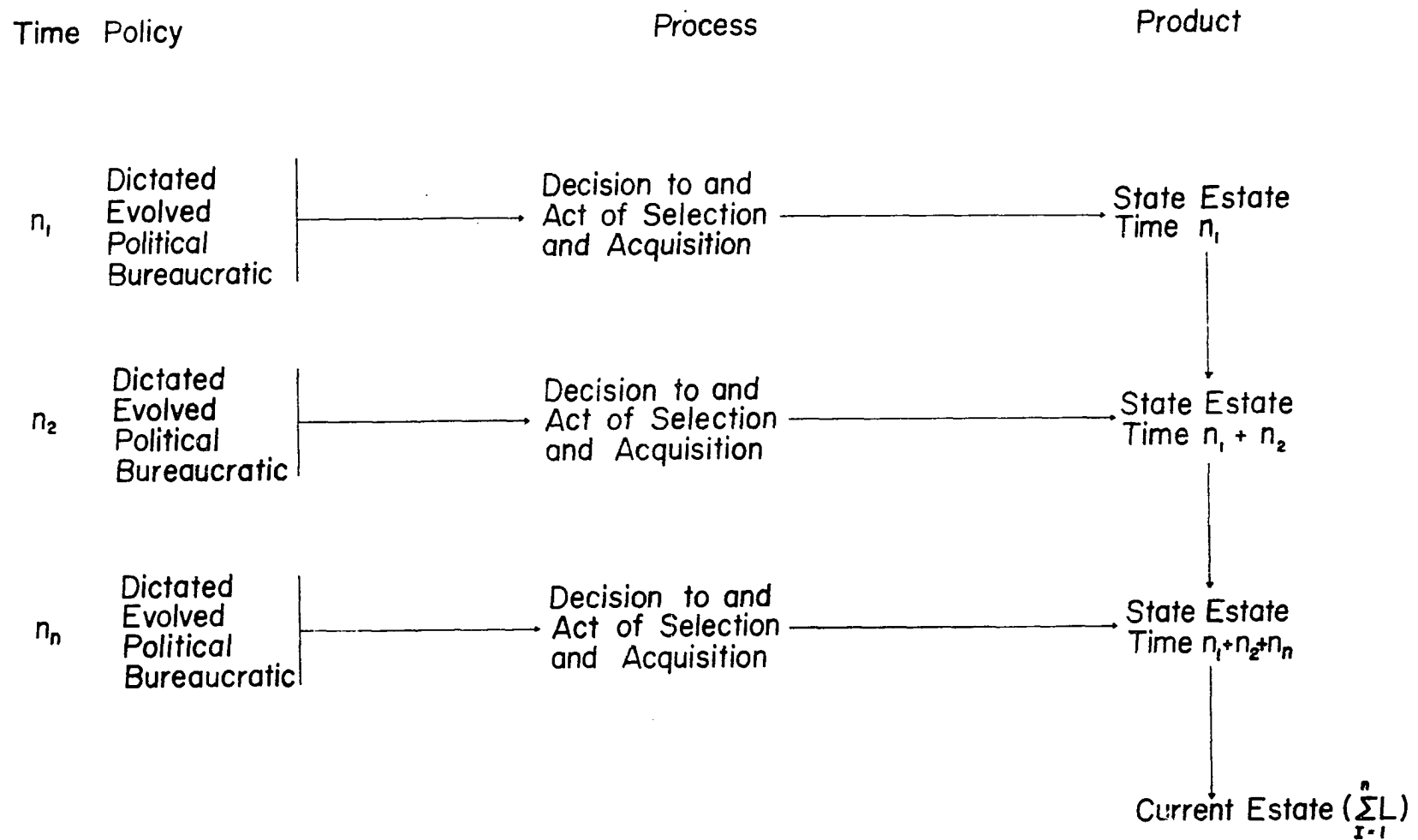


FIGURE 2.2

date of selection and acquisition, considerable information about the operation of known policies which determine selection and acquisition can be retrieved. Further, if clear policy statements are wanting, motivations can at least be inferred from the social-economic-political conditions which existed at the time of selection. The actual method by which this conceptual model can be operationalized is discussed in detail in Chapters III and IV.

Politico-economic Factors in the State Estate's
Spatial Distribution

The estate which emerged as a result of the land selection decision-making process (Figure 2.2) was quantitative and qualitative. Quantitatively, the estate was limited by the acreage which Congress willed to grant to the state. The spatial distribution of the estate is a portion of its quality. Insomuch as Congress granted lands by fixed location formulation to the state, the "decision to and act of selection" (Figure 2.2) was a hollow bureaucratic exercise. A considerable portion of the fixed location or in place land was, however, selected as in lieu land free from the fixed location formula. This land, combined with the in quantity land grant, was selected irrespective of locational dictates to give spatial form and substance to the modern state land estate. The purpose of this section is to develop the major policy themes which helped to shape and will assist in interpreting the spatial development of modern state land estates.

Land selection could not have been conducted in other than

an atmosphere of spatial competition and possibly conflict for land while the state objective in selecting was logically to acquire quality land while avoiding open conflict with the citizen. This has been identified as the "mini-max" problem. Another source of conflict and competition existed, however, and this with the grantor, Congress. First, it must be assumed that when Congress granted land to the state by fixed location formulation Congress expected the land grant to be implemented by fixed location formulation. State administrators, however, if they were seeking quality lands would have desired to make land selections freely. This implies that Congress's goal was to assure that in place land grants remain in place while the goal of the state was to move as much land as possible from the in place to the in lieu land grants. The state's goal could only be achieved if Congress gave lands in place to the state, and before the state's title to that land was perfected, dedicated the same land to other uses. There was opportunity for such multiple land grants. While Congress was granting land to new states it was also giving land to settlers, railroads, and mineral prospectors as well as reserving land for national forests, national parks, the military, and Indians. With so much activity it would be surprising if multiple donations of the same land did not occur. A major objective then in understanding the modern distribution of state lands is to understand how these multiple land donations arose and how the state manipulated them to gain the freedom to select land free from spatial restraints.

Freedom to select land irrespective of spatial dictates was

never more than relative, however. The state could never select land until the federal cadastral survey had been completed. After Congress legitimized many forms of "squatting" on public land in the *Preemption Act of 1849* and the *Homestead Act of 1862*, the federal surveyors became followers rather than leaders of the frontier. Surveyors could only hope to conduct their surveys after the course of settlement was somewhat advanced but before excess damage was done to the integrity of the grid survey. This situation implies that state land selectors had to work in immediate proximity to federal land surveyors. They could not select land in advance of the surveys for this was forbidden by law. Selection of land far behind the surveyors would have been unadvisable for by definition this land would have been the "dregs" passed over by settlers.

It follows that in nearly every state land selectors should have been continually critical of the progress of land surveys. The faster surveys were conducted the more land was available to select from. Indeed administrators were critical of the survey and sought to gain control of it or, this failing, to direct its progress. Further, insomuch as the surveys could not be rapid enough to satisfy state land selectors, they would be expected to develop a fear that there was insufficient land to satisfy the land grants.

Logically, a theme of insufficient land to fill the land grant would develop independent of the progress of the survey, however. Assume a category of land, A, which is more valuable than B category land. A wise administrator would select A quality land. Desperate feelings would arise when it was realized that there was

more land to be selected than A quality land available. Land selectors had to recognize that at some future time they would be forced to select B quality land, a decision which they regarded as poor. Additionally, since everyone was competing for category A land, the longer land selection was delayed, as through the slow surveys, the sooner the day would come when only category B land would be available. The prospects could not but produce anxiety among state land administrators.

These competitive processes resemble the classical interpretation of economic rent offered by Ricardo (1911). The implications of Ricardo's concepts for estate land selection are best explained through an example. If it is assumed that:

(1) There is a plain being settled.

(2) Settlers produce only one product and the product price is constant.

(3) The minimum supply price of a unit of land is zero.

(4) The settlement plan consists of four grades of land, A through D.

(5) The cost of bringing a unit of A type land into production is zero, and each succeeding grade of land costs \$5.00 per unit more than the last grade of land to bring into production. Then:

(1) Settlers will seek all of A type land before B type land is brought into production.

(2) Until all A type land is settled, it is a free commodity, commanding no rent, and valued only for the market value of its product.

(3) When all type A land is settled, the next settler has a choice of paying \$5.00 to bring B type land into production or paying \$5.00 to gain access to A type land. Hence, the cost of bringing B type land into production accrues as rent to type A land.

If it is assumed that the entire plain is settled, the rent which accrues to A type land is:

Cost to bring B land into production =	\$5.00
Cost to bring C land into production =	5.00
Cost to bring D land into production =	<u>5.00</u>
Rent accruing to A land	\$15.00

The \$15.00 rent which accrues to A type land through bringing lesser grades of land into production is neither land rent nor economic rent as economists currently use these terms (Barlowe, 1972, pp. 157-158). Instead the rent is what Renne (1947, p. 212) has called "rent as an unearned increment," the form of rent which explains why, as John Stuart Mill stated (1965, p. 18), the landlord "grows rich, as it were, in his sleep without working, risking, or economizing." Generally, however, it is precisely rent as an unearned increment which produces revenues from state lands. With few exceptions, states acquired lands which they did not work, on which they avoided risk as a matter of law, and upon which they did little economizing. Consequently, if revenue was to be derived from the trust grants, and there was no other purpose for which they were given, most had to accrue as unearned rent.

Ricardian economics suggest that acquiring land was speculative and economically dangerous. To use the example above, type A land is at the intensive margin since it accrues the most unearned

rent. The unearned rent of type B land is then \$10.00; C, \$5.00; and D, none. Type D land, at the extensive margin, is occupied, though it accrues no unearned rent. If there were another type of land, E, beyond the extensive margin, it would neither produce unearned rent nor be occupied. Land types A, B, and C would attract both vendees and lessees. Land type D would attract neither vendees nor lessees but since society needs the products of D type land, it would attract squatters. Society, however, does not need the produce of E land so it will not attract even squatters, much less vendees or lessees.

It would follow that land administrators should have been seeking A type land which commanded the most unearned rent. If they failed, however, the implications were desconsolate. Lesser land would command little rent and, in areas where settlement was in progress, no rent until all better land was fully occupied. The administrator faced the prospect that his land selections might produce no revenue for years, and if he selected land beyond the extensive margin, it might never produce revenue. Yet revenue production was the salient objective of land selection. The short-range revenue production capacity of selected land would be even more dismal if Congress dictated to the states a minimum acceptable rent, which it normally did not do, or a minimum acceptable sale price, which it normally did do.

Ricardo's perception of land economics suggests that state land could produce revenues, by and large, only through unearned rent increments, and that the potential unearned rent varied with

the quality of the land. Wise state land selectors would have recognized the variable quality of land, though probably as a gradient rather than discrete categories, and should have sought lands as close as possible along this gradient to the intensive margin. In subsequent analysis in this study, the search for land close to the intensive margin is referred to as the "environmental objectives of state land selection."

In meeting environmental objectives of state land selection the imperative restraints of Ricardian theory could be overcome if the land administrator could cater selection to a sub-population which required greater access to cheap unoccupied land than the homestead laws provided. To this class leasing, if not purchase, of state land would be attractive. The rancher population in states where they existed should have filled this niche. The ranchers' demand for land in most states was fantastic. The homestead laws even when taken advantage of rarely met this demand. Further, while the rancher demanded a secure relationship to the land he operated there was little reason to establish a fee interest in the land. In the formulation of the spatial distribution of state lands, a close relationship between state land administrators and ranchers, where such entrepreneurs existed, may be anticipated.

Ricardo's concepts are essentially aspatial, using only land quality to define economic rent. Von Thunen has presented a model (1966) parallel to Ricardo's except that distance from a market is used to determine rent producing capacity, for Von Thunen sought to explain the land use patterns surrounding a central place

or market. However, Von Thunen's model may be adapted to explain the distribution of settlement expanding into a wilderness (Figure 2.3). By this variation, the market or central place becomes a core area of settlement. Three zones of land use surround the core of settlement: intense settlement (line A-B, Figure 2.3), developing settlement (line C-D) and the wilderness (line E-F). The objective of settlement is to extend the zone of intense settlement to the limits of the land. Hence on a dynamic frontier lines A-B and C-D are constantly moving toward point F.

Accordingly there is a core of settlement which attracted new settlers from afar. New settlers arrived to find the zone around the core area intensely settled. Lands were surveyed, parceled among well-established settlers and nothing was left of the wilderness but the least valuable wastelands. Beyond was a zone of developing settlement. An important "margin of transference" can be recognized (line x-y, Figure 2.3). Inside point y, the best lands were already taken, the survey completed, and the settlers well on their way to establishing a mature rural society. Beyond the margin, in the "zone of transference" (line y-z) conditions were far different. Much fine land was still available, social conditions were primitive, and the survey would be incomplete though in progress. The zone of transference would merge, at the frontier, into the wilderness. Qualities of the wilderness varied, of course, but the zone was marked by the crudest of social organization if there was a society at all. Additionally, the nature of the wilderness resources were poorly understood so that the area was left to

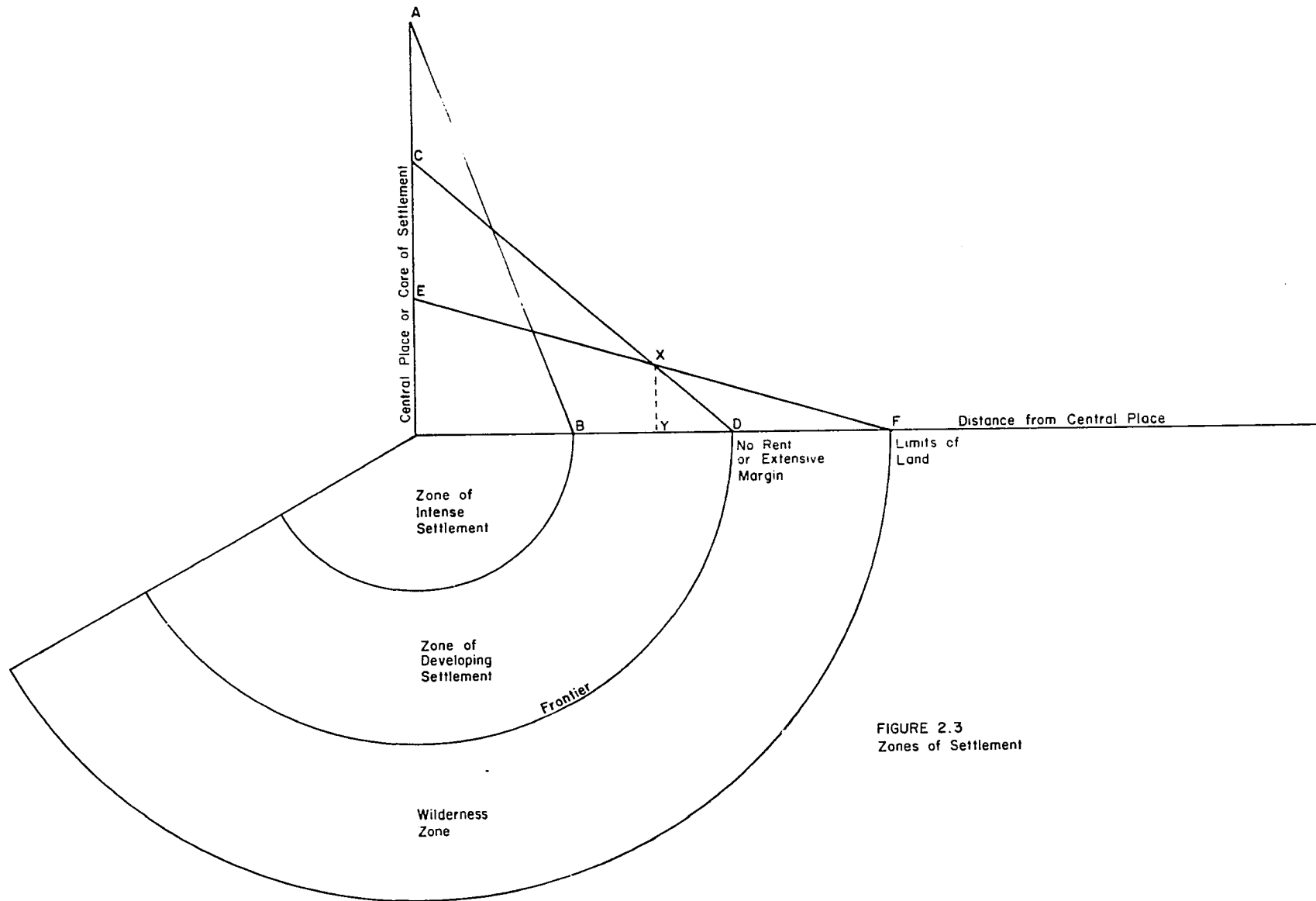


FIGURE 2.3
Zones of Settlement

trappers, traders, prospectors, and the most extensive livestock operators. These "vanguards of the frontier" explored the wilderness while searching for its valuable extractable resources.

To many settlers, the zone of transference between developing settlement and the wilderness was the only place where high-quality low-cost land was available. To the state officials, likewise, this zone was the logical area in which to select land. Of course, state officials preferred land in the zone of intense settlement, but unless it was obtained before intense settlement, land in this area was unavailable to the state.

Beyond the frontier, in the wilderness, state officials could be certain neither about the quality of the land they selected nor that the selected land ever would be anything but wilderness. Further, with surveys being hard to obtain and settlers receiving priority for surveys, it was futile to ask for surveys beyond the frontier. Hence it was within the margin of transference between the area of developing settlement and the wilderness that the state land officials could most wisely and reasonably request surveys and make land selections. Many settlers were competing for land in this same zone; consequently, state officials faced intense competition with settlers.

Facing competition for land was a common experience for potential landlords. The state, however, was a rather peculiar potential landlord. The state, the Board, and their policies existed only at the will of the people to serve the needs of the people. Yet the state, an artificially created corporate being,

in subscribing to deterministic theories of economics, placed a demand on itself to compete for the same land that the citizen was seeking. If the citizens found competition for land with the state excessively obnoxious, they held devastating powers to determine political power and to reorganize policy, law and objectives. Consequently, state officials faced the responsibility, regardless of their economic and environmental appreciation of land value, of maintaining citizen acquiescence to state land selection. The maintenance of public approval, or at least tolerance, of state land selection is referred to in subsequent analysis as the "political objectives of state land selection."

Conclusions

Policy and law in the United States are created by delegation of sovereign power through a decentralized hierarchy. Within this hierarchy, responsibility for allocation of the public domain fell to Congress. Congress used land as a lever for implementation of policy, but whether that policy was singular or multiple is a matter of viewpoint rather than fact.

Implementation of Congressional policy, in any case, necessitated the donation of land to various individuals and groups including the states. Donation was through a fixed locational formulation designed to terminate further competition for land, and through administrative procedures designed to organize competition rather than eliminate it. To the degree to which state administrators faced competition for land, they faced a "mini-max" problem--that is minimize conflict while maximizing potential estate value.

Given this information a conceptual model of state-land selection processes has been developed (Figure 2.2). It suggests that administrators made decisions through time to create the modern distribution of state lands. The modern distribution consequently reflects a continual process of decision-making so that distribution is the key to understanding state-land selection policies.

Theory permits anticipation of the general topics of state-land selection policy which were important in the formulation of the estate's spatial distribution. No decisions had to be made, and hence no policy had to be generated, if Congressional fixed locational grants had been efficacious. Since they were not, states sought to increase their freedom to select land by removing grant land from the fixed locational formulation. Federal-state goals consequently conflicted and, at least desirably, federal and state policies managing this conflict should have evolved.

To the extent that state administrators possessed the freedom to select land they had to formulate policies and decision-making processes which resolved the "mini-max" problem. The maximization portion of the problem was resolved through the "environmental objectives of state land selection," a recognition of variable land quality in a fashion approaching Ricardian land rent theory. In searching for limited land as close as possible to the intensive margin it would occur to administrators that there was not sufficient land to fill the grants. This fear of insufficient land would be heightened by the torpid progress of the national

cadastral surveys. Federal-state conflicts over surveys would inevitably result.

The progress of settlement in a new state compounded by the relationship of land selection to the progress of the cadastral survey would inevitably force state land selectors into the zone of greatest competition. While other potential landlords could dismiss the competition as economic reality, the state, as an artificial corporate being existing only at the will of its competitors, could take no such liberty. Selection policies had to be adapted to the limits which competitors would accept. Where conflicts between the state and its competitors could not be avoided, policies to fairly and reasonably resolve these conflicts were desirable. The resultant policies would meet the potential objectives of state land selection.

No matter whether stated in the precise terms of law or in loosely organized administrative intuition, three bodies of policy had to be formulated if the state lands were to be selected. These policies were those which resolved federal-state conflict and set the direction for meeting the environmental and political objectives of state land selection. The interrelationship of these three bodies of policy, undoubtedly changing through both time and space, guided the administrator whose decisions built the spatial distribution of the modern state land estate. How they interacted is the question which remains to be answered. If the modern distribution of state land can be decomposed into areal classes using discrete dates of selection as the basis of classification, association of the locational

characteristics of land selection with the policy at the time of selection may be accomplished.

CHAPTER III
REGIONALLY SIGNIFICANT STATE LAND CONCENTRATIONS
IN MONTANA

As suggested in Chapter II, a technique for associating the policy and law with state land selection is to disaggregate the current estate into areas derived according to the dates of land selection. The procedure requires two stages. First, lands that have been the object of important state land decision-making processes must be identified and mapped. Second, a temporal framework for categorizing these land must be developed. This chapter concerns the first of three objectives.

The Study Area

The type of detailed temporal-spatial analysis required for a study of state land decision-making prohibits a large sample of states. The data collection requirements and lack of comparability between state administrative structures make interstate comparison a goal for future studies. In this study only Montana was selected as a case study.

There are eighteen state land offices in the United States. Texas, once an independent nation, is too unique to be of utility. Alaska's land selection has scarcely begun. Hawaii combines features of both Texas and Alaska. These states were consequently

eliminated as potential study areas. For the remaining fifteen states, three constraints were set for selecting the sample state. The state had to have:

- (1) A relatively complete legal record of state land selections and acquisitions,
- (2) A current state land administration amenable to cooperation with the study objectives,
- (3) A minimum percentage of lands sold, since sales would unduly influence the modern distribution of state lands.

The state best meeting all criteria was Montana (Figure 3.1). Its land records are not free from flaws, but they are remarkably complete. The Montana Department of State Lands and Investments and the Montana State Forester were willing to cooperate in the study. Slightly more than 10 per cent of the grant lands in Montana have been sold. This was not felt to unduly influence the modern distribution of Montana state lands.

Other reasons existed for selecting Montana. Studies by Anderson (1940), Murray (1942) and State of Montana investigators reveal the usual catalog of poor management, but a remarkable absence of serious criminal abuse of the state land. Since overt criminality in the management of state lands could not be confused with official policy, definitional problems are eliminated.

Montana was admitted to the Union under the *Omnibus Statehood Act of February 27, 1889* (25 Stat. 676), the same act under which Washington and the Dakotas were admitted. Hence, even if generalizations from a detailed study of Montana state land selection



are not appropriate to all of the remaining states, the study of Montana's state land should at least provide a basis for comparison with the Dakotas and Washington where socio-economic conditions differ from those in Montana.

Finally, Montana is currently reconsidering fundamental land policies. Possessed with a love of their land and an environmental radicalism stimulated by this love, Montanans face serious threats from coal development, urbanization, tourism, recreation, private land closure, and subdivision. These threats to Montana's landscape have stimulated reconsideration of, and radical experimentation with, Anglo-American land institutions (see for example, H. B. 85, 98, and 672, 44th Mt. Legislature). Where such radical experimentation is taking place, it is desirable to possess a thorough understanding of the processes involved in the antecedent land use system. It was felt that selection of Montana as a case study area would assist Montanans in their quest for a new land ethic.

Dictated Policies of Montana Land Grants

How the state land administrative structure of Montana was established is important to understanding how lands were distributed. Montana was organized as a territory on May 26, 1864, by the *Organic Act of the Territory of Montana* (12 Stat. 85). Section 14 of that act reserved for school purposes sections 16 and 36 in each township. Following tradition, the act reserved from federal land disposal only surveyed lands. No provisions were made to permit the territory to administer the lands or derive funds from them. The

act did not mention the grants in quantity, or in lieu land selections for in place school lands lost to the territory through preemption or mineral claim.

Montana statehood followed in 1889. Sections 10 through 19 of the *Statehood Act* conveyed the grants to the new state, and dealt with the basic administrative procedures that Congress wished to dictate to the new states. The amounts granted in the *Statehood Act* and the amounts of land in each of these grants still retained by Montana in 1970 are shown in Table 3.1.

In principle, Montana obtained Sections 16 and 36 in each township for the support of common schools. The grant was to be effective at the amount of statehood or upon approval of the survey, whichever was later, so long as the sections had not been legitimately occupied by preemptors, were not mineral in character, and were not subject to federal reservation for other purposes. In the event of preemption, claim to Sections 16 and 36 could be relinquished, and lieu lands were to be chosen as near as possible to the lands relinquished. In the case of in place lands denied the state by virtue of federal reservation, no lieu lands could be selected. The state could only await the extinguishment of the federal reservations to obtain the in place lands. The in quantity lands were to be selected from the surveyed, unoccupied, non-mineral, and unreserved portions of the public domain.

The Montana citizen accepted the land grants in the *Montana Constitution of 1889* (Article XVII, Secs. 1-3; Article XIX, Secs. 3 and 7; Article XI, and Constitutional Ordinance No. 1, Sec. 7).

Table 3.1. Montana Land Grants.

Grant	Original Acreage	Retained Acreage
In Place and In Lieu Common School	5,188,000.00	4,595,406.96
In Quantity		
University of Montana	46,720.00	18,160.87
Mt. State University	90,000.00	60,977.31
MSU (2nd Morrill)	50,000.00	32,632.13
School of Mines	100,000.00	59,606.22
Normal School	100,000.00	62,890.00
Deaf and Blind Asylum	50,000.00	36,235.86
State Reform School	50,000.00	68,744.01
Public Buildings	182,000.00	186,249.56
Veterans' Home	1,275.61	1,275.61
Militia Camp	640.00	640.00
Agricultural School	5,000.00	2,000.00
Penitentiary	9.75	9.75
TOTAL	5,863,645.36	5,108,686.50

Source: Montana Commissioner of Lands and Investments, 1971, p. 1.

The *Montana Constitution* and the *Statehood Act* together established a sacred trust which could not be altered without the concurrence of Montana citizens and Congress. However, Congress could provide permissive alteration of the trust by legislation. Montana could not be compelled to abide by legislation passed after the *Statehood Act* became law, but Montana could, if it willed, take advantage of such legislation so long as the legislation was consistent with

state constitutional and statutory law.

Congressional legislation passed subsequent to the *Statehood Act* is considered in this study as need arises. However, one act, the *Lieu Selection Act of 1891* (Sec. 24, 26 Stat. 1095), is so important to Montana land selection that it is best considered with the dictated policy. The *Lieu Selection Act* empowered Montana administrators to relinquish claim to Sections 16 and 36, whether surveyed or not, within federal reservations prior to extinguishment of those reservations, and to select eligible lands anywhere in Montana to replace the relinquishments. Thus, a significant constraint on locating state land was removed by this act, and its impact on the distribution of land was extremely important.

In addition to accepting the land grants, the *Montana Constitution of 1889* created sub-sovereigns to manage the state estate and dictated to them certain administrative procedures. Land administration authority was delegated to a political board, though the state legislature was to make the laws necessary for the board to effectively manage the lands. Known as the Board of State Land Commissioners, the Board was to consist of the Governor, Secretary of State, Attorney General, and Superintendent of Public Instruction. The four individuals were to be members of the Board by virtue of, but separate from, their elected offices.

The *Act to Provide for the Selection, Location, Appraisal, Sale and Leasing of State Lands of March 6, 1891* (1947 RCM 81-101, 108) empowered the Board to proceed with the selection and management of the state lands. On March 14, 1891, the Governor announced

his choice for the chief bureaucrat, the State Land Agent. His selection of Granville Stuart (Anderson, 1940, p. 26) was approved by the Board, and Stuart was instructed to proceed in cooperation with the Surveyor General of the United States to identify lands suitable for selection, or areas where the Governor could wisely request survey with the intent of making selections, and to report this information to the Board (Minutes, April 1, 1891). Montana was now in the land-grab business.

Regions of Significant Concentrations of Montana State Land

The objective of this chapter is to identify areas of important concentration of Montana state lands. From the dictated policy, it can be determined that school land should be located in a regular pattern (Sections 16 and 36), so that any divergence from this pattern is, in a sense, a deviation from policy dictates. Location of in quantity lands was not decreed in the dictated policy so, in a sense, all in quantity lands symbolize significant acts of administrative decision making. As a practical matter, however, minor concentrations of either kind of land are not pertinent. To avoid pursuit of trivial land administration decisions only areas of major land concentration were identified. The methodology for their identification is much different for school land than for in quantity lands. Consequently, the regional patterns of school land concentration is investigated apart from the concentration of in quantity lands.

School Land Concentration

Each township in Montana should contain Sections 16 and 36 as school land, or about 5.56 per cent of the land in each township. Consequently, about 5.56 per cent of the land in each county should be school land. School land in excess of 5.56 per cent of each county is by definition lieu land which was selected through the decisions made by bureaucrats and politicians. Conversely, counties with significantly less than 5.56 per cent of their land area owned by the state provided major areas of base land offering which permitted the lieu land selections in other areas. Since the amount of state school land owned in each Montana county is known in detail (Montana Department of State Lands, 1970, pp. 1 and 12), calculating divergence from the expected ownership of 5.56 per cent is easily accomplished.

A serious problem is encountered, however. About 11.42 per cent of the common school grant was sold or otherwise alienated between 1891 and 1970 (author's calculation based upon data in Montana Department of State Lands, 1970, pp. 1 and 12). Concentrations of land sales would alter the observed amount of school land in each county without implying a land selection decision. Disinter-ring information about land sales is difficult and would necessitate impractically protracted and expensive searches of patents and titles. The only satisfactory method of anticipating land sales is to assume that the state rate of alienation has been applicable uniformly among the counties so that 11.42 per cent of the expected land ownership should be discounted. The technique is, of course,

not entirely satisfying, but where the 11.42 per cent approximation to land sales inaccurately estimates the rate of alienation, the areas become obvious in subsequent analysis.

The number of sections of school land that the state might be expected to own¹, the amount it owns, and the difference between expected and observed for each county are shown in Columns B, C, and D of Table 3.2. The trend has been to remove common school grant lands from some counties and concentrate their replacements in other counties. Deviations were squared and summed (Column E, Table 3.2, signs are artificially maintained), and the proportion contributed by each county to the total sum of squares (Column F, Table 3.2) was used to rank the counties in order of their contribution to the sum of squares (Table 3.3). Twenty-one, or 37.5 per cent of Montana's fifty-six counties, account for about 90 per cent of the sum of the squared difference between the expected and observed school land ownership. These twenty-one counties (Figure 3.2) are used subsequently for the detailed temporal analysis of state land distribution. The counties fall into two generic groups: those with more and those with less common school land than expected. The geographic tendency is also clear from Figure 3.2. Common school lands are relatively rare in those areas of the state dominated by federal land ownership--national forest reservation in the case of western Montana and Indian reservations in the case of Roosevelt

¹Calculated by: $(\text{County Land Area in mi.}^2 \times .0556) - [(\text{County Land Area} \times .0556) \times .1142] = \text{Expected Land Area Owned by the State in the County in Square Miles or Sections.}$

Table 3.2. School Land Distribution, Expected and Observed

A	B	C	D	E*	F
County	Sections Expected	Sections Observed	Difference	Difference ²	% of Column E
Beaverhead	273.39	400.15	+126.76	+16068.10	6.09
Big Horn	247.39	133.13	-114.26	(-)13055.35	4.95
Blaine	210.55	272.50	+61.95	+3937.80	1.45
Broadwater	58.76	28.03	-30.73	(-)944.33	.36
Carbon	101.75	57.40	-44.35	(-)1967.07	.75
Carter	163.17	222.39	+59.22	+3507.57	1.33
Cascade	131.47	104.65	-26.81	(-)718.88	.27
Chouteau	193.36	341.52	+148.16	+21954.22	8.32
Custer	184.98	215.16	+30.18	+910.59	.35
Daniels	71.07	339.40	+268.33	+72002.29	27.29
Dawson	116.72	136.35	+19.63	+385.49	.15
Deer Lodge	36.44	11.95	-24.49	(-)599.73	.23
Fallon	80.42	106.40	+25.98	+674.74	.26
Fergus	208.92	239.79	+30.87	+952.96	.36
Flatheat	253.00	116.68	-136.32	(-)18582.76	7.04
Gallatin	123.96	46.07	-77.35	(-)5983.51	2.27
Garfield	219.41	261.03	+41.62	+1732.47	.66
Glacier	145.98	13.49	-132.49	(-)17554.40	6.65
Golden Valley	57.92	69.21	+11.29	+127.42	.05
Granite	85.35	27.56	-57.79	(-)3339.52	1.27

Table 3.2 to be continued

County	Sections Expected	Sections Observed	Difference	Difference ²	% of Column E
Hill	144.16	222.99	+78.83	+6214.50	2.36
Jefferson	81.36	39.54	-41.82	(-)1749.31	.66
Judith Basin	92.59	146.82	+54.23	+2940.78	1.11
Lake	73.58	84.35	+10.77	+115.89	.04
Lewis & Clark	171.19	134.71	-36.48	(-)1331.05	.50
Liberty	70.87	135.22	+64.35	+4140.89	1.57
Lincoln	182.92	84.79	-98.13	(-)9630.38	3.65
Madison	173.76	143.03	-30.73	(-)944.47	.36
McCone	128.40	147.14	+18.74	+351.16	.13
Meagher	115.94	94.21	-21.73	(-)472.19	.18
Mineral	60.18	11.56	-48.61	(-)2363.22	.90
Missoula	128.64	60.57	-68.07	(-)4633.11	1.76
Musselshell	92.94	118.70	+25.76	+663.72	.25
Park	129.33	50.40	-78.93	(-)6230.46	2.36
Petroleum	81.51	97.17	+15.66	+245.32	.09
Phillips	256.74	288.96	+32.22	+1038.13	.39
Pondera	81.02	88.39	+7.37	+54.34	.02
Powder River	161.94	218.26	+56.32	+3171.68	1.20
Powell	115.04	88.15	-26.89	(-)723.07	.27
Prairie	85.20	111.65	+26.45	+699.54	.27
Ravalli	117.31	32.51	-84.80	(-)7190.48	2.73
Richland	102.39	125.57	+23.18	+537.48	.20

Table 3.2 to be continued

County	Sections Expected	Sections Observed	Difference	Difference ²	% of Column E
Roosevelt	117.46	28.86	-88.60	(-)7849.26	2.98
Rosebud	248.07	274.04	+25.97	+674.44	.22
Sanders	136.82	74.59	-62.23	(-)3872.04	1.47
Sheridan	83.43	71.64	-11.79	(-)139.09	.05
Silver Bow	35.21	20.76	-14.48	(-)209.81	.08
Stillwater	88.36	70.46	-17.90	(-)320.34	.12
Sweet Grass	113.99	73.56	-40.43	(-)1634.72	.62
Treasure	48.51	57.63	+9.12	+83.19	.03
Valley	244.97	328.72	+83.75	+7013.32	2.66
Teton	112.98	113.35	+.37	+.14	.00
Toole	96.03	121.84	+25.81	+666.04	.25
Wheatland	69.94	100.53	+30.59	+935.96	.35
Wibaux	48.83	51.05	+7.22	+52.09	.02
Yellowstone	130.12	123.64	-6.48	(-)42.04	.02
TOTAL			-1.99	263832.85**	100.00

*Signs have been artificially maintained.

**Total calculated without reference to signs.

Source: Author's Calculations.

Table 3.3. Rank Order of Divergence from Expected School Land Ownership.

A Rank of County	B County	C County Per Cent Divergence from Expected	D Cumulative Per Cent Divergence
1	Teton	.00	.00
2	Pondera	.02	.02
3	Wibaux	.02	.04
4	Yellowstone	.02	.06
5	Treasure	.03	.09
6	Lake	.04	.13
7	Golden Valley	.05	.18
8	Sheridan	.05	.23
9	Silver Bow	.08	.31
10	Petroleum	.09	.40
11	Stillwater	.12	.52
12	McCone	.13	.65
13	Dawson	.15	.80
14	Meagher	.18	.98
15	Richland	.20	1.18
16	Deer Lodge	.23	1.41
17	Musselshell	.25	1.66
18	Toole	.25	1.91
19	Fallon	.26	2.17
20	Rosebud	.26	2.43
21	Cascade	.27	2.70
22	Powell	.27	2.97
23	Prairie	.27	3.24
24	Custer	.35	3.59
25	Wheatland	.35	3.94
26	Broadwater	.36	4.30
27	Fergus	.36	4.66
28	Madison	.36	5.02

To be continued

A Rank of County	B County	C County Per Cent Divergence from Expected	D Cumulative Per Cent Divergence
29	Phillips	.39	5.41
30	Lewis & Clark	.50	5.91
31	Sweet Grass	.62	6.53
32	Garfield	.66	7.19
33	Jefferson	.66	7.85
34	Carbon	.75	8.60
35	Mineral	.90	9.50
36	Judith Basin	1.11	(+)10.61*
37	Powder River	1.20	(+)11.81*
38	Granite	1.27	(-)13.08*
39	Carter	1.33	(+)14.41*
40	Blaine	1.45	(+)15.86*
41	Sanders	1.47	(-)17.33*
42	Liberty	1.57	(+)18.90*
43	Missoula	1.76	(-)20.66*
44	Gallatin	2.27	(-)22.93*
45	Hill	2.36	(+)25.29*
46	Park	2.36	(-)27.65*
47	Valley	2.66	+30.31*
48	Ravalli	2.73	-33.04*
49	Roosevelt	2.98	-36.02*
50	Lincoln	3.65	-39.67*
51	Big Horn	4.95	-44.62*
52	Beaverhead	6.09	+50.71*
53	Glacier	6.65	-57.36*
54	Flathead	7.04	-64.40*
55	Chouteau	8.32	+72.72*
56	Daniels	27.29	+100.01*

*Significant divergence from the expected amount of school land ownership. The sign indicates whether the divergence is positive or negative.

Source: Author's Calculation.

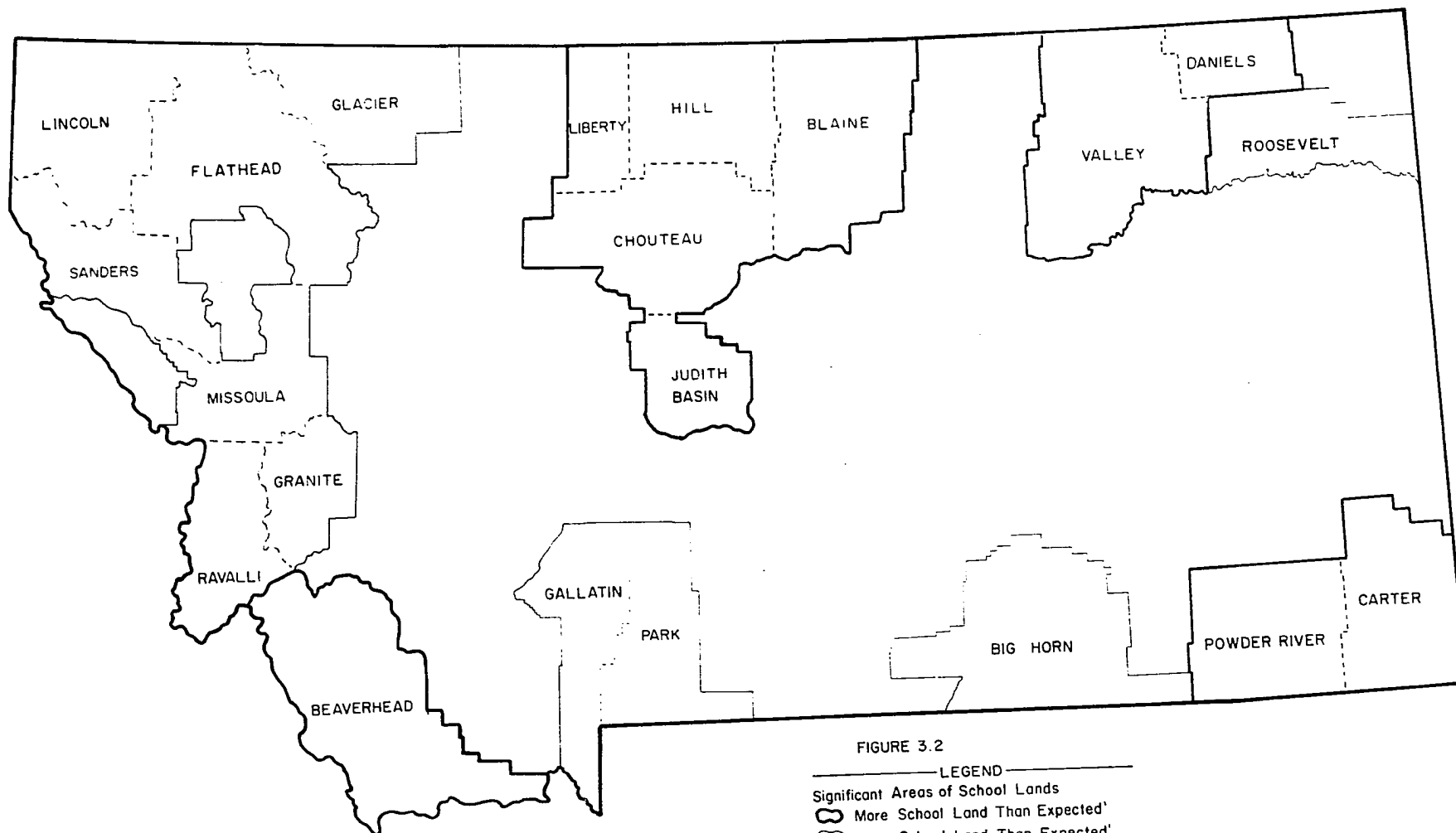


FIGURE 3.2

LEGEND
 Significant Areas of School Lands
 — More School Land Than Expected¹
 — Less School Land Than Expected¹
¹Divergence from expected = 100% or a ± 54.23 sections

and Big Horn counties. In turn common school lieu lands have been selectively concentrated in the plains of northcentral and eastern Montana, and in the valleys of southwestern Montana.

In Quantity Grant Lands

The distribution of in quantity grants cannot be analyzed by the procedure described above. The in quantity lands could be selected freely from the available, surveyed public lands, so policy does not provide a norm against which to evaluate the land distribution. It may be anticipated that the bureaucrat and politician, finding a suitable parcel of land, would find similar adjacent parcels and select them also. This tendency to concentrate selected land would likely be intensified by the transportation modes available during the period of land selection. In any even, observed concentration of the in quantity estate should come as little surprise, but whether the concentration is a function of chance or the result of a systematic process must be determined. A random probability model, the Poisson distribution, was selected as the expected distribution against which the actual distribution could be measured.

The procedure employed is essentially that presented by Choynowski (1959) and involves comparing a known map distribution with a random distribution generated by the Poisson model. The Poisson distribution is generally defined (Mood and Graybill, 1963, pp. 70-72) as: The random variable x is distributed as a Poisson if the density is:

$$f(x) = \frac{e^{-m} m^x}{x!}, \quad x = 0, 1, 2, 3, \dots \quad (3.1)$$

where:

m = any positive number defining the parameter of the distribution

e = the base of the system of natural logarithms having the approximate numerical value 2.71828

x = the variable, in this case the amount of in quantity grant land in each county.

The variable x, however, must be measured in observational cells of equal size, and the observational cells, Montana's fifty-six counties, are obviously not of equal size. The variable x is measured in observational cells of equal size if the number of sections of in quantity grant land per county are divided by the area of the county. Table 3.4, Columns B, C, and D present these data.

The variable x (Table 3.4, Column D) does not meet the criterion of being a positive integer so it must be scaled to an integer. Choynowski (1959) recommended that the value of x not exceed twelve, so this value was selected as the largest value of x.¹ The largest value of x in Table 4.3, Column D, is .0218 for Lewis and Clark County. This value of x was called twelve and the value of x for each other county was proportioned by:

$$x_n = \frac{x_{\text{Col. D}}(.0218)}{12} \quad (3.2)$$

¹In fact, in analysis, the value of x was set at all intervals from two to 12. Since the same set of counties were "significant" regardless of the value of x, it is immaterial what interval x is set at for the purposes of scaling.

Table 3.4. In Quantity Land Density.

A County	B Sections of <u>In Quantity</u> Land	C County Area in Miles ²	D Density Col. B/Col. C	E Scaled Density
Beaverhead	119.60	5551	.0215	12*
Big Horn	.00	5023	.0000	0
Blaine	3.53	4275	.0008	0
Broadwater	10.27	1193	.0086	5
Carbon	9.78	2066	.0047	3
Carter	1.35	3313	.0004	0
Cascade	15.94	2661	.0060	3
Chouteau	76.75	3926	.0195	11*
Custer	.75	3756	.0002	0
Daniels	6.08	1443	.0052	3
Dawson	.75	2370	.0003	0
Deer Lodge	.00	740	.0000	0
Fallon	.00	1633	.0000	0
Fergus	3.48	4242	.0008	10*
Flathead	89.04	5137	.0173	7
Gallatin	33.92	2517	.0135	0
Garfield	.00	4455	.0000	0

To be continued

Table 3.4 Continued

A	B	C	D	E
County	Sections of In Quantity Land	County Area in Miles ²	Density Col. B/Col. C	Scaled Density
Glacier	.00	2964	.0000	0
Golden Valley	6.25	1176	.0053	3
Granite	.00	1733	.0000	0
Hill	17.00	2927	.0058	3
Jefferson	9.40	1652	.0057	3
Judith Basin	7.11	1880	.0038	2
Lake	6.73	1494	.0045	2
Lewis & Clark	75.76	3476	.0218	12*
Liberty	.22	1439	.0002	0
Lincoln	17.30	3714	.0047	3
McCone	.00	2607	.0000	0
Madison	52.46	3528	.0149	8*
Meagher	46.78	2354	.0199	11*
Mineral	22.68	1222	.0185	10*
Missoula	40.45	2612	.0155	9*
Park	1.38	2626	.0005	0
Petroleum	2.00	1655	.0012	1
Phillips	.56	5213	.0001	0
Pondera	.50	1645	.0003	0
Powder River	1.84	3288	.0006	0

To be continued

Table 3.4 Continued

County	Sections of In Quantity Land	County Area in Miles ²	Density Col. B/Col. C	Scaled Density
Powell	2.92	2336	.0013	0
Prairie	.00	1730	.0000	0
Ravalli	15.68	2382	.0066	4
Richland	.94	2079	.0005	0
Roosevelt	.00	2385	.0010	1
Rosebud	3.46	5037	.0006	0
Sanders	23.53	2778	.0085	5
Sheridan	.00	1694	.0000	0
Silver Bow	.00	715	.0000	0
Stillwater	.00	1794	.0000	0
Sweet Grass	.00	1840	.0000	0
Teton	47.65	2294	.0208	11*
Toole	32.66	1950	.0167	9*
Treasure	.75	985	.0008	0
Valley	1.62	4974	.0003	0
Wheatland	13.10	1420	.0092	5
Wibaux	.00	890	.0000	0
Yellowstone	.00	2642	.0000	0
State of Montana	830.35	145587	.0054	2.97

where:

x_n = the scaled value of x for county n ,

$x_{\text{Col. D}}$ = the observed value of x in Column D, Table 3.4, for county n .

The scaled values of x_n were then rounded to the nearest integer and listed in Column E, Table 3.4.

The value of m , the parameter, was estimated by dividing the number of sections of in quantity grant land in Montana by the area of the state and proportioning the resultant according to Formula 3.2. The scaled value of m was 2.97, no rounding of m to an integer being necessary.

With the value of m and values of x calculated, the probable values of x from 0 to 12 could be calculated (Table 3.5, Column B). The expected number of occurrences of counties with values of x from 0 through 12 was calculated (Table 3.5, Column C) and was compared with the observed occurrences (Table 3.5, Column D).

Comparison of Columns C and D, Table 3.5, reveals the tendency toward concentration of in quantity land. Indeed, scaled values of x larger than eight are unlikely to occur in the Poisson distribution, but ten counties have x values in excess of eight. These ten counties are indicated on Table 3.4, Column E, and illustrated in Figure 3.3. They are the counties upon which subsequent analysis concentrates.

From Figure 3.3 it is obvious that in quantity land selection is concentrated in western and north-central Montana. Comparison with Figure 3.2 reveals that important selections of in quantity and

in lieu land coincide only slightly, specifically in Beaverhead and Chouteau counties. Further in quantity lands are concentrated in two counties, Missoula and Flathead, which are conspicuously deficient in in lieu lands. In quantity lands, however, are not found in eastern Montana where in lieu land is abundant. The patterns suggest that in lieu and in quantity estates are spatially surprisingly independent of each other, and this suggests that they may be temporally independent also. Exploration of the temporal characteristics of Montana state land selection is the topic of the next chapter.

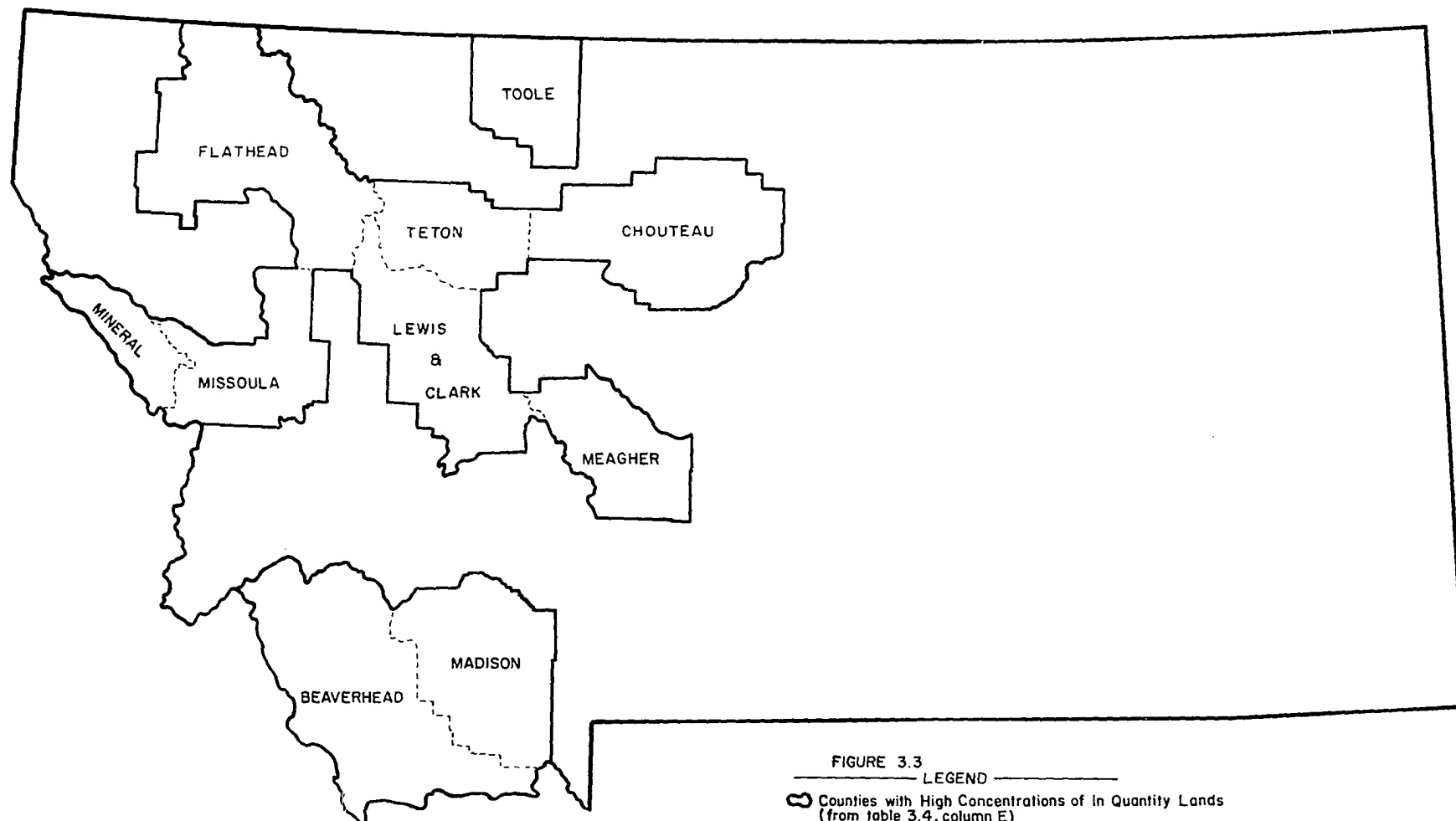
Table 3.5. Expected and Observed In Quantity Land Density.

A	B	C	D
x	f(x)	Expected** Number of Counties	Observed*** Number of Counties
0	.0513	2.8728	29
1	.1523	8.5288	3
2	.2262	12.6672	2
3	.2240	12.5440	7
4	.1663	9.3128	1
5	.0987	5.5272	3
6	.0489	2.7384	0
7	.0200	1.1200	1
8	.0076	.4256	1*
9+	.0047	.2632	9*

*Significant

** $(56)[f(x)]$

***From Column E, Table 3.4



Conclusions

Methods for identifying counties with important excesses and deficiencies of school land, and with major concentrations of in quantity land, have been presented and applied to Montana. The methods have had to vary for the two estates because of salient differences in legal provisions which Congress attached to the grants. Still the grants were made essentially simultaneously, so that strong spatial similarities between the two estates might be expected. The spatial distribution of the two estates appears to be remarkably independent, however, and this spatial independence suggests temporal independence and policy differences possibly more profound than the differences dictated by Congress in the *Omnibus Statehood Act of 1889*.

CHAPTER IV

THE SEQUENCE OF STATE LAND SELECTION

In Chapter III Montana counties with significant concentrations of state land were determined. In Chapter IV the primary literature of state land selection decision-making is approached systematically in order to date the occurrence of these concentrations. Analyzing the dates of selection of state lands that comprise a concentration is one method of making an evaluation of the importance of land selection policies. If large tracts of land were acquired during a given time period, then new policies probably were being implemented at those time periods. It follows that the primary sources of the time period should reveal the policies which generated the concentration.

Organization of the State's Chain of Title

As with any landowner, public land states can sustain claims to land only by tracing the chain of title from the sovereign, generally the United States. For in place lands, the claim is sustained by Montana through the *Omnibus Statehood Act* and a completed cadastral survey. As a matter of law, the procedure is crude but simple.

For in lieu and in quantity, however, the chain of title is more complex. Two events establish a state's claim to land:

selection, in which the state asks for a parcel of land; and acquisition, in which the federal government conveys the land. The difference between the two events is the pendant time.

Selection of land established, at best, an equitable title, which is nothing but the right to acquire full title at a future date in the absence of parties with sounder claims. The equitable title carries no right to use or protect land. Acquisition, however, established a full or exclusive title to the land, as well as affecting the trust. With full title, state administrators could, according to law, lease, sell, and protect the land.

Land acquisition must be a matter of record, for without it the state lacks proof of ownership. Consequently, the Montana Department of State Lands carefully maintains the document, the "clear list," conveying full title to land as well as the date, literally to the hour, of the transaction. Once land is acquired there are few reasons for maintaining record of the selection date. As a result, although the date of acquisition is freely available, the date of selection is difficult to obtain, and since little clerical effort has been expended on these records, the selection date is of doubtful validity when it is available.

The implications of the record system are disconsolate. The selection date is the date that more closely corresponds with the time when the decision is made, while the acquisition date betokens the termination of a trifling and often protracted administrative procedure. However, the acquisition date, rather than the selection date, is used in much subsequent analysis because of its availability.

Sampling the Clear Lists

The clear lists and supporting documents in the Montana Department of State Lands contain acquisition dates, and in some cases, selection dates, for all land acquired for the trust estate. The records, however, are difficult to use and the time required to examine all transactions in the state is prohibitive. Consequently, a sample was taken of lands in the counties in Figures 3.2 and 3.3, which contain significant concentrations of state land. The clear lists for these lands were then searched for selection and acquisition dates. The sampling proceeded as follows:

Two documents give the legal description and grant of all Montana trust land: the *State Land Ownership Listings* and the *Classified State Forest Land Ownership List*. For the ten counties containing significant concentrations of in quantity land (Figure 3.3), each line (a line being an entry in the documents) of in quantity land was identified, and the lines in each county then randomly selected. The sampled lines consisted of at least 10 per cent of the in quantity acreage in the county. Further, to assure geographic dispersal of the acreage, the sample had to contain lands located in at least thirty individual cadastral sections, so the sample was increased, when necessary, until this criterion was met. The same sampling procedure was used for the in lieu lands (Figure 3.2). In both cases, in order to avoid problems resulting from subdivision of cadastral sections, data were collected acre by acre. For example, a 640 acre state section might consist of two 320-acre tracts selected or acquired on different dates.

Consequently, 320 acres would be attributed to the appropriate year.

The Land Acquisition Sequence--An Overview

The per cent of the sample of in lieu and in quantity land acquired in each of Montana's four-year administrative periods is shown in Figure 4.1. The graph clearly reveals that in quantity lands were acquired generally before in lieu lands. Indeed, substantial acquisition of in lieu lands did not occur until 1901 while, for all practical purposes, 1904 marks termination of in quantity land acquisition. Almost all land acquisition was completed by 1932.

Figure 4.1 also reveals two surprising trends. First, in lieu land acquisition was initiated in the period 1901 through 1904, only to wane for over a decade until the period 1917 through 1920. This lull in acquisition I have labeled the "abeyant period," and it is discussed in Chapter VI. The second trend is the acquisition of a large amount of in quantity land in the period 1957 through 1960, long after in quantity land acquisition had been completed. Specifically, the lands acquired in the period were part of the Glacier Park Exchange which is discussed in Chapter V.

In Quantity Land Selection Sequence

Both the selection and acquisition dates were available for the in quantity lands searched in the clear lists. The Glacier Park Exchange is unusual not only because it is a late acquisition, but because the selection and acquisition date are the same, 1958, resulting in a pendant time of zero. Consequently, these lands were

In Quantity and in Lieu Grant Acquisition as a Percent of their Respective Samples by Administrative Period

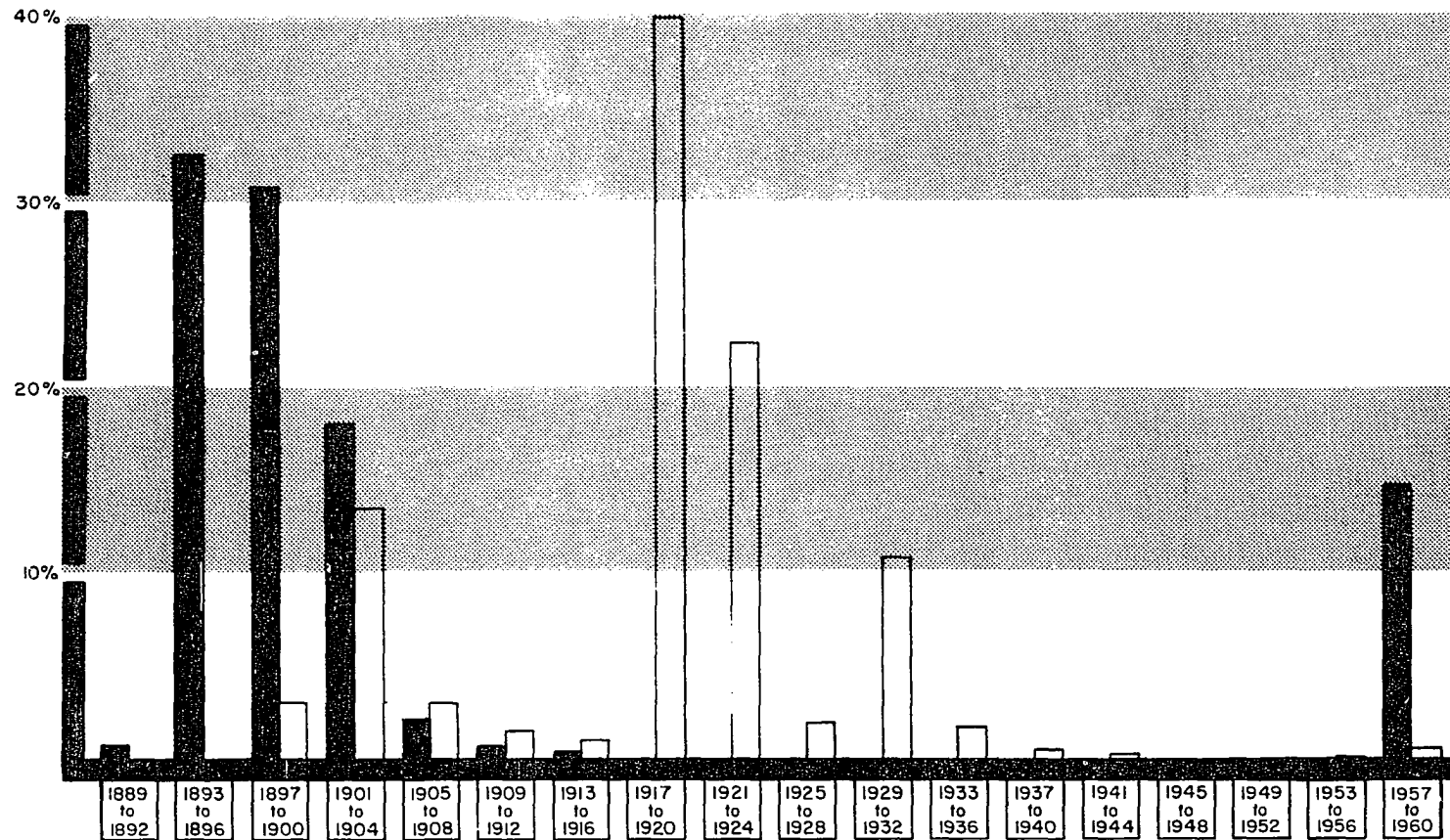


FIGURE 4.1

LEGEND
 ■ In Quantity Grant Acquisition (as a percent of in Quantity Sample)
 □ In Lieu Grant Acquisition (as a percent of in Lieu Sample)

removed from the in quantity land sample for separate consideration. For the remainder of the in quantity land, an important act of selection was defined as any in which more than 5 per cent of the sample was selected in any single county in any single year. The resulting important years of in quantity land selection and their corresponding counties are shown in Table 4.1. There were, however, a number of problems encountered in associating counties with years of selection. These problems--the relationship of Chouteau County with 1898 and 1899, and the impact of the 1958 Glacier Park Exchange on the sample--are reviewed so that the associations shown in Table 4.1 can be more completely understood.

Chouteau County, 1898 and 1899

Chouteau County does not meet the criteria in either 1898 or 1899 if Julian calendar dates are used. However, if the fiscal year is used a different picture is evident. In Chouteau County, 7.19 per cent of the sample was selected in the period from June, 1898, to June, 1899. Obviously, a significant land selection was being made in Chouteau County during the fall of 1898 and the winter of 1899. Consequently, Chouteau County was associated with 1898 and 1899.

The 1958 Land Selections

The 1958 land selections were made without competition from the reserved public domain administered by the U. S. Bureau of Land Management. Consequently, the land selections were ceremoniously conveyed to Montana on the same day that they were submitted. This

Table 4.1. The Sequence of In Quantity Land Selection.

Year	County
1892	Madison
1893	Missoula and Flathead
1894	-
1895	Mineral
1896	-
1897	Beaverhead and Lewis and Clark
1898	Meagher, Chouteau, Teton, and Lewis and Clark
1899	Chouteau
1900- 1957	-
1958	Teton, Toole, Chouteau, and Lewis and Clark

procedure is artificial and produces a pendant time which fails to reflect the years of field investigation upon which the 1958 selections were based. Consequently, the 1958 selections had to be segregated from the rest of the sample.

The sample identified four counties--Teton, Toole, Chouteau, and Lewis and Clark--which were subject to significant land selection in 1958. Only one county, Chouteau, was definitely associated with another period of land selection, though, particularly in Teton and Lewis and Clark counties, analysis of the sample suggested important land selection activity in the final years of the Nineteenth Century. To verify this trend the sample for the four counties was expanded to include 100 per cent of their in quantity lands.

Table 4.2. The Relative Importance of the 1958 Land Selections.

County	1958 Selections as a Per Cent of <u>In Quantity</u> Land Selection	Other <u>In Quantity</u> Land Selections	Year(s) of Most Important Land Selection*	Per Cent <u>In Quantity</u> Land Selected in Most Important Years
Lewis & Clark	24.84%	48.84 Sections	1897, 1898	68.98%
Chouteau	17.79%	63.32 Sections	1898, 1899	91.99%
Teton	72.74%	15.07 Sections	1898, 1899	79.00%
Toole	87.10%	5.27 Sections	1898	100.00%

*More than 20 per cent of the in quantity land, not including that selected in 1958, selected in any single year.

Table 4.2 summarizes the results of the expanded sample. The importance of the 1898 and 1899 land selections in Lewis and Clark County is shown. Table 4.2 also shows that Toole County appears in Figure 3.2 as a county with substantial in quantity land selections only because of the 1958 land selections. The trend for Teton County is uncertain. The 1898 and 1899 selection of about 11.91¹ sections would not be viewed as important, but Teton County's

¹Seventy-nine per cent of 15.07 sections.

place in the region suggests that important land selections occurred, though they were not indicated by the data collection procedures used in this study. Teton County is contiguous with two counties that had active land selection. Also, it is contiguous to Cascade County and its important city of Great Falls which was undergoing rapid growth and consequent rampant land speculation by the late 1890s. Further, Teton County's Sun River was notable for its irrigation potential, a potential which was realized through federal reclamation in the first decade of the Twentieth century. All this suggests that Teton County was ripe for land speculation and the possibility that more than 11.91 state sections were selected but subsequently sold. Consequently, Teton County was assumed to have been subject to important land selections in 1898 and 1899, and the frequent mention of the county in the primary literature sustained the assumption.

The Sequence of In Lieu Land Selection

Selection dates for in lieu lands are generally not available. Initially, it was thought that the selection dates of lieu lands could be estimated by deducting the pendant time of the in quantity lands from the acquisition date of the in lieu lands. The average pendant time for the in quantity lands is 22.76 months, with a standard deviation of 11.52 months. The pendant time is long and the standard deviation large. Additionally, the distribution of the pendant times was highly skewed, as there were many selections with pendant times substantially less than the mean, and a small number with extremely long pendant times. This skewness makes the

in quantity land's pendant time a poor estimator of selection dates ' of in lieu lands.

Fortunately, a better estimator of the date of selection for the in lieu lands was available. The amount of in lieu land selected in each county for a given year is generally indicated in the annual reports of the state land bureaucrats. The annual reports vary considerably in the information they contain and in the way it is organized and presented. Also, between 1889 and 1923, a large number of new counties were created in Montana, so boundaries were continually altered. Consequently, it is difficult to associate the current counties with their antecedents except by recreating the history of each county. Once sample counties were identified, however, their antecedents could be determined, and by knowing the important date of land acquisition, the important date of land selection could generally be identified in the annual reports.

The acquisition dates for the in lieu land sample were grouped by four-year administrative periods. An important period of in lieu land acquisition in a county was defined as any administrative period wherein more than 5 per cent of the in lieu lands were acquired. The major periods of land acquisition for the in lieu lands are listed in Table 4.3.

Several aberrations were evident and dealt with, on an individual basis. For example, by the definition used to identify important acts of in lieu land selection, two counties, Hill and Liberty, do not have any single period of land acquisition. Land acquisition in these two counties was a continuous rather than a discrete event.

Table 4.3. The Sequence of In Lieu Land Acquisition.

Administrative Period	Dates	County
1	1889-1892	-
2	1893-1896	-
3	1897-1900	-
4	1901-1904	Chouteau and Judith Basin
5	1905-1908	-
6	1909-1912	-
7	1913-1916	-
8	1917-1920	Blaine, Chouteau, Daniels, and Valley
9	1921-1924	Carter and Powder River
10	1925-1928	-
11	1929-1932	Beaverhead
12-present	1933-	-

Descriptive statistics bear this out. The modal year of acquisition for Liberty County is 1924, but the amount acquired is only 1.69 sample sections. The mean year of acquisition is 1919, and the squared variance about 1919 is 310.72 years, while the range of acquisition activity covers the period from 1899 through 1958. The descriptive statistics for Hill County are similar.

Although the selection dates for in lieu lands in Liberty and Hill counties give no indication of the significance of any policy, a study of the patents for the in lieu lands reveals the

policy responsible for concentrating much of the land in Liberty and Hill counties. Montana, like many western states, made first time farm loans out of the common school trust fund. During the agricultural depression of the 1920s and 1930s the default rate on these loans exceeded 95 per cent (Anderson, 1940, p. 191). Following default, state officials had little alternative but to foreclose on the loan, which brought the mortgaged lands into the state estate. Fully half of the sampled lands in Liberty and Hill counties were acquired by Montana through foreclosure. Acquisition of land through foreclosure, the process which placed Liberty and Hill counties among other counties with significant amounts of in lieu land (Figure 3.2), represents the failure of financial management practices rather than official decisions to actively acquire lands. No date of selection can be identified for foreclosure lands because there was never a selection. Rather, the lands were defaulted to the state because of an agricultural calamity. For these reasons Liberty and Hill counties were eliminated from further consideration in this study.

With the important dates of land acquisition identified, the annual reports of the bureaucrats could be used to identify important periods of state land selection. The period of in lieu land selection is summarized in Table 4.4.

Toward A Geographical History of Montana Land Selection

The state land selection sequence in Montana is summarized by combining Table 4.1 and 4.4 in Table 4.5. Table 4.5 is given graphic expression in Figure 4.2. The patterns displayed in

Table 4.4. The Sequence of In Lieu Land Selection.

Years	County
1892-1898	--, Selection of <u>In Quantity</u> Lands
1899-1900	Chouteau and Judith Basin
1901-1909	--, The Abeyant Period
1910-1913	Chouteau and Blaine
1914-1915	Daniels and Valley
1916	--
1917-1921	Powder River and Carter
1922-1925	--
1926-1927	Beaverhead County
1928-	--, Post-selection Period

Figure 4.2 conform to traditional geographic regionalization of Montana. Initial interest was in western Montana where earliest settlement occurred. The "patch-work" pattern, however, suggests interest in specific inter-mountain valleys and probably specific resources. Subsequently, land selectors turned to north-central Montana centering their activities around the rapidly developing industrial center of Great Falls. Final land selections were made in highly concentrated though geographically separated areas of eastern and southwestern Montana.

The general aspects of the geographical history associated with the development of these patterns (Figure 4.2) are necessary to the more detailed discussion of policy which follows in Chapters V and VI. The purpose of this section is to present such a discussion. The historical circumstances are amplified, however, where necessary in Chapters V and VI.

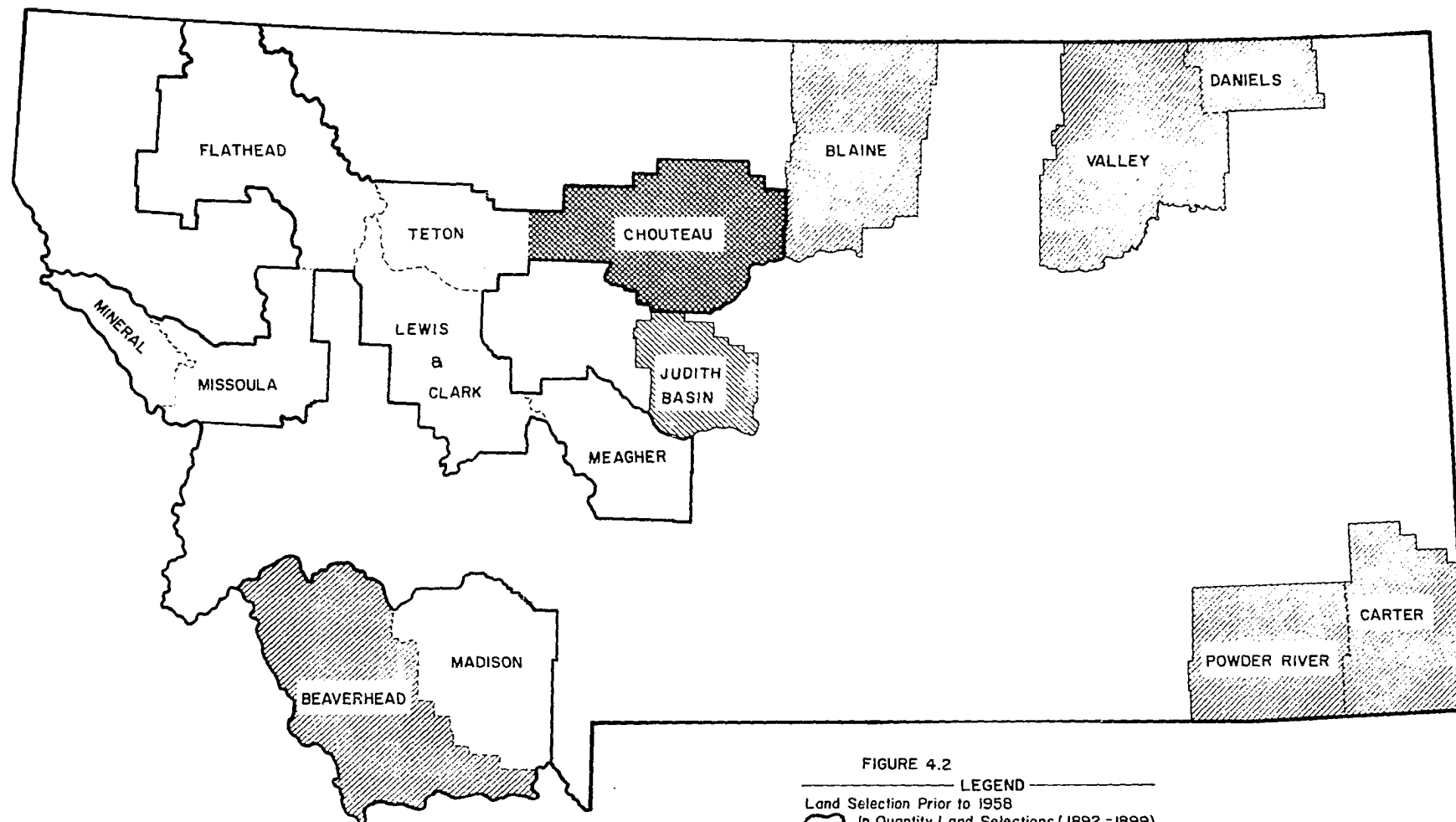


FIGURE 4.2

LEGEND

Land Selection Prior to 1958

-  In Quantity Land Selections (1892 - 1899)
-  In Lieu Land Selections (1899 - 1900)
-  In Lieu Land Selections (1910 - 1926)

Table 4.5. In Quantity and In Place Land Selections.

Year	County*
1892	Madison (Q)
1893	Flathead (Q) and Missoula (Q)
1894	-
1895	Mineral (Q)
1896	-
1897	Beaverhead (Q) and Lewis and Clark (Q)
1898	Meagher (Q), Chouteau (Q), Lewis and Clark (Q) and Teton (Q)
1899	Chouteau (Q and L); Judith Basin (L)
1900	Chouteau (L) and Judith Basin (L)
1901-1909	--, Abeyant Period
1910-1913	Chouteau (L) and Blaine (L)
1914-1915	Daniels (L) and Valley (L)
1916	--
1917-1921	Powder River (L) and Carter (L)
1922-1925	--
1926-1927	Beaverhead (L)
1928-1957	Post-selection Period
1958	Glacier Park Exchange--Teton (Q), Toole (Q), Chouteau (Q) and Lewis and Clark (Q)
1959-	Post-selection Period, continued

*Q = In quantity land selections and

L = In Lieu land selections.

Between 1889 and 1891, the administrative structure for selecting and managing a five-million acre estate was developing, so no land selections were made. Initially land selections were based on the distribution of known natural resources. The sheltered

and fecund river valleys of the southwest were the cradle of Montana, possessing a well developed livestock industry that marketed cattle to Denver and Salt Lake City prior to the 1858 gold discovery in Montana and the development of local markets (Osgood, 1929, pp. 12-17). The state turned immediately to this area for land selection, for example, in Madison County in 1892 and in Beaverhead County in 1897 (Table 4.5 and Figure 4.2). The preoccupation of state land administrators with the livestock industry was so strong that the motives are suspicious, but the plenteous pastures of southwestern Montana would be attractive to anyone seeking valuable land.

Commercially valuable timber was a desirable resource, particularly where it existed on land that also had agricultural potential. Commercial timber was found largely in northwestern Montana, so selectors turned to this area early with land selections in Flathead and Missoula counties in 1893 and Mineral County in 1895 (Table 4.5 and Figure 4.2). However, after the *Forest Reserve Act of 1891* (Sec. 24, 26 Stat. 1095) lands with potentially valuable timber became the subject of increasing federal land reservation, so that state selections in the northwest became increasingly difficult.

In the meantime, the Indian reservations of north-central Montana were extinguished, and ranchers pushed into the valleys of the high plains. More than ranchers came, however. Paris Gibson could not resist the power potential of the Great Falls of the Missouri. In cooperation with J. J. Hill, who began building a railroad "through nothing to nowhere," Gibson began a planned

community at the Great Falls, while Charles Broadwater began a railroad link between the Great Falls and the isolated copper mines at Butte. Completed with amazing speed, this rail line sent Gibson on his way to the U. S. Senate, Hill's Great Northern Railroad on its way to the Puget Sound, and thousands of settlers on their way to Great Falls and its hinterland.

The rapid ascendancy of Great Falls made its hinterland of high quality grazing and irrigable farm land attractive to land selectors. The in quantity grant selections were completed with central Montana lands in Lewis and Clark, Meagher, Teton and Chouteau counties between 1897 and 1899 while in lieu land selection, to replace school lands captured in national forests and Indian reservations, was begun further east in Chouteau and Judith Basin counties in 1899 and 1900 (Table 4.5 and Figure 4.2). For reasons which will be explored later, land selection was then curtailed during the abeyant period for nearly a decade.

At the end of the abeyant period, between 1910 and 1913, initial land selections were again made in central Montana in Chouteau and Blaine counties (Table 4.5 and Figure 4.2). However, the field of selection quickly turned further east to Daniels and Valley counties in 1914 and 1915 (Table 4.5 and Figure 4.2). The Daniels-Valley county land selections were large indeed, amounting to 343.76 sections in two large blocks of nearly contiguous land. This change in selection seems to suggest that Montana land administrators were selecting from lands specifically reserved for Montana. This condition is encountered again in the Powder River-Carter

land selections between 1917 and 1921, and the Beaverhead County selections in 1926 and 1927 (Table 4.5 and Figure 4.2). Indeed, the Beaverhead land selections were the only ones ever publically mentioned by the bureaucrats before the selections were actually filed (Montana Register of State Lands, 1926, p. 33), which strongly suggests the absence of competition and the existence of special dealings between federal and state officials.

For all practical purposes, with the exception of the 1958 Glacier Park Exchange, land selection was complete in Montana by 1927. Geographically, there was a logical sequence from initial resource specific land selections, to the speculative selections in central Montana, to the mere filling of the grants regardless of quality in far eastern Montana. There was a decided tendency for the field of land selection to progress from west to east, parallel to the general trend of intensive settlement of Montana.

Conclusions

Figure 4.2 portrays the geographic and temporal sequence of land selection in Montana. While the pattern is logical and appealing in general outline, it predicates only shallow reasons for land selection. What were the motives and objectives subscribed to by administrators as they made land selections? What conflicts did they encounter in making land selections, and how did these conflicts influence land selection decisions and policies? Answers to these questions must be found in the primary literary record of the decision-makers: the *Minutes* of the Board, the reports of the bureaucrats, and the surviving private papers of politicians and

bureaucrats. The volume of this literature is tremendous and without any inherent order. However, the geographic pattern depicted in Figure 4.2 does provide considerable guidance in ordering the primary literature search for evidence of major objectives, decisions, and problems. The remainder of this study is devoted to the analysis of that primary literature in a quest to identify the objectives held and the conflicts encountered by state land administrators as they made the selections.

CHAPTER V

FEDERAL-STATE LAND CONFLICTS

The policies articulated in the *Omnibus Statehood Act* specify that most school land should be in place--that is, limited to Sections 16 and 36 of each township. The analyses in Chapters III and IV indicate that a large quantity of school land is in lieu, however, and consequently, had to have been selected from the public domain. The movement of land from in place to in lieu categories has been identified in Chapter II as a salient source of federal-state conflict over the spatial distribution of the grant estate and this conflict had to be resolved through policy manipulation. Furthermore, from Figure 3.2 it was inferred that national forest reservations in western Montana and Indian reservations in eastern Montana were the lands made eligible for in lieu selections.

Montana officials could not select lieu lands for in place lands unless the in place lands were actually denied to the state. Consequently, with each lieu land selection, officials had to identify the base, or in place lands denied to Montana, and offer proof that the lands had been denied to Montana for legitimate reasons. This information is preserved in the clear lists, the documents which convey full title to in lieu lands to Montana. In the original sample of 193.75 sections in the ten counties with

excess school lands (Figure 3.2), the reason for base offering was noted. The relative importance of each reason of base offering was calculated and is displayed in Table 5.1.

Table 5.1 shows the importance of federal land reservation in freeing school lands from fixed locations. Fully 86.7 per cent of the lieu land sample was subject to state selection because of conflicting federal land reservation ("Primary Cause," Table 5.1). Forest and Indian reservations were the most important of these land reservations. It is clear that the federal land reservation policies subsequent to the *Omnibus Statehood Act* conflicted with the spatial dictates contained in the original state land grants so an understanding of the spatial pattern of the state land estate requires an understanding of this conflict and its resolution.

In this chapter the conflicts between the spatial dictates in the Montana land grants and subsequent federal land policies are discussed. The first of these conflicts is the impact of national forest reservations on freeing Montana state land from the fixed formulation grant. A logical extension of this inquiry is the territorial conflict which arose over state lands in Glacier National Park, even though the state lands at issue were in quantity rather than in lieu lands. State-Indian conflicts over the spatial distribution of their respective lands, a topic of great interest today, is the last topic analyzed.

The burden of resolving conflicts resulting from federal land preservation subsequent to the *Omnibus Statehood Act* was the moral responsibility of Congress. What emerges from an analysis of Congressional action is a dismal portrait of Congress's inability

Table 5.1. Sample Causes for Lieu Land Selection.

<u>Lieu</u> Land Sample	Primary Cause		Secondary Cause	
	Source	% of Sample	Source	% of Sample
100% (n = 193.75 Sections)	Federal Reservation	86.76%	Forest Reservation	67.42%
			Indian Reservation	10.67%
			National Parks	7.25%
			Other**	1.42%
	Non-Federal Reservation	10.36%	Farm Loan Foreclosure	7.48%
			Preemption***	2.88%
	Miscellaneous*	3.19%	-	-

*Includes survey inaccuracies which permitted Montana to claim land, exchanges with local governments, and lieu lands for which base lands or reasons for base offerings were not identified.

**Includes military reservations and reclamation projects.

***Includes both mineral and settlement preemption.

to consider national land legislation in a broad context of unified policy, or to provide the leadership necessary to resolve the conflicts which were created through shortsightedness in policy formulation. The failure of Congress to provide a unified leadership through national land policy placed the burden of resolving distributional conflicts, through manipulation of existent laws, on politicians and bureaucrats. Consequently, while many administrators acted ably, conflict resolution was dependent upon their leadership and ability to negotiate rather than upon more uniform and common practices.

National Forests and Montana State Land Selection

National forests in Montana occur almost exclusively in the western portion (Figure 5.1). Large stands of commercially valuable timber are concentrated even more in the extreme northwestern part of the state. Montana land selectors, hoping to acquire valuable timber, turned to this rich area at an early date. However, the selector faced a stout competitor, the United States. Forest reservation, a thing which did not exist when Montana entered the Union, advanced apace after 1891, and it had two impacts on Montana's land estate. First, in place school lands in national forests were denied the state unless the reserved lands had been surveyed prior to reservation. Second, in quantity land selections in national forests were denied to the state unless the survey of the selected lands was completed prior to forest reservation.

Denial of in quantity land selections in forest reserves was of great concern to Montana land administrators. Though Montana

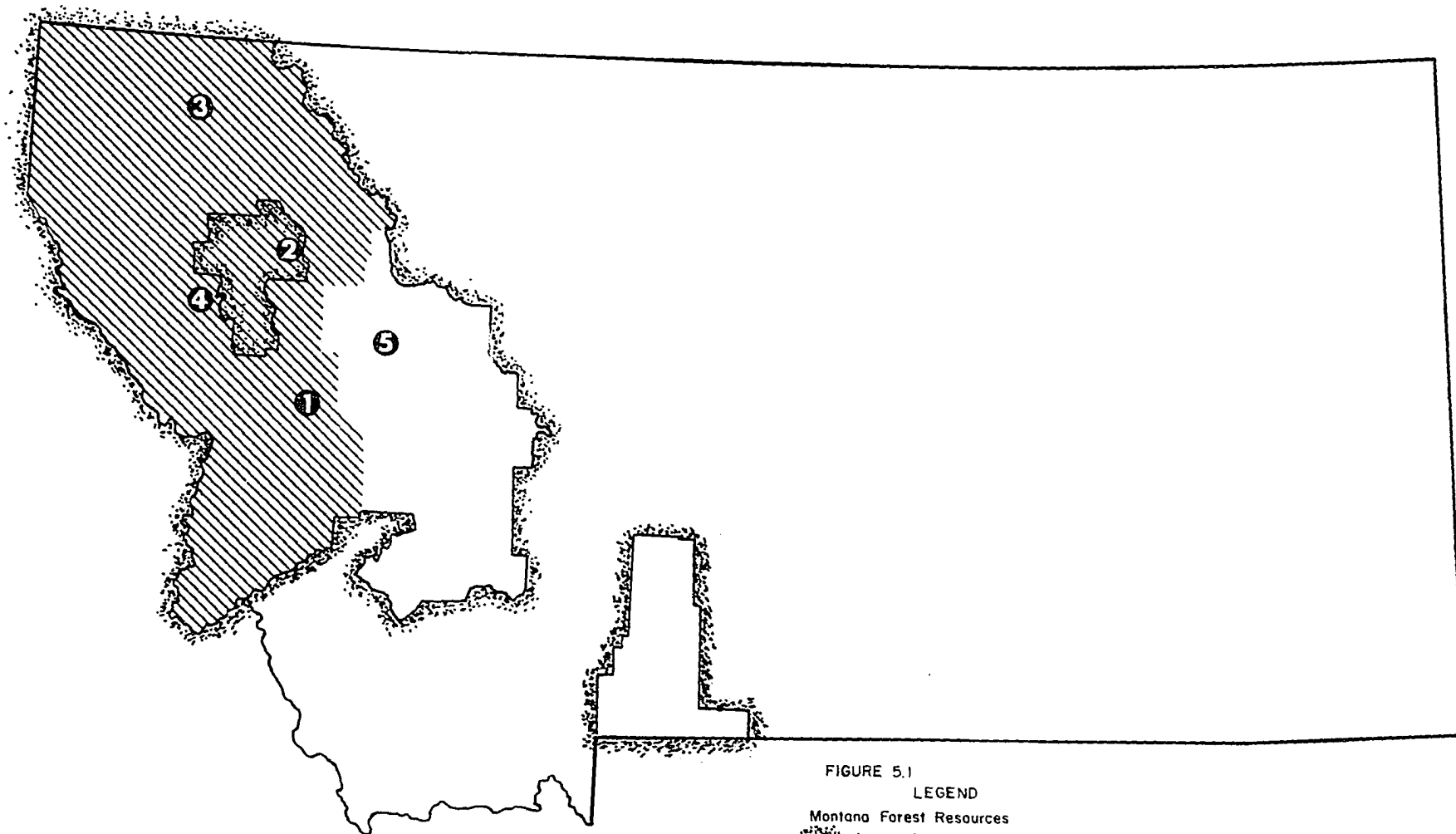


FIGURE 5.1

LEGEND

Montana Forest Resources

-  Areas of Major National Forest
($>41.03\%$ of county area in national forest)
-  Areas of Major Timber Production
(harvest $> 35,000$ bd. ft./mi² county area)

State Forest

- | | |
|--|--|
|  Clearwater |  Swan River |
|  Stillwater |  Thompson River |
|  Lincoln | |

was able to obtain large quantities of land in Missoula, Mineral, and Flathead counties, in addition to forest land in Sanders, and Lewis and Clark counties, many in quantity lands were ultimately denied to Montana by forest land reservation. Indeed, the Swan River and Stillwater Creek areas which, as is discussed in Chapter VI, were thought to be the most desirable land were denied to Montana during this period. Montana land administrators, however, had little recourse but to accept federal land reservations and denial of state in quantity land selections.

Ultimately, the fate of the in place lands within national forest reservations became a subject of primary concern. Congress had seemingly promised these lands to Montana. Did Congress now deny them forever to the new state? Was Montana expected to relinquish all interest in these forest lands and to select nearly worthless range land to replace them? Was there not some way by which Montana could establish a greater interest in the national forest resources?

Legal Foundations and Early Relinquishments

National forest reservation has its origins in popular and Congressional discontent with public domain management. Though eastern and western Congressmen could not agree upon sound management practices, Congress did manage to pass the *Act to Repeal Timber Culture Laws* (26 Stat. 1095), Section 24 being the *Forest Reserve Act of 1891*. The act empowered the President to reserve from the public domain land principally valuable for its timber. Though much land was reserved under the *Forest Reserve Act of 1891*, the law

had obvious weaknesses; it empowered only reservation and made no provision for management.

Reform of the *Forest Reserve Act of 1891* was accomplished by the *Forest Reserve Act of 1897* (30 Stat. 11). Authored by western Congressman responding to what they considered to be President Cleveland's ruinous reservations of February 22, 1897, the act of 1897 provides the foundation of modern national forest law and is generally considered brilliant legislation. The act of 1897, however, failed to provide for the disposition of school lands within the forest reserves. By implication, the *Omnibus Enabling Act of 1889* and the *Lieu Selection Act of 1891* were to determine the fate of state school lands in national forest reserves. Through this legislation Montana had two choices for managing the reserved school lands. It could either relinquish reserved lands and select lieu lands elsewhere, or it could await extinguishment of the forest reserves. The first alternative could only be followed if it were legal under state law, while the latter alternative impractically delayed acquisition of the lands.

Between 1892 and 1899 Montana officials selected the in quantity grants unconcerned about the future of reserved school lands. By 1899 the in quantity grants were selected while applications for leases to state land in central Montana remained unfilled. To meet the demand for leasable state land, the Register of State Lands asked the Montana Board of State Land Commissioners for authority to relinquish claim to school lands in a portion of the Flathead Forest Reserve (Minutes, June 5, 1899). The action, the

first of its kind, was authorized and a flood of requests soon followed. The Register was instructed to investigate the forest reserves for potential in place land relinquishments (Minutes, August 21, 1899), and consequently the Board relinquished school sections in Bitterroot Forest Reserve on March 13, 1900 (Minutes) and the east half of the Lewis and Clark Forest Reserve on April 11, 1900 (Minutes). Meanwhile, relinquishment of reserved Indian lands began on July 1, 1900 (Minutes).

Virtually all lieu lands selected to replace forest relinquishments were located in central Montana to meet the demand for leasable land, particularly in Judith Basin and Chouteau counties. Then, for reasons which will be explored in Chapter VI, both relinquishment and selection was halted until July 31, 1908 (Minutes). Initial selection after the abeyant period was cautious for many things had changed in Montana. Central Montana was nearly settled, so future land selections would have to be made further east in areas of dubious value. The relinquishment of valuable timber land in western Montana for questionable eastern grazing land was not to be entered into lightly, particularly since doubts about the legality of land relinquishments had arisen. Consequently, the Board, on July 1, 1909 (Minutes), instructed the Montana Attorney General to investigate the state's right to in place school lands inside the national forest reservations.

The Montana Attorney General was given instructions to investigate and, if necessary, negotiate with the federal government on specific topics. He reported his findings to the Board in a

Memorandum of December 30, 1912. The Memorandum of December 30, 1912, is contained in four *Decisions of the Montana Attorney General* 537, 544, though the more informative draft version of his report is available in the Forest Exchange Files of the Montana Department of State Lands. The draft version was used in this study. The Memorandum of December 30, 1912, addresses, in response to the Board's request, the legitimacy of state land relinquishments in the light of an Idaho Supreme Court Decision, *Balderston vs. Brady* (107 Pac. 493; 108 Pac. 742); the impact of *Balderston vs. Brady* on United States House Bill 10584; and the negotiations between Montana and the Interior Department in the light of the model proposed by H. B. 10584.

Balderston vs. Brady

The Montana Board could relinquish land in federal reservations under the *Lieu Selection Act of 1891* only if the action was lawful under state law. In early land relinquishments, the Montana Board had assumed that it was empowered to make relinquishments, but by 1909 a legal tangle in Idaho called into question the Montana Board's authority to make relinquishments. If the Board was not empowered to relinquish land, the issue of what to do about in place lands in national forests was moot, for the Board could not do anything about them.

The Idaho rule was given in 1909 and 1910 in *Balderston vs. Brady* (107 Pac. 493; 108 Pac. 742), a complex, poorly presented case, tainted by politics. In 1901 the Idaho Board was selecting land in an area where it possessed a priority right, but the U. S.

Land Office failed to inform settlers of the state's priority right to land. Consequently, the U. S. Land Office rejected the filings of the Idaho Board, an action eventually reversed by the Interior Secretary on the reasoning that a state claim to land was not lessened by errors in the Interior Department (35 Land Dec. 640).

However, the Interior Secretary did not approve the filings, for the Idaho Legislature had taken up the matter. If the ruling of the Interior Secretary prevailed, many settlers would have to abandon their homesteads and the improvements on them to the State of Idaho. The Idaho Legislature by resolution appointed a special commission to investigate the conflict and instructed the Idaho Board to abide by the commission's ruling. The commission determined that genuine settlers were sustaining undue injury and since the lands in question were not as yet acquired by Idaho, directed the Board to relinquish the lands to the United States so that the settlers would be able to file on their homesteads. The suit of *Balderston vs. Brady* was brought to thwart implementation of the commission directive. The Court ruled that the Board was without authority to relinquish state lands under any circumstances. However, the Court did not make it clear if the weakness in the Board's authority was constitutional and correctable only by an amendment, or statutory and correctable by legislative action.

The rule issued in *Balderston vs. Brady* was important to Montana because Montana statutory and constitutional law was nearly indistinguishable from Idaho's, so it was highly probable that, if

asked, the Montana Supreme Court would rule as did the Idaho Supreme Court. Since constitutional amendment is a slow and difficult route to correction of administrative problems, both Montana and Idaho elected to attempt correction of the problem by statutory provisions. Chapter 78, *Montana Laws of 1911* provided that, "All sections sixteen and thirty-six when surveyed, within the boundaries of the national forests within the State, are ceded to the United States." This specific law has since been broadened into a general relinquishment and exchange law (1947 RCM 81-304, 305 and 306) which has never faced serious court test. Idaho's relinquishment law, however, was challenged almost as soon as it became law and was sustained (*Rogers vs. Hawley*, 115 Pac. 687).

Here it is necessary to distinguish between relinquishment and exchange. Relinquishment is the surrender of the state's equitable interest in a parcel of land, and Montana's statutes permitting relinquishment are probably constitutional. Exchange, however, involves the trade of one parcel of land in which the state has an exclusive interest for land owned by another party. Since acquired lands cannot be disposed of except at public sale, the exchange laws of Montana are probably unconstitutional as well as inconsistent with federal law. As will be explored, this weakness has been used by the Board to assist it in negotiations, particularly in the Glacier Park Exchange; however, the constitutional question surrounding land exchanges has seldom blocked a profitable land exchange.

H. B. 10584

So long as the states could relinquish lands, the federal executive branch could resolve the conflict between state claims to land and the forest reservations. The procedure was legal and simple in design, but complex to implement. Within a forest reservation all Sections 16 and 36 were identified and their timber quality determined. For lands lacking in commercial timber quality, the state would routinely select grazing lands. For commercially valuable timber lands, however, state officials would identify a single tract of commercially valuable national forest land and select it. This land would then be surveyed after which the President, under authority of the *Forest Reserve Act of 1897*, would return the tract of land to the public domain which consequently conveyed instantaneously the lands to the state. Implementation of the process, however, required a tremendous amount of labor and state-federal cooperation. What constituted timber quality land had to be determined; unsurveyed Sections 16 and 36 in the national forests had to be located and appraised; and federal and state officials had to agree on the national forest lands to be surveyed and denationalized.

The major weakness in the system was that it depended upon a President who was willing to remove forest lands from national reservation. This weakness could be corrected if Congress institutionalized the process in the national land policy and law. House Bill 10584 was introduced by western Congressmen with the assistance of the Agriculture Secretary to accomplish this end.

Representative Mondell of Wyoming guided the bill in the House on April 13, 1910 (Congressional Record, Vol. 45, pp. 4632-4639). The argument in support of the bill was that it simplified, through spatial segregation, management of federal and state land. The argument implied that states already held title to the reserved forest lands, and was a complete misrepresentation of the actual situation. Representative Mann of Illinois staunchly opposed the bill. Reflecting on the tragic abuse of state land in the Old Northwest, Mann argued that concentration of state lands amounts to taxation without representation; that the states only wanted to waste the lands; and that the lands would retain value only so long as they were denied to the states. National forest reservation denied lands to the states, and Mann was not disposed to alter the circumstances. Though both the arguments in support of and in opposition to H. B. 10584 were factually incorrect and misrepresented land grant concepts, the bill narrowly passed in the House.

In the Senate debate on H. B. 10584 was held on February 2, 1911 (Congressional Record, Vol. 46, p. 1813), after issuance of the opinion in *Balderston vs. Brady*. Senator Heyburn of Idaho was responsible for guiding the bill through the Senate, and he stated that he intended to do nothing with the bill. Western senators voiced strong opposition to Heyburn who adamantly held that:

The supreme court of Idaho has passed upon that question [the process offered in H. B. 10584] adversely to the rule that would be established by the bill, and I am not willing to have it disturbed. I think our supreme court is entitled to that respect.

Since H. B. 10584 had only narrowly escaped the opposition of

eastern congressmen in the House, western congressmen could not hope to pass another bill similar to H. B. 10584 with their own ranks divided. The attempt to make an informally negotiated system of conveying land to the states part of the national land policy was hopelessly defeated.

Montana Forest Land Exchange

In the conditions leading up to *Balderston vs. Brady*, the Idaho Board violated a cardinal political rule of state land administration (Chapter VI, this study) by needlessly engaging itself in court proceedings where land rights of genuine settlers were at stake. Confusion resulted, not only in Idaho but in Montana and in the U. S. Congress. In this uncertain environment the Montana Attorney General began negotiations with the federal government to clear Montana's interests from the national forest reserves. The negotiations eventually involved both Gifford Pinchot and Theodore Roosevelt and culminated in the Agreement of December 23, 1912 (Forest Exchange File, Montana Department of State Lands; 4 Dec. Mt. Att'y. Gen. 537, 544).

Agreement was difficult to achieve, however. To reach the Agreement of December 23, 1912, it was necessary to clear the confusion raised by *Balderston vs. Brady*. This was accomplished by Chapter 78, *Montana Laws of 1911*, through which the Legislature relinquished the reserved school lands. The Montana Legislature would have been foolish to issue a blanket relinquishment of what little legal interest Montana held in the reserved lands unless there was assurance of available public lands in Montana sufficient

to replace, through lieu land selection, the relinquished lands. A gubernatorial proclamation of March 10, 1910, reserved to Montana a large portion of what is today Valley, Daniels, Powder River and Custer counties. This reservation assured sufficient land to fill the grants thus clearing the way for forest land relinquishment (Chapter 78, Montana Laws of 1911) and serious federal-state negotiations.

The Agreement of December 23, 1912, assured that all lands relinquished by Chapter 78, *Montana Laws of 1911*, were to be surveyed for commercially valuable timber. In the case of lands not valuable for their timber, the Board was to select from grazing lands held under the reservation of March 10, 1910. Relinquished lands of commercial timber value were to be replaced by one or more contiguous tracts of national forest. Needless to say, actual implementation of the Agreement of December 23, 1912, was difficult.

Despite the monumental demands placed on federal and state personnel the majority of the survey was completed by November 27, 1918, when President Wilson denationalized and conveyed to Montana what is today the Stillwater and Swan River state forests (40 Stat. 1894, 1896). Simultaneously the Interior Department conveyed to Montana more than 200,000 acres in Daniels and Valley counties. Systematic searches for unrelinquished forest lands continued into the late 1920's resulting in lieu land selections from reserved and federal grazing land in Powder River, Carter and Beaverhead counties. Indeed, to the extent that there may still be unsurveyed school lands in the national forests for which Montana has never made lieu

land selections the Montana Forest Land Exchange is not complete and the Agreement of December 23, 1912, is still in force.

Montana Forest Land Exchanges--Conclusions

In the creation of national forests, Congress failed to consider that it was permanently reserving lands in which the states had a long standing interest. In effect, Congress by dedicating the same land to two separate uses was creating conflict in policy. Congress was never able to resolve the dilemma. Consequently, conflicts which arose were settled by negotiations between federal and state officials although federal officials were not obliged by law to negotiate much less reach any settlement. The negotiations resolved the conflicts through the Montana forest land exchanges which were both difficult and expensive to implement.

To Montana the exchanges were worth the expense and difficulty. Armed with an iron-clad state forest management law (1947 RCM, Title 81, Chapter 14), Montana foresters have managed the small but fecund state forests with a singularity of purpose which would be intolerable if applied to the much larger national forests. The forest land exchanges permitted Montana to rid itself of dispersed, low value, mountainous forest land and replace it with grazing lands in northeastern, southeastern and southwestern Montana. Although there could be little doubt that these grazing lands were not the most valuable land in the state, the grazing lands acquired by Montana as part of the forest land exchanges between 1918 and the mid-1930's were an improvement over several

hundred thousand acres of scrub timber, ridge crests, and talus slopes.

The Montana Forest Land Exchange had, however, its unfortunate aspects. Congress created a major conflict in institutionalizing both state land grants and national forest reservations. Congress did not anticipate the conflict and when it was brought to attention, Congress failed to provide leadership in resolving the conflict. Given Congressional failure, leadership fell by default to state and federal politicians and bureaucrats. In the case of Montana these negotiations probably provided more valuable lands than the original grant would have conveyed. For this accomplishment Montana administrators are to be complemented. However, there was no guarantee that the negotiations could achieve such a happy end. A single mistake in the negotiations could have resulted in disaster for the integrity of Montana's estate. Further, while Montana achieved a profitable end, such informal negotiations between state and federal administrators cannot be interpreted as a national land or land grant policy. There was no guarantee of consistency between jurisdictions so, while Montana attained worthy ends, other states may have been denied the success which Montana achieved.

The Glacier Park Exchange

The Forest Land Exchange explains Montana's lack of school land in western Montana and concentration of lieu land in other parts of the state. The Glacier Park Exchange resolved another serious land conflict. Montana acquired absolute title to 10,000

in quantity acres of high quality timber in what subsequently became Glacier National Park. By threatening to timber this land, the Montana State Forester led the Board's negotiations which resulted in the acquisition of 168,000 acres of in quantity land in Toole, Teton, Chouteau, and Lewis and Clark counties.

Although the amount of acreage involved in the Glacier Park Exchange might suggest that Montana negotiated an exceptionally profitable trade, from a qualitative perspective the long and troublesome negotiations may have accomplished little but the preservation of the state's dignity and the esthetic quality of environmentally important land. Nonetheless, the federal government paid a much higher price for the land than the Board would have demanded had federal officials not been so intransigent in initial negotiations. Indeed, settlement was achieved only because state officials, particularly the State Forester, were able to create and maintain a crisis atmosphere for almost eight years.

Glacier Park to 1946

The *Organic Act of Glacier National Park* became law on May 11, 1910 (36 Stat. 354). After describing the new park's boundaries, the act ordered respect for the rights of landowners already located inside the park. The phrase implies that condemnation could not be used to acquire land solely for the general benefit of the park. Routinely, Montana relinquished the equitable title to unacquired school sections within Glacier National Park as a part of the Forest Land Exchange. Montana, however, possessed full title to about 10,000 in quantity acres, all prime timber, on the east bank of the

Flathead River within the boundaries of the park. According to the trust, this land could only be disposed of at public auction. According to state law even this route was closed since vending of timber quality land was prohibited after 1909.

Trust and state law to the contrary, Montana officials initially appeared willing to sell the 10,000 acres back to the federal government at appraisal. Between 1924 and 1928 federal and state foresters appraised the timber with the intention of facilitating that sale. Rutledge Parker, the Montana State Forester after 1927, participated in those appraisals and in 1932 offered to sell the 10,000 acres to the National Park Service for the appraised \$178,596.50. At that time Parker emphasized the state's legal and moral obligation to make productive use of the 10,000 acres. Still, for esthetic reasons, the Office of the State Forester restrained its impulse to cut the timber until the National Park Service obtained funding to purchase or exchange the lands (Letter, Parker to Gov. Ford, March 18, 1946, quoting from a letter, Parker to E. T. Scoyan, Superintendent of Glacier National Park, 35-108-5 MHS). However, by 1946 no special legislation had been sought and Parker ran out of patience.

The Initial Crisis

In 1946, Montana Senator Wheeler wrote to Governor Ford that the National Park Service had complained to him of potential state timbering in Glacier National Park. What, asked Wheeler, was the explanation for this threat (Feb. 27, 1946, 35-108-5 MHS)? Ford sent the letter to Parker requesting Parker to provide a background so that Ford might "reply to Senator Wheeler in an intelligent manner"

(Letter, March 6, 1946, 35-108-5 MHS). Parker's reply of March 18 (35-108-5 MHS) reviewed the problem. On March 18, 1945, the timber in a remote section of the park had been offered for logging but no bids were received. The sale had been held to stimulate federal interest in reaching an agreement on the lands. Parker concluded that:

It does seem strange that our Federal Government would, on the one hand, give in the form of an endowment, a land grant to the State of Montana...and on the other hand, create a federal reservation in which are included valuable State grant lands, the negotiable assets of which have been frozen....What I don't like about it is the extreme complacent attitude on the part of the Government and its utter failure to make any serious effort to compensate the State for its property.

In a separate Memorandum accompanying the letter of March 18, Parker recommended that the federal government be given an ultimatum to make settlement and that the Board settle only for cash (approximately \$357,189.20) since the federal government possessed only mismanaged timber and overgrazed grasslands to offer in exchange.

Through Ford, Wheeler provided Newton B. Drury, Director of the U. S. Park Service, with Parker's letter of March 18, and on July 3, 1946, Drury replied to Parker (Letter, 35-108-5 MHS). The Park Service, he said, was not complacent in the matter of the Glacier Park lands, but many states contributed funds and lands to help acquire the economic and social benefits of national parks. Montana could and should do the same. He suggested that the National Park Service acquire the lands at their pre-WWII value, and that the Montana Legislature compensate the state trust funds for the balance of the value which had accrued to the land.

An irate Parker replied (Letter, August 2, 1946, 35-108-5 MHS) that national park reservation was not always locally popular especailly when the motive was greed rather than philanthropy. Montanans had little reason to support or pay for more federal land ownership for any reason. In Montana, the federal government already owned acreage that exceeded the area of North Carolina by 10,000 square miles, and it was a burden, not a blessing. Further, exchanges offered no solution, for the land exchange laws of Montana were probably unconstitutional. Even if they were not, according to Parker, exchanges were out of the question for the reason that the federal government did not own in Montana 10,000 acres worth having.

Serious Negotiations

In the initial period of negotiation state and federal bureaucrats exchanged hostilities. The Park Service was chronically short of land acquisition funds so the possibility of the Park Service buying the state land was practically nonexistent. Drury admitted this in a letter of June 30, 1947 (35-108-5 MHS) and concluded:

I repeat--to cut this timber would be a calamity. Isn't there some deferring action you can take, or ask the State Legislature to take, in order to stop, for a specified time if not indefinitely, the cutting of this timber?

The humbler attitude facilitated negotiations leading to an agreement on September 6, 1947 (Letter, Drury to Ford, Oct. 22, 35-108-5 MHS). The state park lands would be bought by the Park Service at one-half their appraised value while Ford was to ask the 1949

Montana Legislative Assembly to provide the other half necessary to compensate the trust funds.

State officials involved in the agreement of September 6, 1947, knew it would never be implemented. There was little possibility that the Park Service would obtain the necessary funds, and even less possibility that the Montana Legislature would appropriate a match. Indeed, Parker reported to the Board (Letter, March 3, 1948, 35-108-5 MHS) that he could not even find a sponsor for the necessary state legislation. The issue, however, might never get as far as the legislature because there was a difference of \$128,454.25 between the federal and state appraisals of the land. Parker suggested that the Park Service be given until April 30, 1949, the closing date of the 1949 state legislature, to agree to the state's higher appraisal or the issue would be closed and the timber would be sold. The Board agreed (Minutes, March 6, 1948).

Parker apparently did not believe that this ultimatum would ever be implemented. While he adamantly resisted the idea of exchanging the land, he cooperated with U. S. Representative Mike Mansfield in drafting and passing U. S. House Bill 4980 (80th Congress, 2nd Session). The bill authorized the Interior Secretary to make a land exchange with Montana that would solve the Glacier Park crisis in the best interests of the United States.

The Crisis Culminates

The Park Service never responded to the ultimatum of April 30, so on August 10 (Minutes), despite national and local pressure

to the contrary, the new governor, Bonner, offered the timber on a remote section. It was purchased by the Park Service for appraisal, \$36,531.60. The sale demonstrated that the Board would sell the timber but was designed so that only the Park Service could be the vendee (Minutes, Aug. 13, Nov. 18, 1948; May 11, June 15, Aug. 10, 1949).

The environmental brinksmanship, however, was too much even for Parker. He reported to the Board (Letter, Dec. 13, 1949, 35-130-3 MHS) that the Park Service simply did not have the money to buy all of the lands. Continuing the sale of the state land would mean the implementation of timbering, an activity that was not popular. Land exchange was the only solution left, but this violated so many state laws that the Board was ill-advised to undertake it. The matter had become so complex that Parker advised the Board that only the State Legislature could solve the problem.

In response to this plea the 1951 Montana Legislature passed Chapter 168, 1951 *Laws of Montana* which ordered a reappraisal of the state lands in Glacier National Park. The 1953 Montana Legislature was to review and approve the appraisal. Following approval of the appraisal the Board was instructed to dispose of the lands at a value equal to or more than the appraisal either for cash or:

...[the lands] may be exchanged for other lands of equal or greater value in accordance with the provisions of Section 81-304 of the Revised Codes of Montana, 1947, and any amendments thereto.

The appraisal came in at \$789,682.90. The amount was acceptable to the U. S. Bureau of Land Management which offered Montana

116,223.87 acres with all mineral rights and 70,925.42 acres with fissionable minerals reserved to the federal government. The Bureau of Land Management valued this land at \$755,120.31, leaving \$34,573.62 worth of land to be selected by the Board. The offer was acceptable to the Board (Minutes, Jan. 30, 1953) and the 1953 State Legislature (Chap. 114, 1953 Laws of Montana).

The 1953 act empowered but did not consummate the Glacier Park Exchange. For the next five years the Board and the Bureau of Land Management struggled over value, bickered over mineral leases, faced the problem of "squatters" on the land as late as 1956 (Minutes, Dec. 21, 1956), and argued interminably about the wording in patents and deeds. By July 16, 1958 (Minutes), however, the Montana Attorney General found all patents and deeds in order, and on October 2, 1958 (Minutes) deeds for 9353 acres of state in quantity land valued at \$84.43 an acre in Glacier National Park was exchanged for patents on 168,371.78 acres of central Montana federal grazing land valued at \$4.69 per acre.

The Glacier Park Exchange--Conclusions

Parker, a bureaucrat, was supposed only to execute rather than create policy. In fact he contributed much to policy formulation. By 1946 he recognized the contradiction of Congress dedicating the same lands to two purposes and that only crisis could resolve that contradiction. Parker created the needed crisis and for seven years guided Montana's politicians and bureaucrats through a labyrinth of negotiations.

Conflict resolution requires compromise and Parker eventually had to compromise. While he felt that cash rather than a land exchange was most advantageous, exchange eventually had to be accepted. Whether Parker was right in seeking a cash settlement is difficult to determine. The Commissioner of State Lands, in the *Report* of 1956 and 1958, wrote in glowing terms of the new state lands. They were selected to "round out" existing state land parcels in north-central Montana, and thus increase the attractiveness and value of the existing lands. Additionally, the 168,000 acres were selected with an eye on mineral value. To many employees of the State Land Department, however, the exchange brought little to the state except valueless gores.

Wise or not, the Glacier Park Exchange concentrated more than 168,000 acres of state land in portions of Chouteau, Teton, Toole, and Lewis and Clark counties while denationalizing an equal portion of federal land in those areas. The problem arose, substantially, because Congress, in the creation of national parks just as in the creation of national forests, forgot that grants to the states had also been made and that these grants might seriously conflict with national reservations. Though repeatedly asked to offer guidance, Congress provided little direction and less money to the solution of the problem which it had created. Without congressional leadership, conflict resolution fell on federal and state officials. In this case, however, the only viable resolution, exchange, so clearly violated state and federal law that only the Legislature dared take the responsibility for authorizing the exchange.

Indian Land Conflicts

Dictated policy suggested that Montana should possess no land in Indian reservations. State lands in Indian reservations should have been relinquished by Montana under provisions of the *Lieu Selection Act of 1891* or denied the state by the federal government under provisions of the *Omnibus Statehood Act*. In Montana, however, this presumption is only partially correct. No state lands are in the Fort Peck, Northern Cheyenne, Blackfeet, or Rocky Boy Indian reservations (Figure 5.2), but there are state lands within the Crow, Fort Belknap, and Flathead reservations. At least three reservations, consequently, do not demonstrate characteristics predicted to exist by national and state land-grant policies. The objective of this section is to examine the contradictions and conflicts which arose in state and Indian land relations.

Legal Foundations

Indian land law, a maze of executive proclamations, treaties, and special and general legislation, appears to be a complex of unique circumstances. Some generalizations, however, are possible. Three types of Indian reservations, treaty, statutory, and executive, have been distinguished (Wilson, 1972, p. 14). Since treaty and statutory reservations are similar in character and function they may be grouped in this study as a single type, treaty-statutory reservations. Treaty-statutory reservations gain their authority either through a treaty made with the Executive Branch and ratified by Congress or directly through an act of Congress. In contrast, an

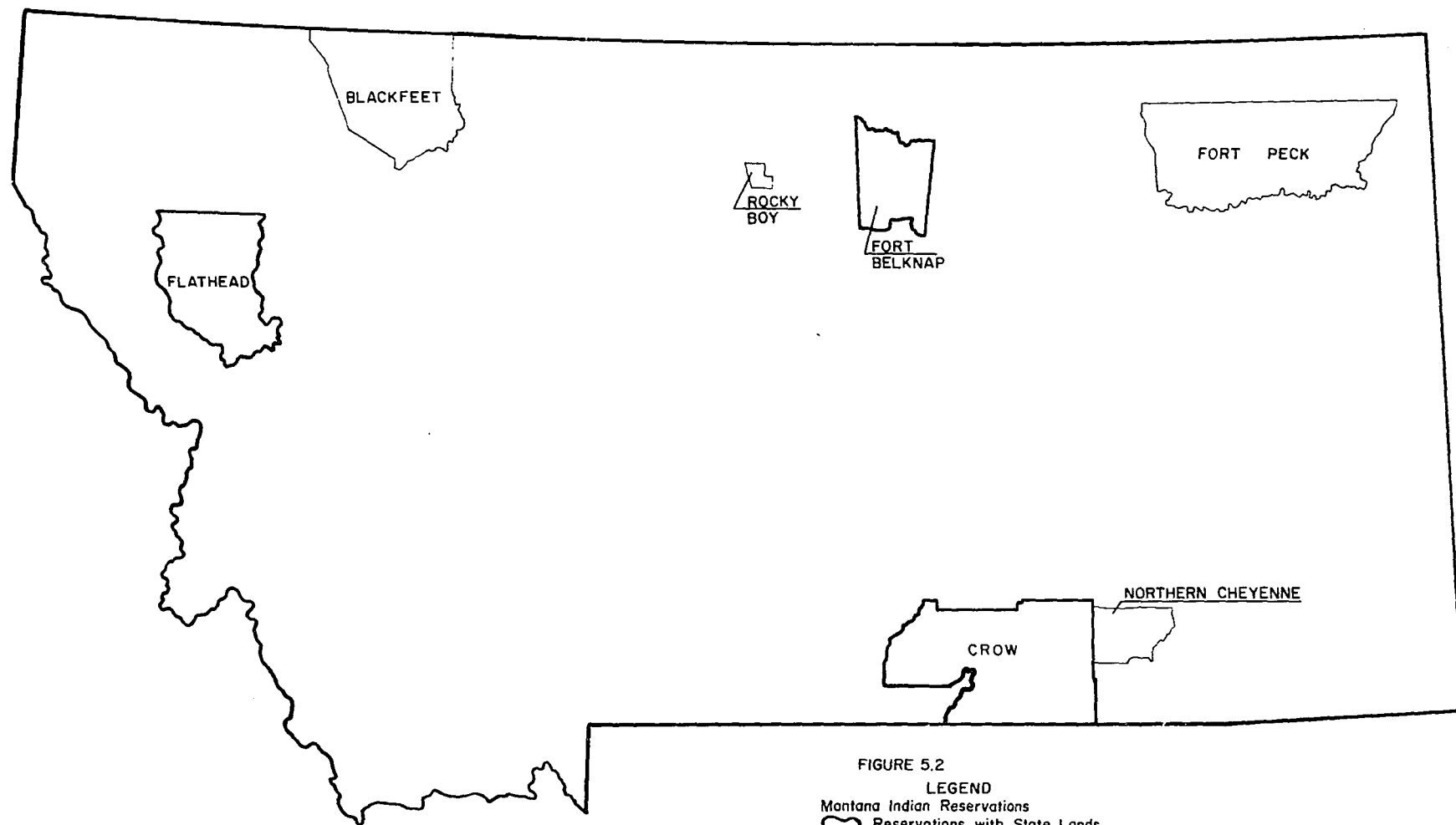


FIGURE 5.2

executive proclamation is needed to create an executive reservation. As a matter of protocol, Congress has far more authority over treaty-statutory reservations than over executive reservations. In Montana all reservations except the Rocky Boy are of the treaty-statutory type.

Two acts of Congress have seriously affected lands within the treaty reservations. The first is the *Dawes or Indian Allotment Act of 1887* (24 Stat. 388), and the second is the *Indian Reorganization Act of 1934* (48 Stat. 984). The *Dawes Act* dictated the allotment of homesteads to Indians and the eventual extinguishment of reservations. However, by the 1930's it was obvious that allotment was a failure in the sense that social integration was not achieved while conditions among "allotted" Indians were desperate. In response, Congress abrogated the *Dawes Act* in 1934 with the *Indian Reorganization Act*. The *Indian Reorganization Act* restored tribal government but stopped rather than reversed the allocation process.

Wilson (1972, pp. 19-22) used the land divisions of the *Dawes Act* and the *Indian Reorganization Act* to construct a classification of Indian reservation land tenure. All reservations in Montana except the Rocky Boy are of the "allotted-opened-reorganized" type recognized by Wilson. The classification "allotted-opened-reorganized" implies that the reservation was subject to the *Dawes Act*, and that allotment advanced far enough that all or part of the reservation was opened to non-Indian settlement. However, consequent settlement by non-Indians did not proceed far enough that the

reservation defied restoration under the *Reorganization Act of 1934*. Such reorganized reservations, however, frequently enclosed lands of the non-Indian settlers within the restored reservations.

This progression of legislation was important to Montana's estate. Between 1892 and 1934 the Board could use the *Lieu Selection Act* to relinquish land inside Indian reservations. However, since the *Dawes Act* promised the rapid demise of Indian reservations in Montana, relinquishment of Indian reservation lands was not imperative. If school lands were not relinquished by the time the reservation was opened, in place lands not allotted to Indians were conveyed to Montana. When reorganization was applied to these reservations the state frequently found itself being the major "non-Indian settler" surrounded by Indian reservations.

The remaining portion of this section explores the early relinquishments of land on Indian reservations and through an examination of a single reservation, the Crow, the process by which Montana became a landlord within Indian reservations.

Early Relinquishments

Prior to allotment of an Indian reservation, the state could elect to relinquish equitable title to in place lands in Indian reservations. Alternatively, the state could elect to retain the equitable title which would become an absolute title with the inevitable implementation of the *Dawes Act*. In Montana the decision to relinquish or retain was based upon the availability of potential lessees to land, the scarcity of state land to meet the demand for leases, and the value of the Indian lands relinquished in comparison

with other lands which might be relinquished.

The value of Indian land relinquishments was addressed by the Register of State Lands in his *Report* of 1900 (pp. 7-8) where he recommended:

...a careful examination be made [of reservation lands] to the end that those sections which are found to be... [worthless for a variety of reasons]...be relinquished to the general government, and lands selected in lieu thereafter. We can thus exchange about 400,000 acres of land...for an equal amount of first-class grazing land....

The Register's statement of 1900 was an appeal not for relinquishment of Indian lands, but for use of discretion in making relinquishments. Relinquishment of federally reserved lands in Montana had begun on June 5, 1899 (Minutes) though relinquishment of Indian lands did not begin until June 1, 1900 (Minutes) and that relinquishment, all in place lands in the Blackfeet and Fort Peck Indian reservations, applied indiscriminately to broad tracts of land.

The Register's request for discriminate relinquishment of Indian lands appealed to the Board. The next relinquishment came on January 28, 1901 (Minutes) and covered the Northern Cheyenne and Crow reservations "except those lands which in the view of the Land Agent should be retained." The Agent and Register appeared before the Board to detail the survey of the Northern Cheyenne and Crow Indian reservations on May 13, 1901 (Minutes). The survey of the Northern Cheyenne reservation was completed and all state lands on that reservation relinquished prior to the beginning of the abeyant period.

Lieu lands to replace the relinquished lands of the Blackfeet,

Fort Peck, and Northern Cheyenne reservations were made to fill lease applications in central Montana. However, the Crow reservation survey was not completed prior to the beginning of the abeyant period and relinquishment of lands in the Flathead and Fort Belknap reservations had not even been considered. Land on these reservations never would be relinquished. In 1909, at the end of the abeyant period, in place lands on Indian reservations had received scant attention. The Board's indifference was understandable. The rich grazing lands of central Montana were settled and potential lessees were relatively rare. In a tighter land market, the reserved forest lands had to be disposed or the opportunity would be lost, while based on the intent of the *Dawes Act*, it was believed that the Indian land problems would resolve themselves if left alone.

The Crow Reservation and State Land

The *Dawes Act* was only a general act which usually required specific legislation to consider the unique legal status of each reservation. Allotment came to the Crow Reservation in 1920 with the *Crow Allotment Act* (42 Stat. 576). A substantial portion of the act concerned the in place lands in the Crow Reservation. Montana was to acquire all Sections 16 and 36 in the reservation unless those lands were allotted to Crows or otherwise reserved to the tribe. The Board could select up to two sections in each township of the reservation to replace in place lands allotted to the Crows. The grant was subject to the provision that Montana assume the duty of educating Crow children. Though Montana's *Constitution* technically protected the educational rights of all children in the

state, special legislation was passed to accept the terms of the grant and assure the educational rights of the Crow children (1947 RCM 81-1201, 1203).

For a number of reasons, allotment was a national disgrace. The *Indian Reorganization Act of 1934* was designed to halt allotment and reverse the sad social degeneration of Indian populations. Tribal government was reestablished, allotment was halted, and the boundaries of the reservation reestablished. Private land owner rights within the reservation were recognized and protected though Congress was supposed to assist the Indians, through legal means, in acquiring private land within the reservation. The best assistance which Congress could offer, of course, would be money for land acquisition, something Congress has never done.

Currently, the largest private land owner in the Crow Reservation is Montana which owns 8,828.88 acres in place and 18,799.97 acres in lieu. The nearly 28,000 acres of state land are owned in dispersed isolated tracts. Being mostly low carrying capacity grazing land, the estate is useless unless it can be attached, through leasing, to large ranch units. The Board has generally permitted the Crow to lease the state lands along with Indian lands to operators on the margins of the reservation and direct appropriate compensation to the state.

The system, never particularly satisfactory, is functional only so long as the Crow lease their lands to non-Indian operators, something which the Crow are increasingly disinclined to do. The Crow themselves are hostile to paying rent on lands which they view

as theirs by right and tradition and which, in any event, can be used as free range unless the Board elects to fence its lands.

Indian-state relations are becoming increasingly hostile. Montana land administrators, of course, are obliged to wisely and profitably manage the land grant estate so resentment of the Crow attitude is justified. The Crow, likewise, reasonably resent the presence of the state within their reservations. Neither Montana nor the Crow invented the circumstances making them neighboring landlords so confrontations between the two will never lead to successful spatial segregation of their estates. Rather such confrontations will only raise the ire of both parties and contribute to the degeneration of state-Indian relations for no good purpose.

Inconsistent Congressional management of Indian affairs and state-land grants created an unsatisfactory land distribution within the reservations and only Congress can rectify the conflict. The Glacier Park Exchange suggests that Congress or the Executive Branch could purchase or trade for the state reservation lands. Montana land administrators, however, do not hold the negotiating leverage, land of national significance, which they held in the Glacier Park negotiations. Until negotiations leverage can be found it is doubtful if the federal government can ever be stimulated to take action on the state-Indian land problems.

Leverage to force a solution to state-Indian land conflicts can be attained only through a state-Indian agreement to present a common front to federal officials, and the only point of agreement is the mutual desire of both parties to be rid of each other. So far neither the Indians nor the state have produced the leader-

ship necessary to convert the common hostility into a common front before Congress.

Federal-State Land Conflicts--Conclusions

The land grants to Montana were made when eventual denationalization of the public domain was assumed. Within two years, however, denationalization of the public domain was no longer a singular national policy. The *Forest Reserve Act of 1891*, practically a legislative accident, was a radical change in national land policy for forest resources would no longer be delivered to the private sector. The *Forest Reserve Act of 1897* added clarity to the new land policy. The *Indian Reorganization Act of 1934* further reversed the policy of denationalization of the public domain with great impact on state-land management.

The shift of policy away from denationalization of public land was gradual and issue-specific; consequently, Congress has failed to consider the breadth of existent national land policy or the impact of reservation on established denationalization policies. For Montana, most Indian land legislation, all forest land reservation, and at least one national park organic act were written as if Congress had no knowledge of the grants made to Montana but a few years before.

Legally there was no conflict, for Montana could either relinquish the reserved in place lands, or await extinguishment of the reservation. However, the conflict between state grants and national reservation was more than a simple matter of legal technicalities. In 1889 Montanans assumed that Congress had promised a

given amount of land, and Montana land administrators planned on having that land. They consequently viewed increasing land reservation as a breach of the contractual intent under which Montana became a state.

Appeal to Congress for special legislation to reconcile reservation with the intent of state-land grants was a logical course to follow but, overall, it failed dismally. Where cash has been required to satisfy conflicting claims, Congress has been miserly to a fault. Congress could create empowering legislation, but as in the defeat of H. B. 10584, it as often as not failed even in this. Since Congress was unable to reconcile national reservations with the intent of the land grants, the burden of reconciliation fell upon federal and state bureaucrats and politicians, those very low in the policy-making hierarchy (Figure 2.1 and 2.2). Through use, and possibly abuse, of existing policies and laws, agreements have been reached between the states and the executive branch which satisfy the intent of the land grants.

Successful state-federal negotiations have depended, in large part, upon the quality of leadership provided by state and federal officials. Yet leadership was powerless without administrative flexibility and freedom to act. Flexibility was achieved generally by avoiding public attention and courts, and interpreting laws and policies as the amount and situation demanded. Still laws could only be twisted so far, so it was occasionally necessary for the Board to turn to the Legislature to acquire specific powers.

The problem of segregating state land-grant lands from

reserved land has not been solved to this day, and in this sense state land selection is a process as yet not completed. On three Montana Indian reservations, Indians and state officials face each other as neighboring landlords with little in common, save a mutual desire for each to be rid of the other. If that mutual desire leads to nothing more than confrontations, conflicts and possibly violence can be expected to plague land managers. If, however, the mutual desire to be rid of each other is sufficient to stimulate a common Indian-state cause before Congress and the federal bureaucracy, there is hope for a rational and sane settlement to Indian-state land conflicts.

CHAPTER VI

STATE LAND SELECTION OBJECTIVES

By April 1, 1891, the administrative hierarchy requisite to state land selection was fully operational. The bureaucrats and politicians faced a tremendous task. By the smallest estimate, they had to select 27.03 per cent, and at the most 48.65 per cent, of the 5,863,645.36 acre land grant.¹ Congressional and state legislation, though it prescribed many management rules, provided the politician and bureaucrat with little guidance in land selection. The land was to be selected from the surveyed, non-mineral, unreserved, public domain; the land for which every other aspirant to landownership was competing. Like other aspirants, the state had to take parcels of at least forty acres, the minimum cadastral unit of the U. S. survey. However, the state had one major disadvantage in competing for land. Although the state, through the governor, could petition the Surveyor General to survey areas where selections were desirable, petitions did not guarantee a survey. Unlike the private citizen, however, the state could not preempt or "squat" on land beyond the margins of the survey.

¹The smaller estimate is based upon the in quantity land grants plus the positive values in Column D, Table 3.2. The larger estimate assumes that all alienated land in the common school grant also had to be selected.

Although dictated and evolved policy defined the lands from which the state estate could be selected, the guidance was not particularly helpful, for fundamental questions were not addressed. What resources were to be sought? What locations were the most desirable? Should the state seek timber, farm land, grazing areas, urban land, or land in proximity to known or potential areas of population? Should the state attempt to acquire its lands in large contiguous blocks which would be easier to manage, but would concentrate in a few counties the burden of tax-exempt state lands? Was dispersal of the selected land desirable? Was there a desirable limit to the amount of land the state should own in each township?

Since the dictated and evolved policy did not attempt, at least initially, to answer these questions, the politicians and bureaucrats had to rely on their own values, attitudes, and preferences in formulating answers. The beliefs and perceptions of those making state land selections, thus, became more important than written policies and laws in determining the final geographic distribution of state lands. State land administrators, however, were seldom novices in land economics and institutions. Most of the state land-management office holders were in their positions at least in part because they had distinguished themselves as pugnacious if not vicious competitors in the turbulent frontier land market. They could be expected to be thoroughly familiar with land resource potentials and the use and abuse of institutional aspects of land disposal and transfer. As thoughtful and often

well-educated men, they brought to their offices valid, if desultory, concepts of land institutions and values. These beliefs arose from experience and made sense to them in the social context of the day.

The social context in which decisions were made cannot be overlooked without doing injustice to the reputations of devoted public servants. Hopefully, the approach used here permits us to capture some of the flavor of Montana at the turn of the century, and allows us to view the work-a-day world of the politician and bureaucrat in that light. Yet, it is as impossible for us to duplicate the historical context in which many fundamental land decisions were made in early Montana, as it will be for social scientists a hundred years from now to completely understand the events which are determining coal development today.

This chapter explores, in light of the material presented in Chapter II, the beliefs, values, and attitudes of the politicians and bureaucrats whose decisions eventually created the spatial patterns displayed in Figure 4.2. To accomplish this task, the political and environmental objectives which eventually areally concentrated the dispersed state lands are explored. From the analysis, an understanding of the fidelity of the bureaucrats and politicians to the dictates of their beliefs, as well as an understanding of the compromises with their beliefs which reality forced them to make, emerges.

The Theme of Insufficient Land

As anticipated in Chapter II, an important theme in the selection of state land is the mood of desperation created by a fear that there was not enough land available to fill the grants. In Montana the sentiment, often approaching panic, was ubiquitous through the period of active selection despite the millions of acres of unoccupied and unclaimed land which surrounded the administrators on all sides. The sentiment was expressed by the Territorial Superintendent of Public Instruction in 1882 (pp. 20-21); it is mentioned by the Board at the appointment of Granville Stuart (Meeting, April 1, 1891); and dominates the behavior of the bureaucrats involved in the 1958 Glacier Park Exchange.

In one sense the lack of available land was a real rather than imagined problem. The administrators, seeking a productive estate, wanted the lands selected immediately, but at any one time there existed only a small amount of surveyed available land, and with the sluggish progress of the survey, selection promised to be perennial. The torpid surveys irritated Montana administrators and did little for federal-state consonance. Little was availed by the governor's hastening surveys by request if there was no money for a survey. For example, the rejection of an early request for a survey of twenty-seven townships in Teton and Chouteau counties so irritated the Board that on June 10, 1893 (Minutes), Governor Rickards was ordered to Washington to negotiate with the Interior Department. Rickards telegraphed the Board on June 16, 1893 (Minutes), that the Interior Department was not inclined to approve a survey costing more than \$5,000, particularly when the

state offered no guarantee that it would select land in the survey area. He requested, "If I can promise to take [a] large quantity [I] think my work will be easier, though I have a hard job before me. Wire information." The Board promptly responded (Minutes, June 16, 1893) that the state would select 250,000 acres and "more if available." ~~The figure quoted was apparently made up on the~~ moment. The state won its request only because the funds for surveys would be lost if not committed by the end of the fiscal year.

On December 26, 1895 (Minutes), Rickards was again in Washington to argue that at least one-third of the money allotted for surveys in Montana should be spent only on state requests. He was not successful. A formal resolution was sent to the Surveyor General of the United States on June 27, 1898 (Minutes), asking him to hasten the Montana surveys. As selection was re-initiated after the abeyant period, the governor and attorney general were sent to Washington to pressure again for, among other things, completion of the survey of Montana (Memo, December 30, 1911, Forest Land Exchange Folder, Vault Files, Montana Department of State Lands). However, whining over the survey's progress dissipated only as selection of the grant was completed.

Conduction of the survey frustrated land selection. So long as the progress of the survey was a barrier to land selection, there was not enough land in Montana to fill the grants. However, the theme of insufficient land cannot be fully explained by the slow progress of the survey. As theories of Ricardo and Von Thunen might suggest, administrators recognized that land could

be obtained, though obtaining land of value was more difficult. Consequently, in terms of potential value there was insufficient land to fill the grants (Montana Board, 1892, p. 7). Land Agent Stuart, in his *Report* for 1892 (p. 30), gave expression to the problem of value in making land selections:

In States like the Dakotas the land is mostly quite uniform in quality, and a great deal of it could be fairly selected from examination of the Land Office plats...but in Montana such a course would be disastrous...because the sections, and even parts of the same section, differ greatly in value....The necessity of making a personal examination of a large number of sections...before I could determine what was worth taking has made my work seem slow, and it has been very laborious.

Dakotans might have taken issue with Stuart's evaluation of their land selection problems, but the statement clearly suggests that Montana lands were thought of in qualitative categories which were judged on their economic potential.

Quality lands were necessary to the attainment of revenues from the state land-grant estate. Quality lands were in short supply, and consequently the land selectors realized that insufficient lands were available to fill the land grants. Theories of land value presented by Ricardo and Von Thunen (Chapter II, this study) suggest that the conversion of even quality land to cash through sale or leasing would be difficult at best on a frontier. Any compromise in quality of selected land would simply delay further the realization of profits. Recognizing these prospects intuitively, the anxiety over insufficient land would only be enhanced among the administrators. The remaining portion of this

section explores the seriousness of the revenue production problem by reviewing the actual condition of land sales and leasing in Montana. The implication is that in meeting the environmental objectives of state land selection, the administrator was wise to consider factors other than absolute fecundity of land if he was interested in short-range returns. These other factors were the social environment of land rather than the mere physical environment.

Land Sales in Ricardian Economics

One obvious way to make money is to convert land into cash which may be invested. For most states this is attractive for it frees the government from the problems of being a landlord. Congressional policy thwarted land sales in Montana as a management strategy, however. To most settlers, the minimum supply price per unit of federal public domain was, essentially, zero. The minimum supply price per unit of state land was set by Congress at \$10.00 per acre while the minimum supply price per unit of state grazing land was eventually lowered to \$5.00 per acre (47 Stat. 150). Consequently, only the most fertile and best located of state lands could attract potential vendees while the remainder of the estate remained unattractive because it was too expensive. Even after public lands were no longer available, vendees could not be attracted until the unit productivity of the land exceeded both the product price and the minimum sales price of the dictated policy. For example, in the case of the 168,000 acres obtained by Montana in the Glacier Park Exchange, the average appraisal was \$4.79 per acre

which, since the appraisal included mineral value which cannot be alienated by Montana to a vendee (1947 RCM 81-902), is substantially below the minimum sale price. A vendee had to donate to Montana the difference between the appraised value of the surface resources and the minimum sale price. Since few vendees are willing to make such a donation, land sales have been difficult.

If, however, land administrators were willing to sell land as soon as it became attractive to vendees, the sale price on state lands would remain through the history of land sales close to the minimum sale price. In studying grant land sales in Iowa, Lokken (1942, pp. 154-179) observed that the average sale price remained remarkably constant and close to the minimum sale price despite rampant speculation and inflation. Speculation and inflation, so long as the state was willing to sell land at the minimum price, only hastened land sales rather than raised the price. In Montana, in the period 1899 through 1919, the average of the yearly average sale price per acre was \$14.42 (calculation based on Montana Register of State Lands, 1948, Table 16) even though the period is marked by rapid agricultural settlement, the dry farming experiment, high product prices, and rampant inflation and land speculation (Toole, 1972, pp. 25-58). Under these conditions, a figure of \$14.42 per acre is very close to the minimum sales price of \$10.00 per acre.

Leases in Ricardian Economics

To the extent that sales were impossible, revenue had to be derived from contract rent produced by leasing the lands.

Obviously, in the long run, better quality land would produce more contract rent since its increment of unearned rent is larger, and this was reason enough to make selectors seek high quality land. However, Ricardo's interpretation of land rent suggests that high quality land would not begin accruing rent until a lower quality land was being settled. There is little reason for anyone to rent high quality land so long as high quality land is still available, essentially free, from the federal public domain. The leasing of high quality land is only possible, other things being equal, when all high quality land is taken and settlement is active in lower quality land. This suggests that a large proportion of the state lands would remain unleased and unproductive for a long period of time. The suggestion is valid; in fact, the proportion of the estate leased has grown only slowly (Table 6.1).

The land selector could not even be assured that selected land would ever be of value. Since society needs the produce of that land, land on the extensive margin attracts settlers, though not enough that they are willing to pay rent for the land. Beyond the extensive margin lies land which is not even attractive to the settler. Land selections on or beyond what would ultimately become Montana's extensive margin consequently would not accrue unearned rent so would be forever useless to the state. All state land in Montana was eventually leased (Table 6.1) but the early land selector had no way of knowing of this eventuality. Again, selection of land as near as possible to the intensive margin of Von Thunen and Ricardo assured not only the earliest possible rent accrual and the

Table 6.1. Proportion of the Montana Estate Under Lease, Selected Years.

Year	Per Cent of the Estate (Managed by Montana) Leased
1900	14%
1914	62%
1930	63%
1938	68%
1942	86%
1948	92%
1970	+100% (Through Multiple Leasing)

Source: Author's calculations based upon Montana Register of State Lands, 1900, pp. 9 and 11; 1914, Table 5 and p. 9; 1930, Table 12 and 14; 1938, Table 18 and 19; 1942, Table 19 and 22; 1948, Table 17 and 20; Montana Commissioner of State Lands, 1970, pp. 1-2.

greatest possible eventual land sale, but the greatest possibility that the selected land would have any value at all.

Political Objectives of State Land Selection

The purpose of this section is to examine the relationship between state land selection officials and the Montana resident. Relations between the state and ranchers as individuals and as a group are examined first. The individual farm settler's relations with the state are then explored, followed by relations between the state and groups of farm settlers and local government. The conclusion is that maintenance of state-citizen relations were objectives of land selection as real, important, and serious as the economic and environmental objectives.

The Rancher and State Land Selection

Even if selected wisely, state lands would remain vacant and therefore unproductive for a long period. Yet, making money was the objective of state land administration. There existed a solution to this dilemma if there existed a sub-population in the state which required greater access to cheap unoccupied land than provided through the homestead laws. To this class leasing, if not purchase, of state land would be attractive. The rancher population in the state filled this important niche in Montana land policy.

Because of the need for seasonal pastures, western Montana ranches were always based upon relatively large capital intensification. Osgood (1929, pp. 56-57) describes one such ranch on the Beaverhead River in southwestern Montana in the 1870's. The operation consisted of 500 horses, 3000 cattle, 3000 sheep, 40 pure-bred cattle, 75 pure-bred sheep, and dairy cattle producing 7000 to 9000 pounds of butter per year. Besides buildings and livestock shelters, the "homestead" consisted of 500 acres of developed crop and hay land. The operation depended upon 19,200 acres of land divided into summer and winter pasture, all illegally fenced.

Eastern Montana ranches were originally more extensive. Cattle were simply put on the range to multiply naturally. The range livestock industry was speculative, to a degree dependent upon foreign capital, and dependent upon legal control of only a small amount of land. Pierre Wibaux, for example, owned only 160 acres but ran his herds between the Missouri and Yellowstone rivers on a

range of fantastic proportions which nearly amounted to a fiefdom (Dick, 1941, p. 477).

There were few competitors for the eastern range lands, but since these huge estates existed without legal foundations in land, they were hard to protect from small settlers. Although vigilance committees occasionally directed their wrath at settlers instead of rustlers, violence was seldom either socially acceptable or prolonged. The threat of settlers to the range livestock industry, however, never reached its full potential because the environment took its toll first. Following the dry summer of 1886, the herds froze to death in the bitter winter of 1886 and 1887. In the blizzard's wake many ranchers, such as Granville Stuart, went on to new careers. Others began rebuilding their operations along the lines of the more cautious but enduring western Montana intensive model ranch unit.

The intensive ranch unit required little land but demanded a secure title to a greater portion of the ranch unit. Pasturing had to be carefully controlled which meant fencing, winter feeding areas, water holes, and land suitable for hay production. Those who controlled these vital resources held *de facto* control of the extensive pastures and so had no need for legal control of them.

To gain control of the range, however, required more land than a rancher could easily obtain through the homestead laws. Leasing state land presented an obvious opportunity for the rancher to solve his land problems. Hence, if the state wanted an early income from its estate it had only one potential customer, the

rancher. Circumstances conspired to make partisans of ranchers and state land administrators. Criticism of these cordial relations has been frequent (Most, 1943; Gladen, 1970) though the critics have failed to understand that state officials had little alternative but to cater land selections to the rancher's needs.

The system of catering land selection to ranchers, though there were many variations, was remarkably consistent. Once a rancher identified land he desired to control, he petitioned the Board to select it and promised to either lease or purchase after acquisition. Routinely, the petitioner defended the land's potential value. For example, on March 5, 1898, A. Lincoln of Deerfield, Fergus County, wrote Governor R. B. Smith that since he was "surrounded by sheep" he was desirous of leasing eight and one-half sections "of the most extensive meadow land in the County," land which would "always rent" if selected by the state (35a-26-9 MHS).

Selection of the petitioned lands was hazardous. If the petitioner reniged on his promise after selection, there was little the Board could do under Montana's open range fence law to prevent the petitioner's free use of the land except to fence it. The good faith of the petitioner was assured by financially committing him, through bonding, prior to the selection. The bond required was normally the minimum sale price if the petitioner promised to buy the land and the first five years rent, generally \$80 per section per year, if he was seeking only a lease.

This general model was provided for by law (Montana Laws of 1901, p. 174 c), and was equalitarian in the sense that it was

available to everyone, though having the cash for bonding limited the system to those of some means. At this point, however, the Board deliberately and routinely issued leases to defraud the United States. In Meagher County, for example, the Board issued leases to 37,487.20 acres on July 11, 1898 (Minutes) though the lands were not selected until June 27, 1898 (Minutes). Selection passed to the state an equitable title with no implication of exclusive or possessory interest while the exclusive title remained with the federal government until the lands were acquired by the state. Consequently, the Board passed to lessees land rights which it did not possess.

This procedure could have caused trouble. Lessees were using invalid leases to exclude others from public lands open to traditional transitory uses either permitted or overlooked by law. Further, the state might be denied the exclusive title to the leasehold it had created. The first problem, apparently, never directly arose. The second problem did arise, but the lessees understood the process. If acquisition were denied the state, the lessees simply retrieved the unused portion of the bond (see for example, Minutes, May 25, and June 10, 1911). At least no one ever sued the Board for completion of the lease contract, probably because none dared to. On October 28, 1915, the Montana Attorney General ruled that leases issued prior to acquisition were "ineffectual for any purpose whatsoever" (6 Op. Mt. Atty. Gen. 265). Legal or not, there can be no doubt that the system was profitable and in the interest of Montana, even if it did pervert the common law.

Rancher-State Contentions

There can be no doubt that ranchers were privileged before the Board. The lands that the rancher wanted selected were usually selected, and these selections often gave the rancher *de facto* control of much public land. Even though leases were issued to ranchers before the state had any interest to lease, the privileged status of the rancher was subject to politico-economic limits.

Range conditions in Teton County about 1900 provide the best example of the limited scope of ranchers' privileges before the Board. On March 17, 1900 (Minutes), the "residents" of Teton County complained that leases of critical state water holes to the Sun River Land and Stock Company would cripple the residents' ability to keep herds and flocks on the range. The *Chouteau Montanian* (March 23, 1900, p. 1) noted that the residents asked the Board of County Commissioners to support the protest and editorially praised the decision of the County Commissioners to assist the settlers (March 30, 1900, p. 2). On April 12, 1900 (Minutes), the Montana Land Board ruled that leases to the water holes would be made to the Board of County Commissioners, thus maintaining the water holes as public property.

On June 1, 1900 (Minutes), Teton County residents protested leases to the Sands, Taylor and William Flowerree Sheep and Horse Company. After a closed hearing (Minutes, July 9, 1900), the Board issued the leases to "a settler," D. A. Ricardson. Although Ricardson was an obscure individual, William Flowerree was not. William, the son of the "cattle king," Daniel Flowerree, held three earned

degrees from eastern universities and managed his father's estate as well as the American Bank and Trust Company of Great Falls (Stout, 1921, p. 583). Although Flowerree was obviously an illustrious rancher, his lease application was denied in favor of the obscure Ricardson.

Meanwhile, Flowerree disputed, before the Board, leases to J. P. Woolman, a merchant-rancher and Republican of considerable import (Minutes, July 19, 1900; Progressive Men of Montana, pp. 494-495). Unfortunately, the solution to this confrontation is not recorded. It is certain, however, that Woolman and Flowerree willingly submitted their land problems to the Board and peaceably abided by whatever decision was offered.

Teton County was not the only area to witness denial of ranchers' lease applications. For example, while the Teton County problems were before the Board, residents of Fergus County protested potential water hole leases to the Libby-Merril Company (Minutes, June 7, 1900). The decision (Minutes, June 28, 1900) was to deny all lease applications, and in effect, maintain the water holes as public property open to all users of the range.

Although ranchers' lease applications were occasionally declined, rent was a more serious point of contention. The usual bond for a lessee was \$80.00 per section per year, a fixed contract rent which was eventually altered to consider the livestock market and the carrying capacity of the land (1947 RCM 81-402). Fixed or flexible, grazing land rent has been viewed as exorbitant by ranchers and criminally low by scholars (Murray, 1942; Gladen,

1970; Most, 1943; Cole, 1966 and 1968). To the rancher, however, any rent not highly responsive to the notoriously unpredictable livestock market is potentially exorbitant. Further, none of the scholarly criticism of the low rental rates has recognized that users of state land generally sacrifice freedom to negotiate terms when dealing with the state as a landlord. Land is rented at prescribed rates and under prescribed rules, or it is not rented. The sacrifice of a lessee's right to negotiate justifies a lower rent than would usually be charged on similar private land.

On occasion, however, ranchers have been able to force the Board to negotiate. The classic example occurred in Valley County in 1929. On June 19, 1929 (Minutes), the State Land Agent appeared before the Board with three ranchers to report their request for a rent reduction. Between 1918 and 1927 the ranchers had leased only the water holes on a 47,800 acre tract of land, using the rest of the tract as free range. In 1927, the State Land Agent, appealing to the ranchers' citizenship, convinced them to lease the entire tract at \$75.00 per section. Although the ranchers freely admitted that the land was worth \$90.00 per section, they argued that the Board lacked competitors for the land; thus, if the request for a rent reduction was denied, the ranchers would not renew the leases but use the land as a free good. On May 11, 1929 (Minutes), the Board instructed the State Land Agent to make the necessary arrangements with the ranchers to assure that all 47,800 acres remained leased.

Overall, since ranchers were the state's only consistent customer for land, relations between the Board and the livestock industry were cordial to the point of being suspect. However, the cordiality was limited. Livestock lease applications were denied, often in favor of obscure settlers. Apparently, the Board was willing to assist ranchers in obtaining land rights necessary to guard their estates prior to settlement, but the Board was not willing to use its lands to protect ranchers from settlers already in the field. If contract rents have appeared ludicrously low to students of state lands, the rents have appeared exorbitantly high to ranchers. Ranchers have been unable to lower the contract rental rates beyond a certain point unless they held special spatial advantage and a monopoly on the competition for the land they sought.

The Settler and State Land Selection

In 1901, Sutherlin published a brief criticism of Montana state land administration. He held that if state lands had been selected to please the farmer instead of the rancher, the estate would have provided 6,000 agricultural homesteads. Sutherlin failed to understand that at \$10.00 per acre a state-supplied homestead was no favor to the agriculturalist. To the extent that the Board was interested in settler prosperity, the best it could do for the settler was avoid contact with him. Yet, as has already been discussed (Chapter II, this study), the geographic arrangement of available land on the frontier forced settlers and the state to compete for land. A number of laws, however, acted to differentiate state-settler interests in land and thus reduce competition and consequent confrontation and conflict.

So long as the survey was lacking, the state could not select land, but under the *Homestead Act of 1862*, the preemption settler could settle the land he desired without fear of state interference in his affairs. Although preemption gave the settler choice of the best land which was to the state's disadvantage, it at least effectively separated interests of the settler and state.

After the survey the land was open to all, so state officials and settlers competed intensely. In this competition the state bureaucracy was unable to react quickly to crisis, and consequently it normally lost, a situation which fretted administrators, especially when the state had requested, and possibly helped pay for, the survey. The *Priority Selection Act of 1893* (28 Stat. 394) was designed to correct this situation. Upon state request, the law required that after approval of a survey the land would remain closed to settlement for sixty days while state officials made land selections. In fact the law gave to state officials more power than they dared, for political reasons, to use. A sixty-day priority to select land where the state had requested a survey and given notice of its predetermined interests was fair, but a sixty-day priority period for the state in cases where settlers had requested a survey would hardly have been popular. Consequently, the Board only took advantage of the *Priority Selection Act of 1893* where the state had requested the survey (see for example, Minutes, April 13, 1894).

As another way of avoiding state-settler conflicts, the state conducted its own field survey of prospective land selections. The state surveys sought to determine the environmental character-

istics of the land and to identify lands which were subject to settlement. As a practical matter, to avoid conflicts the rights of a settler were recognized whether he legally or illegally settled on the land.

Montana's citizens had recognized the serious ramifications of citizen-state conflicts, and they offered the Board some guidance in resolving state-settler conflicts. In the event of conflict, "...preference shall always be given to actual settlers thereon [the land]..." (1889 Mt. Const., Art. 19, Sec. 7). The phrase essentially puts the Board and the state courts on notice to resolve state-settler conflicts "by equity, or 'natural, logical justice,' as opposed to the stricter rules of the common law. Of course, this mandate only applied where Montana held jurisdiction. Jurisdictionally, where absolute title had passed to the state only the federal government could abrogate the trust and award the land to another party. Where the state did not have absolute title, that is on selected lands not yet acquired, the Board held jurisdiction and could resolve conflicts simply by amending selection lists to exclude the contested lands.

In fact, with one exception, the Board and bureaucrats succeeded in astutely avoiding selection of settled or squatted lands. In the Forest Land Exchange, most of the bureaucracy was committed to surveying the valuable timber resources of northwestern Montana, so lieu land selections in Valley and Daniels counties were made without surveying the lands. When the Governor issued the Proclamation of March 10, 1910, withdrawing hundreds of sections from the

public domain in Valley and Daniels Counties, many settlers were already on their way to new homesteads in what, unknown to them, was a state reserve. These settlers could not have known of the Proclamation of March 10, 1910. As a matter of common law, their ignorance was their fault for constructive notice of the proclamation had been published. As a matter of equity, however, the Board was obliged to rectify the harm done to actual settlers. A series of mass hearings, the "Scoby Land Contest," ensued.

The Scoby Land Contest consisted of 124 appeals between May 6, 1914, and January 29, 1918 (Minutes). Of these, fifty were found in favor of the appellants and the selection lists modified to exclude their homesteads; sixty-seven went against the appellants; one was dismissed as irrelevant; five were remanded for further investigation; and one was under the jurisdiction of the Interior Secretary. Examples (Minutes, May 6, 1914) of reasons for awarding land to settlers were, "few cows, selling butter; wife and infant child all living there and making good; himself and family living there and farming; 180 acres in flax; fair house and barn; wife and three children with horses and some cattle; victim of mistake of U. S. Land Office; and, granted as charity only." Reasons for denial (Minutes, May 6, 1914) were, "small shack; no breaking; claimant is a lawyer in Scoby; no crop; more land than he can farm; came from Canada; not a citizen; and only postage stamp speculation." From the cases it was obvious that the Board was willing to grant equity to a genuine settler who was harmed through the state's failure to survey the selected lands, but intolerent of

"postage stamp speculators" attempting to take advantage of the Board's kindness.

The reasonableness shown by the Board in the Scoby Land Contests inspired others to attempt to take advantage of the state. "Avaricious professional locators" encouraged settlers fraudulently to enter state land and to appeal to the Board to clear title to the land. The Board had no tolerance for the procedure, so the "locators" turned to Congress, and asked it to intercede on behalf of the settlers. On April 7, 1916 (Minutes), the Board petitioned Congress to avoid entering into land questions which were entirely a matter of state jurisdiction. Fortunately, Congress took the Board's advice.

The degree to which the Board could be firm with the settlers was demonstrated in Fergus and Choteau counties in 1917. On June 9, 1917 (Minutes), a number of "squatters" appeared before the Board begging it to relinquish Montana's equitable title to their "homesteads" so they might be able to file claims. The Board was merciful in the sense that the squatters were allowed to gather their 1917 crops. However, the squatters were expected to be off the land by January 1, 1918. Subsequently, the squatters appeared before the Board with a lawyer but did little better (Minutes, June 28, 1917). They could compete for leases on the land like anyone else, in which case their improvements on the land would be disposed of according to statute. If they did not compete, they would be expected to be off the land by January 1, 1918, and any improvements left on the land after that date were to become state property

(Minutes, July 11, 1917). The Board did not relish such conflicts. When land selections were begun in Carter and Powder River counties, the field teams were strongly admonished to identify, if nothing else, occupied land.

If the rancher was privileged before the Board, so, though in different ways, was the small agricultural settler. While state lands could benefit the rancher, they were nothing but an impediment to the agriculturalist. In adapting and expanding upon policies found in the *Homestead Act of 1862* and the *Priority Selection Act of 1893*, the Board categorically avoided conflict with agricultural settlers. Generally, the Board was successful in this objective. In the few instances where conflicts could not be avoided, the Board seriously undertook its obligation to provide equitable settlement. Possibly the best measure of the Board's quasi-judicial record is the openness with which cases were heard and the few appeals beyond the Board to higher courts and authorities. Apparently, most appellants were satisfied with their treatment before the Board. Speculators erred, however, in interpreting the Board's fairness as timorousness. The Board, while merciful to the honest man, was quite capable of defending itself from the unscrupulous.

Local Government and State Land Selection

The citizen, and consequently local government, generally supported wise state land selections. Indeed, in livestock areas, local government often assisted ranchers in attracting state land selectors to their area of the state. In agricultural areas, how-

ever, state land concentrations were unpopular for two major reasons. First, state lands were expensive, so they were generally unavailable to small and poor settlers. Local governments consequently regarded state land as thwarting the economic development of the rural community and the local economy. Second, if state lands were not sold by the state, they were not subject to local property taxes. The geography of state lands, thus, had an important affect on the distribution of the property tax burden.

These two objections to state land concentrations were stated at an early date. Concerning prospective land selections in Chouteau County, State Land Agent Stuart in 1891 wrote:

As usual, sentiment in that vicinity desires it [the land] be thrown open to settlement, and would oppose its being granted to the State, if they [the settlers] knew it was contemplated. [Field Notebook 1, p. 39, entry dated June 28, 1891, MHS].

Petitions opposing land selections were submitted by residents of Flathead (Minutes, July 1, 1893) and Beaverhead (Minutes, February 28, 1898) counties. Normally, since such local opposition was unlikely to become a state issue, the Board simply disregarded the petition.

However, the Legislature did pass laws aimed at restraining the Board's enthusiasm for concentrating land. The *Selection Act of 1897* (Laws of Montana, 1897, p. 193) limited land selections to 200,000 acres per county. The statute was, however, toothless for it did not apply when, in the Board's judgement, there was no alternative but to concentrate more than 200,000 acres in a county. The *Selection Act of 1907* (Laws of Montana, 1907, p. 100) limited land selection to 100,000 acres per county, irrespective of the Board's

judgement. The Board, however, simply made decisions as if the law did not exist (Montana Legislative Council, 1956, p. 7).

If most Boards generally ignored local protests to state land concentrations, the Board of Governor Toole between 1901 and 1909, took the protests seriously. For all practical purposes, during this, the abeyant period, Toole's Board stopped all land selection. The apparent reason was local protests from central Montana. Between 1897 and 1901, the Board had selected vast acreages at rancher's requests while agricultural settlers flooded into central Montana through Great Falls, the town Paris Gibson had built. On May 13, 1901 (Minutes), U. S. Senator Gibson himself appeared before the Board to express his opposition to all state land selection. The Board responded on May 25, 1901 (Minutes) with new selection policies. The *Selection Act of 1897* would be adhered to. Further, contiguous selected sections would be limited to two per township in counties with more than 50,000 acres of state land and three in counties with less than 50,000 acres. To this the Board added that further relinquishment of state lands in federal reservations would be curtailed (Minutes, April 15, 1902), and that in the future no leases would be made except at public auction (Minutes, June 4, 1902). The self-imposed restraints, apparently in response to local protests, effectively terminated land selection until governor Norris took office in 1909.

Local opposition to land selection is the apparent explanation for the abeyant period. In fact, it is not a good explanation. Toole had been the first governor of Montana, and in that adminis-

tration he had appointed Stuart as Land Agent and enthusiastically pursued state land selection. Further, Toole's Board between 1901 and 1909 was exclusively Democratic, so it had little reason to cower before the single protest of Gibson, a Republican. There is little to suggest that any member of the Board during the abeyant period was elected on a state land issue.

The alternative to the hypothesis that the abeyant period was a response to local protest is to accept the fact that many things were done during Toole's administration which are not fully understood. Governor Norris thought that the administrative policies of Toole's Board were mysterious. After succeeding Toole, Governor Norris initiated investigations of Toole's Board. No criminal abuse was revealed; but the investigation found the administration of the forest lands to be in shambles (Anderson, 1940, pp. 72-94). The *Minutes* during the abeyant period are little more than lists of land offered for sale. The substantive information available in the *Minutes* suggests that Attorney General Donovan, whose erroneous legal opinions are rife in the *Minutes*, rather than Governor Toole, controlled the Board. The abeyant period is not only a period of little land selection, but also a mysterious period in the records of the state land administration. Whatever its cause, there can be little doubt that valuable time in the selection of state lands was lost. In this sense, the Toole administration was negligent in its responsibilities.

Normally, Board members eschewed debate with local authorities over the wisdom of concentrating state land in local areas.

This tactic minimized the possibility of a local issue becoming a state issue. However, there was one exception to this behavior which is important for it reveals that local protests to state land selection were not always ethical, and that state attitudes toward local protest could be surprisingly crass. The selection of the Swan River State Forest, a part of the Forest Land Exchange, encountered the staunch opposition of the Kalispell Chamber of Commerce. Governor Stewart openly engaged in conflict with this group over the issue.

The Kalispell Chamber of Commerce protested transfer of the Swan River area from federal to state government on September 29, 1915. The contents of the protest have been lost, but subsequently a Kalispell citizen wrote the governor that the Chamber was a tool of a "company" seeking to keep the forest lands in federal control where they were more easily exploited (October 6 and 16, 1915, 35-231-3 MHS).

After an extended period of silence Stewart replied to W. H. Griffin, President of the Kalispell Chamber of Commerce (November 2, 1915, 35-231-3 MHS). The letter was remarkably harsh in its tone. According to Stewart, "[N]o intelligent man would question the wisdom of the exchange." The only reason for opposition to the land acquisition was that Griffin feared that the Somers Lumber Company would be unable to obtain the timber for the "give away" price of national timber.

Griffin replied on November 9, 1915 (35-231-3 MHS). After defending himself and the Kalispell Chamber of Commerce and a routine condemnation of state land generally, Griffin raised a salient issue.

The acquisition of the Swan River State Forest was a violation of the *Selection Act of 1907*. Griffin's point is correct. The Board violated the *Selection Act of 1907* not only in Flathead (present day Lake County), but also in Chouteau, Daniels, Valley and Beaverhead counties before the act was repealed in 1921. Stewart replied to Griffin that as a believer in public debate he would look forward to reading Griffin's letter (November 13, 1915, 35-231-3 MHS).

This type of public debate was unusual for Board members, but for a public official to be so blunt was even more unusual. Even more astonishing, although Griffin raised a persuasive legal point, that the exchange violated state law, he did not pursue the point. Though there exists no satisfactory explanation for Griffin's failure to pursue his point in court, it is important to realize that, without judicial challenge, the Board's actions in Flathead County were final and binding irrespective of the state laws they violated.

Political Objective--Conclusions

As a political entity the Board was dependent upon the people and their political representatives. Consequently, the Board made land selection decisions that were acceptable to the people. Because ranchers need inexpensive access to large tracts of land, state land selection found its greatest political support in ranch communities. Though inexpensive to lease, purchase of state land came dearly, especially when compared with federal homesteads. State lands were not only useless to, but an impediment

to, farm settlers. Consequently, the Board was wise to avoid farmers and areas of the state suited to farming. Failing to avoid conflict with the settler, it was wisest to capitulate rather than pursue purely legal logic to its end. Local governments presented the most elegant denunciations of state land selection and ownership.

A number of factors helped the Board meet its political objectives. Laws made the Board's actions credible. Law enabled the selection of land which users had promised to lease and advised the use of equity when conflicts occurred. Federal law attempted to spatially segregate state and settler interests in land, and thus reduce the possibility of conflict.

The Board, however, relied on its own political acumen as much as law. It had to decide when to apply equity and when to apply law to settlers, ranchers and citizens. The Board realized that political protests from local governments seldom expressed a statewide sentiment, so it generally disregarded local protests. Indeed, silence was the prevailing tactic in land selection for silence avoided attracting attention to the Board's activities. Meetings and hearings were usually open but they were seldom advertised, and public hearing on land selections were unheard of. Court proceedings, because they tended to expose the entire land selection process to public view, were avoided. This rubric was violated by the Idaho Board in *Balderston vs. Brady*, and the result was chaos even beyond the borders of Idaho.

Not all of the methods the Board applied were morally

attractive. Equity, since it requires subjective moral judgement rather than the application of strict rules of law, is difficult to apply and easily seduced by favoritism. The Board excelled at equitable judgement, and there is little in the *Minutes* to suggest favoritism. Still, the use of equity made decisions of the Board unsystematic and unpredictable in the sense of the order demanded by common law doctrines and for this reason the Board is suspect and subject to criticism.

If this were the only shortcoming of the Board, however, it would be minor indeed. When all else failed, the Board neglected the law in order to meet its objectives. Administrative neglect of legal dictates to meet legitimate administrative goals is illegal and enjoined but not criminal. The Board did not make decisions which were criminal, that is the deliberate misallocation of public property for personal profit, except possibly during the abeyant period, or if they did, they hid them well. Still, though official approval of worthless leases and routine violation of such state laws as the *Selection Act of 1907* was not criminal, the actions were illegal and an ugly perversion of legislative intent and the common law.

Though the behavior of the Board in these matters was inexcusable, the decisions were made, apparently in all cases, with the good of the state in mind. For example, it generally took more than two years for the Interior Department to approve a state land selection, and during that two years the land would have provided no revenues to the state if the Board had not decided to make

legally questionable leases during the pendant time. The realization of the situation does not exonerate the Board, but it is clear that the Board found it necessary to neglect principles of the common law as well as statutory dictates not because it willed to, but because the common law principles and statutory dictates were utterly unrealistic in the political world the Board faced. Given inadequate legal theory and guidance, the Board chose to abandon legal theory and dictates in favor of its own common sense in order to meet the intent of the land grants. The chosen course was tragically, rather than vilely, damnable.

Environmental Objectives

Settlers seek out the most valuable land. This commonsense observation is not as simple as it first appears because defining the qualities that produce value in land is difficult at best. For the sake of simplicity in developing their models, Ricardo defined value in terms roughly equivalent to soil fertility, while Von Thunen determined value by distance from the market, both variables, of course, being powerful determinates of land value.

Whether stated in terms of fertility, distance from the market, or the core of settlement, Table 4.5 and Figure 4.2 suggest the hypothesis that state land administrators thought in terms of grades of land of descending quality and structured their selection decisions according to these grades. The core of settlement in Montana is certainly the fertile valleys of the western mountains. Here the earliest selectors sought the valuable meadows and dense

stands of timber in the core area. Thwarted by dense settlement and the political factors which attended it, and forest reservation, selectors turned to central Montana lands, further from the core of settlement and of lower value. Still, the rich pastures and potentially arable lands of central Montana were attractive. However, as settlement, compounded by the delay of the abeyant period, advanced in the region, selectors had to settle for lands on the edge of the final frontier, far removed from the core of settlement and of remarkably low value.

The purpose of this section is to evaluate this model of land selection. The model is not particularly efficacious. Selectors appear to have clearly recognized only two categories of land, "good" and "bad." Among "good" lands subcategories were recognized though the subcategories did not necessarily imply an understanding of value so much as an understanding of complex environmental diversity and a desire to take advantage of this diversity. Further, the selectors did not tend to dichotomize the environment into natural and social or political components. Rather the environment was understood holistically so that soil fertility, for example, and political acceptability were co-variables in the environmental evaluation of potential land selections.

Western Montana Land Selections

Selection of in quantity land began in 1892 in Madison County. Except to note that there were over 133,000 acres selected in southwestern Montana (p. 19), Land Agent Stuart's *Report* for 1892 is remarkably silent about these initial selections. It appears that

applications for leases existed in Madison County and that selections were made to satisfy the potential lessees. The Territorial Superintendent of Public Instruction (1884, p. 18) recorded that applications for leases were made in the territorial period though the territory could not act upon them. Madison County was a likely candidate for such applications for within its boundaries were Montana's second territorial capitol, the gold camp of Virginia City, and the sheltered river valleys of the Madison and Ruby with its tributary, the Beaverhead, the cradle of the Montana livestock industry. The intensive ranch unit was supplying beef to Salt Lake City and Denver prior to the discovery of gold and the development of local markets (Osgood, 1929, pp. 12-16). Though Virginia City did not survive as Montana's political center, Madison County's livestock industry was, by the 1890's, mature, stable, and without doubt in need of greater legal land control. State land selections supplied this needed access to land.

In Montana large stands of commercial timber are located exclusively in the northwest (Figure 5.1), the area where state land agents spent much time. Stuart was dubious about the worth of trees, considering them only in relationship to soil, topography, water resources, and proximity to society. Agricultural potential was his first consideration. In his *Report* of 1891 (p. 4), Stuart said of the Swan River and Lake area (present day Lake County):

[The Swan River] valley is about six to seven miles wide, narrowing to a point at the foot of Swan Lake which is a fine body of water...well stocked with trout and [s]almon...[the] soil of the valley is generally good and suitable for agriculture, but covered with a dense forest [a] considerable portion ...being large enough for lumber.

Of the Missoula River Valley, Stuart wrote:

Found it [the river valley] narrow and tortuous, with nearly all good land occupied by squatters. The timber had been good, but a number of saw-mills were fast culling it out, so that it was not worth while to ask for surveys there [Montana Land Agent, 1891, pp. 6-7].

The Missoula River Valley, therefore, did not attract Stuart, for, while the land was satisfactory, settlement and development were too far advanced. Other areas were rejected for different reasons. The lands were attractive but they were too isolated to be attractive to users for years, possibly decades. In the eyes of the land selector the Swan River and Lake area was ideal, combining lack of development with accessibility, fine soils, level land, and commercial timber, so it became the norm against which other areas were evaluated.

Several areas met the standards of the Swan River Valley. The Camas Prairie (Clearwater State Forest, Figure 5.1) area of southwestern Missoula County, traversed by the Agent in 1891, was reported to be a level plain with fine stands of commercial timber interspersed among the tall grasslands (Minutes, June 13, 1891; Montana State Land Agent, 1891, p. 7). The Stillwater-Whitefish creeks in northwestern Flathead County (Stillwater State Forest, Figure 5.1) were attractive for their fine timber, good soils, and level topography. The "Pleasant Valley," apparently in Lincoln County but impossible to precisely locate today, attracted Stuart because of its similarity to the Swan River Valley area (Montana State Land Agent, 1891, p. 4).

Deliberately chosen because they were close to the frontier

margin and only slightly affected by settlement, the areas were lacking surveys. In requesting surveys the Board emphasized the land's timber quality (see for example letters to O. Eaton, Surveyor General, appended to Montana State Board of Land Commissioners, 1891). This may have been a convenience, for the Board had to justify its requests for survey, and the phrase "the same being timber" appended to the description of requested surveys was as good a reason as any. In reviewing selections through 1897, Governor Smith emphasized that:

The lands [recently selected] in Flathead, Gallatin and Deer Lodge counties are either very valuable for the timber growing thereon or as agricultural lands....The timbered lands are easily worth ten dollars per acre and are rapidly increasing in valueA good portion of the timber land when cleared of timber is very valuable as agricultural land.
[Memo of Governor R. B. Smith, April 22, 1897, under signature of the Montana State Board of Land Commissioners, 35a-23-15 MHS].

However, agents and the Board increasingly sought timber for its own sake. For example, in 1897 Smith also projected that:

We expect as fast as surveys are made to select the rest of the grant, yet to be selected, in timbered lands of Flathead, Missoula or Ravalli counties as far as is possible. [Memo of Governor R. B. Smith, April 22, 1897, under signature of the Montana State Board of Land Commissioners, 35a-23-15 MHS].

The lands identified for selection in this early period had to be surveyed, and much could befall the land prior to completion of the survey, selection, and completion of the state's title to the land. The lands were desirable because they were only slightly beyond the margin of settlement and, in the few years it took to survey and select land, settlement could advance rapidly.

In 1893 State Land Agent Hickman reported that he filed on 43,967.48 acres in the Stillwater River area of Flathead County. He had hoped to get 100,000 acres but the "timber sharks" had gotten there first and, adding insult to injury, were pressuring the state to relinquish half of what it had claimed (Montana Land Agent, 1893, pp. 5-6).

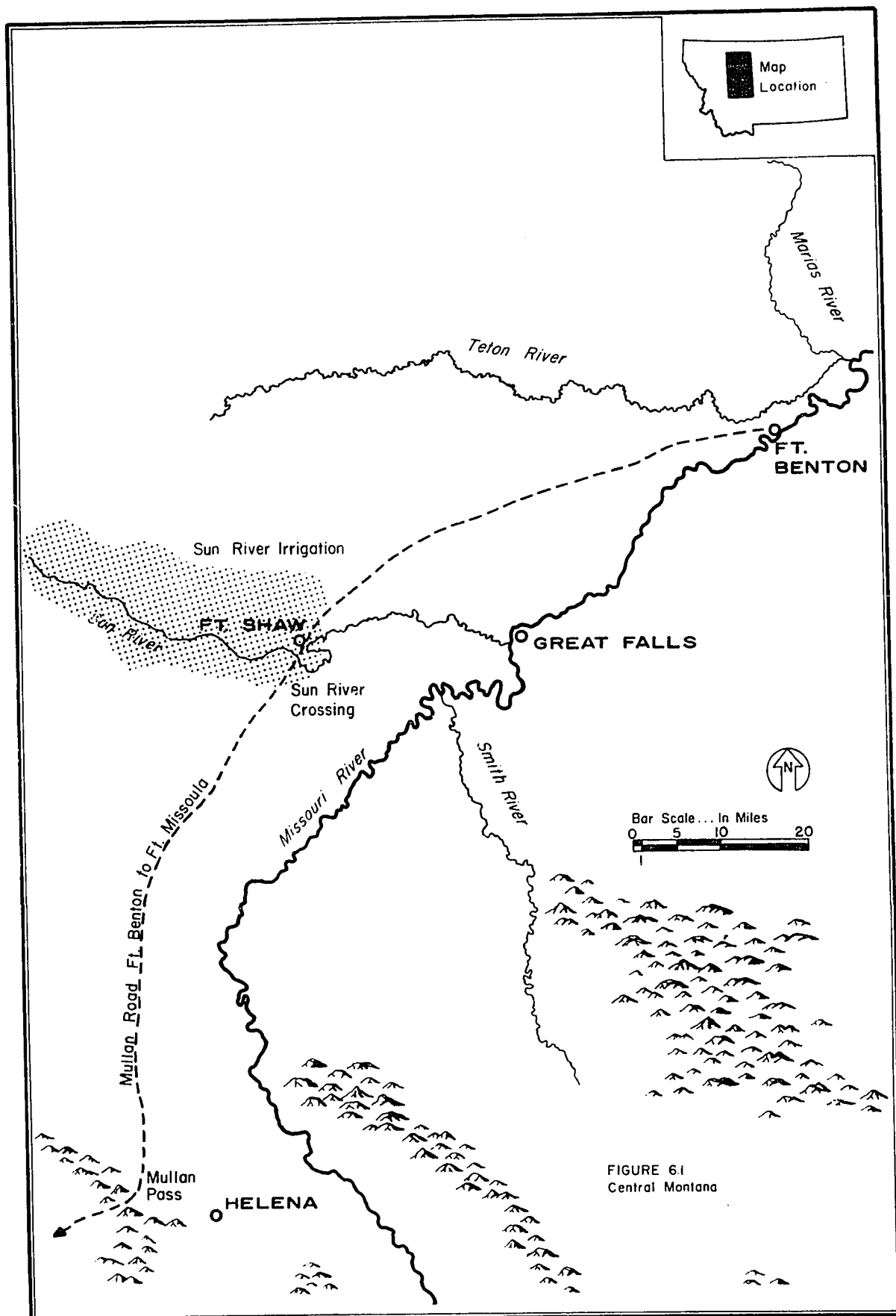
Private development was a minor problem compared to the federal reservations of forest land. Under the timber reserve acts of 1891 and 1897, the President removed from the public domain land valuable for timber. Although the Board was able to acquire the Camas Prairie, or Clearwater State Forest; the Thompson River State Forest in Sanders County; and the Lincoln State Forest in Lewis and Clark County (Figure 5.1), most of the desired areas of western Montana, including the Swan Lake and Stillwater Creek areas, were included in national forests before the Board acquired the selected lands. The Swan Lake and Stillwater Creek areas, as has already been discussed, became the subject of negotiation in the Forest Land Exchange and were conveyed to Montana in 1918.

With northwestern Montana closed to selection, the administrators had to go elsewhere for land. In 1897, selections were again made in the mountain pastures and valleys, this time in Beaverhead County. The Honorable J. E. Moore of Beaverhead County wrote the Board that the state grants could "yet be located in Beaverhead County," and the Agent was instructed to investigate (Minutes, April 10, 1897). No definite reason for Moore's interest in the welfare of the grant land can be found, but interestingly,

he appeared before the Board almost three decades later with two state senators to again urge the Board to make the greatest possible land selections in Beaverhead County (Minutes, September 9, 1926). In both instances he apparently achieved his objectives. The 1897 selections in Beaverhead County were logical for the same reason that selections in Madison County in 1892 were logical--the lands were "well watered and excellent grazing" (Minutes, July 30, 1898).

Central Montana Land Selections

Land selections in the western portion of central Montana deviate from Ricardian-Von Thunen precepts. Although Fort Benton is one of Montana's oldest towns and was a port which linked the Missouri to western Montana via the Mullen Military Road, it cannot be regarded as a market or core area of settlement (Figure 6.1). Western Montana's valleys were well developed before central Montana attracted the settler. Despite its remoteness, however, state land selectors turned to central Montana almost before they turned to western Montana. Only fiscal problems with the survey kept central Montana from being the field of earliest land selections in Montana. In 1891 Land Agent Stuart investigated the abandoned Fort Shaw Military Reservation which had protected in northwest Cascade County the vital Sun River Crossing of the Mullen Military Road. In addition to land on the military reservation, he found at least 40,000 acres of irrigatable land and recommended another 589,120 acres, or about twenty-five townships, for survey (Montana Land Agent, 1891, p. 8). His recommendation, with the qualification that "it cannot



be known how much of it will be secured by the state until after it is surveyed and examined," was acted upon in 1893 by the Board; however, the survey request was promptly rejected as too expensive and too far beyond the pale of settlement. These lands sent Governor Rickards on his 1893 odyssey to Washington and gained the eventual approval of the mammoth survey.

These early selections of the Board were beyond the frontier, and Stuart suggests the reason why--the speculative value of potentially irrigable land. Paris Gibson, a businessman bankrupted by the Panic of 1873 before turning to sheep ranching near Fort Benton, built a city at the Great Falls of the Missouri in the 1880's. Hydroelectric power, the services of James J. Hill's rapidly expanding railroad, and Butte's copper assured the swift ascendancy of the new hamlet. The agricultural hinterland was limited to sheep and cattle enterprises because of problems of aridity. The rivers flowing east from the Rocky Mountains to the Missouri, Sun, Teton, and Marias, provided a potential for irrigation, but privately endowed reclamation was limited by the expensive engineering structures required for any substantial advance of irrigation. Through the 1890's, pressure mounted for federally subsidized reclamation. As Montana's U. S. Senator, Gibson provided much of the leadership in developing the *Reclamation Act of 1902*, and the Sun River was among the first projects approved under that act. Needless to say, speculation was rampant in the area north and west of Great Falls through the 1890's. It was in this uncertain field that the Board cast its lots.

The success of the speculative venture presented new

frustrations. A resolution was presented by the Board in 1902 (pp. 3-4), the preamble reviewing the Teton, Chouteau, and Lewis and Clark county land selections, and the text affirming that Montana would not interfere with Federal irrigation plans. Where state lands were needed for canals and ditches, the Board would return the lands to federal authorities. This resolution neglected legal realities, for the Board was constitutionally barred from giving acquired land to any group, even the federal government. The Montana Legislature moved to alter this resolution in 1905. Chapter 53 of the *Montana Laws of 1905* made three salient provisions. First, state lands within federal irrigation projects would be sold through the same procedures as the reclamation project lands. Second, where the federal government needed state land in fee simple, the lands would be sold at \$10.00 per acre, the minimum legal price. Third, easements, where necessary, would be donated by Montana to the Federal Government. As a matter of law, however, this bill was only a slight improvement over the resolution of 1902. The Legislature could not authorize the disposal of the fee simple interest in grant lands except through public sales. Granting of easements does not require public sale, but does require just compensation for the easement granted (*Lassen vs. Arizona*, 358 U. S. 458).

The fact remains, however, that the selectors had gambled and won. Total victory demanded that acquisition of potentially valuable lands was not to impede the federal construction which would convert potential value to reality. Legislative action

eliminated conflicting objectives, and, while it did so by neglecting constitutional mandates, the legislative dictate was nonetheless the law of the land. Any eligible plaintiff, of course, could have sought to enjoin administrative action authorized by Chapter 53, *Montana Laws of 1905*, but none did.

Other factors drew land selectors to central Montana. Overcrowding of the western pastures and extinguishment of Indian reservations in the east provided the incentive for expansion of the livestock industry. In 1871, the first herds were driven along the Mullen Military Road to the new fields that lay beyond the Sun, while further east were the Smith, Shields, and Judith rivers, bovine paradises of natural pastures and abundant water (Osgood, 1929, p. 57). By 1880, expansion was so profitable that range stock were driven from California to the Smith River (Dick, 1941, p. 498). As we have seen, the central Montana herds suffered terrible destruction in the winter of 1886 and 1887, so ranchers began intensifying their operations. However, ranch land around Great Falls was increasingly difficult to control.

The land grab gave the state land administrators a market filled with ranchers ready to lease land. The Agent's *Report* for 1902 (pp. 32-33) stated directly that lands in Chouteau, Meagher, and Judith Basin counties were selected for the promised grazing leases on them. This was no understatement. On June 13, 1898 (Minutes), the Board held a selection list of about 37,000 acres in Meagher County for further consideration. On June 27, 1898 (Minutes), the list embracing exactly 37,487.20 acres was approved

for selection, and on July 11, 1898 (Minutes), the register was instructed to issue five-year grazing leases on the lands even though they were not yet acquired. Little wonder the developer of Great Falls, Paris Gibson, objected to state land selections in central Montana.

The Montana administrators were attracted to central Montana by the speculative fever which accompanied irrigation development and the land requirements of the livestock industry. In its dealings with ranchers, the state essentially let the livestockmen, rather than the bureaucrats, select valuable land. The system smacked of favoritism and was often blatantly illegal, but worked to produce revenues and better the trust funds.

Final Land Selections

In the initial period of land selection the politicians and bureaucrats were unimpressed with eastern Montana. The State Land Agent in 1895 (pp. 17-20) had argued that eastern Montana lands were and always would be worthless. The state was better advised to leave the grants unfilled than accept land with its liabilities in the east of Montana. In Ricardian concepts the agent believed that eastern Montana lands were beyond the extensive margin and would always remain so.

However, between 1895 and the initiation of land selections in Chouteau and Blaine counties about 1910, many conditions in Montana had changed. The plains of eastern Montana became attractive to settlers who entered the land, assured by dry farming theories

that prosperity was just around the corner. The movement reached a crescendo when good weather and inflated wheat prices induced by World War I combined to make the dry farming theories appear credible (Toole, 1972, pp. 25-98). The fortuitous combination of events, however, did little to whet the enthusiasm of the state land administrators for eastern Montana lands. After the abeyant period initial selections in Chouteau and Blaine counties were made on the basis of two considerations. The first was continuation of the lease application system, and the second was a "hot tip" from the Secretary of Interior recommending the "excellent character" of a 61,000 acre block of land just being surveyed in Chouteau County (Minutes, January 31, 1910). The Board's reliance on the Interior Secretary for information suggests that land was becoming increasingly difficult to find, and since a large part of this 61,000 acre block was selected by March 15, 1910 (Minutes), lack of thoroughness and enthusiasm for the field surveys is suspected. By reminding the field teams that adequate evaluation of grazing land was difficult when lands were snow covered (Minutes, January 21, 1910), the Board indicated that at least the survey teams were indifferent to quality field investigation.

By the Agreement of December 23, 1912 (Forest Exchange Folder, Vault Files, Montana Department of State Lands), Montana relinquished claim to in place lands in the national forest reserves and agreed to take in their stead eastern grazing land for relinquished land not of commercial timber quality. In anticipation of this agreement, the Governor in 1910 requested that a large tract

of land in Valley and Custer counties (present day Valley, Daniels, Carter and Powder counties) be reserved and surveyed for the state. The survey, however, revealed that the lands were underlaid by coal, closing the lands to state entry and, worse yet, potentially opening them to private entrymen willing to accept the coal severed and federally reserved. This situation threw the state land administrators into confusion. Montana Attorney General Galen was adamant that neither the lands nor the coal were particularly desirable (Memo of Attorney General A. J. Galen, Dec. 30, 1911, Forest Exchange Folder, Montana Department of State Lands). To the Attorney General, although the lands the Board wanted lacked quality, they were the best remaining lands in Montana. The coal underlying the lands was at best only alleged and, if there at all, of low quality so that any recognizable value was decades off. Besides, the Interior Department was wrongly interpreting the homestead laws. The state should, like any other settler, have the right to enter with the coal severed from the land. This was the arrangement eventually reached. The Board was under no illusion that in Valley and Daniels counties it was getting a paradise and clearly had come to think of selection as a desperate crisis.

When selection turned from northeastern to southeastern Montana, the field agents were instructed to insure that selected lands were not already occupied (Minutes, May 4, and December 27, 1918). In the land selections made in southeastern Montana and later in Beaverhead County the state made no pretense that it was obtaining good land, only that it was the best of what was left.

In 1921, the State Forester reported on the quality of federally reserved land in Beaverhead County which was offered to the Board as a field of selection (Minutes, July 9, 1921). The lands were of high quality in the sense that there was not enough growing on them to burn. Consequently, expenditures to protect the lands would be slight. Again, on August 19, 1926 (Minutes), the State Forester recommended that if possible the Board should acquire yellow pine land in Beaverhead County because the yellow pine is fire resistant.

It is also obvious that in selections after 1917 the Board was intent on acquiring all land due it; and less intent on the comparative value of the land acquired. Much time, therefore, was spent in identifying slivers of base land which the Board could relinquish (Register, 1926, p. 33). The reasons for this appear to be the satisfaction of accomplishing the selection task, and possibly, the joy of harassing federal bureaucrats. Certainly, federal land ownership was unpopular in Montana so that there was an emotional if not practical satisfaction in converting all land possible from federal to state landlordship. The intricacy, however, of completing the selections is illustrated by the complexity of the base offerings of the period. The base offerings for a 39.82 acre lieu land lot in Beaverhead County is an example (Table 6.2). Admittedly this lot is unusual, but in both southwestern and southeastern Montana far more complex base offerings can easily be found. Furthermore, only in Beaverhead, Carter, and Powder River counties are such complex base offerings encountered.

Table 6.2. Base Lands for Lot 2 (39.82 acres), Township 15 South, Range 5 West, Section 11, Beaverhead County, Montana.

Base Land Description	Reason Base Unavailable
1. T1S,R37E,Sec.36, part SW $\frac{1}{4}$	Indian Reservation
2. T2S,R9E, part	Fractional Township
3. T2S,R42E,Sec.16, part NW $\frac{1}{4}$	Indian Reservation
4. T3S,R15E,Sec.36, part	National Forest
5. T3S,R41E,Sec.16, part S $\frac{1}{2}$	Indian Reservation
6. T3S,R46E,Sec.16, part NW $\frac{1}{4}$	National Forest
7. T3S,R46E,Sec.36, part	National Forest
8. T4S,R1E,Sec.36, part NE $\frac{1}{4}$ SE $\frac{1}{4}$	National Forest
9. T4S,R11E,Sec.16,part NE $\frac{1}{4}$ SW $\frac{1}{4}$	National Forest
10. T4S,R14E,Sec.16, part N $\frac{1}{2}$ SW $\frac{1}{4}$	National Forest
11. T4S,R14E,Sec.36, part SE $\frac{1}{4}$ NE $\frac{1}{4}$	National Forest
12. T4S,R51E,Sec.16 part	Fractional Township
13. T4S,R57E,Sec.16, part N $\frac{1}{2}$ SW $\frac{1}{4}$	Preemption
14. T5S,R2E,Sec.16, part N $\frac{1}{2}$ NE $\frac{1}{4}$	National Forest
15. T5S,R2E,Sec.16, part N $\frac{1}{2}$ NE $\frac{1}{4}$	National Forest
16. T5S,R3E,Sec.36, part SE $\frac{1}{4}$ SE $\frac{1}{4}$	National Forest
17. T5S,R10E,Sec.36, part SE $\frac{1}{4}$ NW $\frac{1}{4}$	National Forest
18. T5S,R13E,Sec.16, part	National Forest
19. T5S,R15E,Sec.36, part	National Forest
20. T5S,R38E,Sec.36, part of lot 4	Indian Reservation
21. T5S,R44E,Sec.36, part of NW $\frac{1}{4}$	National Forest
22. T5S,R44E,Sec.36, part of SE $\frac{1}{4}$	National Forest
23. T6S,R30E,Sec.36, part	Indian Reservation

In the latter period of land selection, it can be concluded that Montana land administrators were acting to fill the grants as best they could from a pool of land that was not particularly desirable. The most the Board could hope to do was to take the best of a bad lot. In this regard, the Board clearly disagreed with the Agent's statement of 1895. It was better to take nearly worthless land, liabilities and all, than to leave it in federal hands and the grants unfilled.

Environmental Objectives--Conclusions

A Ricardian-Von Thunen model of land selection suggests that selectors would recognize a gradient or, at least, categories of land from good to bad, and a temporal-geographic view (Table 4.5 and Figure 4.2) of land selection suggests that categorical land selection occurred. The primary literary remains of land selection decisions does not reflect, however, a gradient in land selection beyond a dichotomous "good-bad" land classification.

The environmental factors which defined good quality land were complex, but the fact that the Board sought several types of good quality land simultaneously indicates the Board members did not perceive of good land in categories of descending quality. Land was, of course, classified into categories based upon potential use, but there is little to suggest that the classification reflected value. By implication, then, the temporal-regional pattern of land selection portrayed on Figure 4.2 reflects preference only in that the last selections in Montana were made from "bad" or at least low

quality undesirable lands. In the earlier period of selection from 1892 through 1902, the shifting of the field of selection from meadows of southwestern Montana, to the forests of northwestern Montana, to the pastures of central Montana reflects not the order of preference of administrators but the administrative ease with which the several types of land could be selected and acquired.

Among the "good lands," agricultural quality lands were an obvious goal. However, agricultural lands which could be brought into production with little capitalization were rare in Montana, and preemptors clearly held the advantage in obtaining them. Besides, seeking high-quality agricultural lands conflicted with an important political objective of state land selection, avoiding the agricultural settler. Agricultural lands with dense stands of timber required capitalization to bring them into production. The capitalization, timbering, could be profitable in its own right, however. Consequently, agricultural lands covered with timber were a high value land selection.

There is a clear shift of interest from timbered agricultural land to land valuable exclusively for its timber. This shift may be interpreted as an appreciation of land value gradients, but I am of the opinion that it is an incorrect interpretation. The Board initially planned to strip timber from land and then sell it for its agricultural potential. Timber was not, in the traditional way of thinking, a renewable resource. However, federal forest reservation forced westerners to learn rapidly the principles of sustained yield forest management. The shift in interest from timbered

agricultural land to commercial grade timber for its own sake resulted not from an appreciation of the theoretical subtleties of land economics but from the growth of a new technology, scientific forestry, which altered the land managers' understanding of environmental resources. After a few bad experiences with timber sales, Montana adopted legal policies which have demanded sustained yield management irrespective of the agricultural potential of the state forest resources.

Potentially irrigable land, since it required immense capitalization, was not subject to the political objective of avoiding contact with the small agricultural settler. The selection and acquisition of potentially irrigable land was, however, a speculative venture of uncertain potential results.

High quality pasture, meadow, and grazing land was an attractive resource since it assured income even before the land was acquired. The difference between high quality grazing land and low quality grazing land is, however, slight. The distinction was generally not determined by an environmental assessment of the land conducted by state field personnel but by an operator's willingness to pay a minimum rent for access to the land. Allowing ranch operators to select state lands was valid only if it was assumed that the operators had long term objectives and were not selecting lands of value only for the survival of their unique operations. Such an assumption by public servants is made at great economic risk.

The failure of the Board to recognize and behave in a universe that nearly matched a Ricardian-Von Thunen model has several

explanations. The models themselves determine value on the basis of simplified variables and both make assumptions about the nature and ability of the decision-maker which are unrealistic. The Board faced a complex environment in which value was determined by measuring, if only subjectively, such factors as soil quality, available water, vegetative cover, slope, topography and location. The Ricardian-Von Thunian models assume knowledge of the future, possible alternative actions, ability to determine values associated with alternatives, and the ability to assign proper "payoffs" to alternative choices. Obviously the Board did not meet these assumptions. Still the Ricardian-Von Thunian models have revealed considerable predictive powers even when applied to other operators who faced a highly complex environment and who have not met the assumptions of the Ricardian-Von Thunian model.

The central difference between the state and other operators is that other operators are fairly assumed to be economically rational, that is desirous of maximizing profits or minimizing losses, but the state meets this assumption only in part. Certainly, the Board sought to maximize the returns to the land grant estate, and in this sense it was economically rational. However, the Board acted as an agent of the state, an artificial corporate entity whose very being was political. Politics required the minimization of conflict and to the extent that this political objective conflicted with economics then economically rational behavior had to be sacrificed in favor of politically rational behavior. In other words, in solving the "mini-max" problem, minimize conflict while maximizing profits,

emphasis was on the "mini" portion of the problem. To avoid conflict, economically valuable land was avoided in favor of land of less long-range value if the political environment demanded.

The land grant legislation, in the case of Montana, the *Omnibus Statehood Act*, sought to structure political activities in the states within economic parameters acceptable to Congress. In so doing Congress appears to have implied that state officials were to be always economically rational. In fact, no level of the decision-making hierarchy ever made such an assumption. Indeed, all levels have been aware and tolerant of official neglect of even Congress' economic-legal parameters so long as that neglect was based upon politically rational thinking and not criminal in intent. However, many scholars in reviewing state land selection and administration have demanded strict economically rational behavior on the part of state decision-makers even though such behavior has been neither demanded nor expected by law. If economically rational behavior is expected of state land administrators then the management of most state land grants has been a dismal failure. If, however, the researcher recognizes that both economically and politically rational behavior has been expected of state land administrators and that these types of behavior are to a degree in direct conflict, then, at least in Montana, the accomplishments, if not always the actions, of the Board may be viewed as impressive.

CHAPTER VII

THE SPATIAL EFFICACY OF 25 U. S. STATUTE 676

Whittlesey (1939) was the first geographer to clearly articulate the need for the study of geographical jurisprudence, and he observed that, "The operation [or efficacy] of law can be traced only through patient study of the incidence of individual laws." In this study, the individual law which has been patiently studied is the *Omnibus Statehood Act of 1889* (25 Stat. 676) which dictated the spatial allocation of land resources to Montana.

Decisions concerning the spatial allocation of Montana's in quantity land were not made by Congress in the *Omnibus Statehood Act of 1889*. Instead, decision-making authority was delegated by Congress to Montana and, subsequently, by Montana to the Board. The majority of this estate, however, was given in a geographically predetermined pattern which denied to state officials all decision-making authority. In fact, the spatial distribution of the modern in place estate differs substantially from the geographically predetermined pattern, implying that much of the in place grant was conveyed to Montana through techniques not prescribed in the *Omnibus Statehood Act*. In this aspect, the *Omnibus Statehood Act* was not entirely normative, so the research task became two-fold: explaining the deviations from the *Omnibus Statehood Act* and explaining the procedures by which land selections were made.

Deviations from the *Omnibus Statehood Act* existed because that act was only one portion of a rapidly evolving national land policy. Lands which Congress reserved for Montana in 1889 became, before transference to Montana, priority lands in other components of the national land policy. Consequently, some grant lands were denied to Montana. While this denial was not a legal abortion, it was a moral miscarriage of legislative intent. Congress was morally bound to resolve the conflict between the *Omnibus Statehood Act* and the rapidly evolving national land policy. It did so with the *Lieu Selection Act*.

The *Lieu Selection Act* allowed state officials to select land in lieu of the in place land reserved to the federal government. The act increased the freedom of administrators to choose land in accordance with their own objectives. Implementation of the *Lieu Selection Act* was more difficult than anticipated, however. Congress might have assisted, through further legislation, state and federal officials in selecting the land grant as modified by the *Lieu Selection Act*, but it failed almost entirely in filling this leadership role. The result was that federal and state officials had to engage in prolonged negotiations to implement the combined land grant acts, and they frequently did so by bending if not breaking major national and state laws.

Although Congress delegated major land selection decisions to the State of Montana, through an accident the magnitude of this delegated task was greater than the *Omnibus Statehood Act* alone suggests. Montana then delegated, subject to a few restraints, land

selection to a politically based board. The Board's actions tended to concentrate state land in selected counties of Montana. Any potential landlord subscribes to a theory of land value and, given freedom of choice, will cluster his land acquisitions around resources which that theory predicts will be valuable. Consequently, the Board's concentration of land is not surprising. The resources about which the Board centered land selection are, however, surprising at first glance. Grazing land dominated both agricultural and forest land. A simple explanation for the dominance of grazing land is that the *Homestead Act of 1862* gave the preemption settler priority to agricultural land, and the *Forest Reserve Act of 1891* gave the federal government the first pick of timber, thus leaving only grazing land to state land selectors.

This explanation, however, does injustice to the complex world of the state land administrator. Reinforced by legislation, the nature of the economic system threw the land selector on to the margin of Montana's then-settled areas. There was little point to selecting land in areas already densely settled, and even less point in leaping far beyond the frontier into the wilderness. In the former area only marginally productive lands had escaped settlement, and in the latter, the administrator faced difficulty in evaluating land or in obtaining the survey necessary to convey land to the state. Consequently, the land administrator was forced to acquire land in the most competitive of Montana's land markets, the land between the wilderness and the area of established settlement. Consequently, the progress of state land selection strongly reflects the

major events of Montana settlement: initial settlement of the western valleys, the movement into north-central Montana, and the final progress into the eastern plains.

In making land selections, one may believe the Board should have pursued only economically normative objectives, and any compromise of pure economics was dereliction of duty. However, the Board faced political responsibilities. Consequently, deviations from economic norms is much more difficult to criticize. Because a political corps draws its power from the people and is accountable to the people which had created it, the Board faced political responsibilities as demanding as any economic or environmental responsibilities. The Board's political objective was simply to avoid excessive and intolerable conflict with its chief competitor, the citizen. The objective implied, at the least, avoidance of public review and open conflict, and the settlement of conflict by equitable judgement when conflict was unavoidable. The Board could defend its interests from obvious exploitation, but when no clear evidence of exploitation existed, the Board thought it best to avoid pursuit of the issue.

The political objective also meant that cooperation with those who needed and appreciated state land concentrations was advisable. Consequently, ranchers and the Board became colleagues. In central Montana, at the turn of the century, Board-rancher cooperation reached a level obnoxious to small land holders and economic leaders. While the motives of the Toole administration during the abeyant period are less than clear, it is certain that the Toole

Board established its policies at least in partial response to popular criticism of rancher-Board accords.

In meeting its objectives, the behavior of the Board was not always admirable. In adjudicating conflicts through equity rather than stricter legal principles, decisions were frequently inconsistent and contradictory. In resolving conflicts, laws and policies were interpreted out of context and intent to justify legally questionable actions and decisions. If loose interpretation of law and policy failed, the Board (and more than once, the State Legislature) simply disregarded the dictates of higher authorities. While this action may be criticized, it was not criminal or even technically illegal. When authority was delegated to the Board, it was delegated completely. The Board's official actions, no matter how questionable, were as much a portion of the national land law and policy as the most concrete and absolute statute until challenged through due process.

The power of the Board should be a caution to modern legislation. There is no harm in delegating authority to individuals, but difficulties occur when those who delegate power cannot monitor the actions of the subordinate group. Certainly, the Board was expert in hiding its actions. Modern innovations such as advisory councils, public hearings, citizen advocacy, evaluation of objectives through planning and budgeting, and legal provisions which make it simpler to challenge decisions, have been implemented to make those holding delegated authority accountable to those who have delegated authority. While many administrators may view accountability as an imposition on their offices, the imposition is utterly necessary to efficacious public policy.

Accountability, however, is a dual responsibility. The Montana Board found it necessary to neglect legal dictates because many of the dictates were unrealistic and inappropriate to the situation which the Board faced. Institutionalized legislative research has been the innovation designed to bring applied scientific research to measuring the efficacy of existent and potential laws. While elimination of politics from innately political systems is neither practical nor desirable, the modern legislature which disregards legislative research is inviting disaster instead of performing civic duty.

The Spatial Efficacy of 25 U. S. Statute 676
and the Study of Geographical Jurisprudence

Whittlesey did not identify what he meant by a "law" when he suggested its geographic study. The mere complexity of the literature encountered in evaluating the efficacy of the *Omnibus Statehood Act* suggests that modern law is far more complex than the classical sovereign command and threat. An individual "law" exists in a legal environment composed of the literature and ideas of the age so that an individual law must be understood in this environment if it is to be credibly evaluated by jurists.

The concept of public policy is at best vague and uncertain, but this much is certain: policy is both effected and affected by law. In this study the land grant concept was effected by the national land disposal "policy," and after passing through a maze of statutory provisions the grant was affected by the Board which subscribed to a vaguely defined set of objectives which may justly be

identified as policy.

If the nature of policy is illusive, the concrete nature of law is deceptive. A statute or code, the most obvious form of law, is authoritative and knowable, but in the words of Friedman (1973, p. 78), "A code may be a behavioral mirage; it may not mean what it says; it may be 'interpreted' totally out of shape." Even if the researcher is capable of intellectually relating the maze of codes and statutes, he still has understood only a portion of the law. Behind the statutory law is the common law. Friedman (1973, p. 78) describes the common law as:

...too shapeless, too complex. There are too many books. The law is too unknowable. It can never be restated authoritatively.

Still, statutory law must be interpreted in the light of common law principles and doctrines. In the law under study, the statutes recommended the application of equity to state-citizen conflicts, but the statutes did not define equity. Rather, the principles of equity, natural or moral law, were set forth in several centuries of chancery court decisions.

A large portion of administrative law delegates authority, not surprisingly, to administrators. The latter's actions, attitudes, prejudices, and technical abilities, seldom recorded and often not even understood, become, through the act of delegation, as much a portion of public law and policy as the most carefully worded statute. The scholar who seeks to understand the operation of administrative law must, consequently, address the role of administrative discretion in law, for without such consideration, the

law cannot possibly be understood in its complete operational context.

Beyond law as policy, statute, common law, and administrative prerogative is law as the unwritten social norm. The common social practices have been referred to by various scholars in such terms as "the living law" and "the code of the West." Administrators must consider and adapt their behavior in accord, as much as possible, with the way people actually behave. Equity was forced upon the Board because, even on the turbulent frontier, land business was conducted by certain commonly understood ethics. Even if these ethics were largely mythical, the Board was given notice that, like anyone else, it was expected to abide by the norms.

Returning now to the *Omnibus Statehood Act of 1889*, what of its efficacy? Were those provisions of the act which allocated lands by fixed location efficacious? If the act is analyzed only in terms of its internal text, the answer must be that the law lacked efficacy. However, if the law is understood in the light of other laws, common law principles, prerogatives of administrators, and common practices of the day, it emerges as a fairly successful law in that its intent if not its letter was implemented. This conclusion implies, for those with interests in geographical jurisprudence, that the "patient study of the incidence of individual laws" may regard laws either in the absolute terms of their own text, or in terms relative to the entire legal environment. To the extent that geographers evaluate the spatial efficacy of law in absolute terms they will disclose the successes and failures of specific laws in achieving

specific objectives. To the extent that laws are evaluated in terms relative to the entire body of law, successes and failures of the general legal system will be evaluated. Both are worthy accomplishments, and in this sense, further inquiry into the complex relation between law and geographical phenomena will be productive.

BIBLIOGRAPHY

- Alexander, Lewis M. 1968. "Geography and the Law of the Sea." *Annals of the Association of American Geographers* 58, 177-197.
- Anderson, Clarence Richard. 1940. "History and Administration of Land Grants to Public Schools in Montana." Unpublished Master's Thesis, Montana State University (Missoula).
- Anderson, Ronald A. 1969. *Social Forces and the Law*. Cincinnati: South-Western Publishing Co.
- Atherton, Lewis. 1961. *The Cattle Kings*. Lincoln: University of Nebraska Press.
- Barlow, Raleigh. 1972. *Land Resource Economics*. Englewood Cliffs: Prentice-Hall, Inc.
- Billington, Ray Allen. 1974. *Westward Expansion: A History of the American Frontier*. New York: Macmillan Publishing Co., Inc.
- Black, Henry Campbell. 1968. *Black's Law Dictionary*. St. Paul: West Publishing Co.
- Boal, Frederick W. 1970. "Urban Growth and Land Value Patterns; Government Influences." *Professional Geographer* 22, 79-82.
- Bogue, Allan G. 1963. *From Prairie to Corn Belt*. Chicago: The University of Chicago Press.
- Brown, Ralph H. 1948. *Historical Geography of the United States*. New York: Harcourt, Brace and World, Inc.
- Brown, William H. 1972. "Access to Housing: The Role of the Real Estate Industry." *Economic Geography* 48, 66-78.
- Choynowski, Mieczyslaw. 1959. "Maps Based on Probabilities." *Journal of the American Statistical Association* 54, 385-388.
- Cole, Stanley M. 1968. "A Study of Leasing Practices of Public School Lands in Colorado: Final Report." Unpublished report, Colorado State University. Research in Education Report ED 022339.

- _____. 1966. "Relative Merits of the Sale or Retention Under Lease of Public School Lands in Colorado." Unpublished report, Colorado State University. Research in Education Report ED 010422.
- Commager, Henry Steele. 1973. *Documents of American History*. Vol. 1. New York: Appleton, Century and Crofts.
- Corwin, William F. N. d. "Recreational Planning of Montana State Lands." Unpublished Western Interstate Commission for Higher Education report prepared for the Montana Department of State Lands and Investments.
- Cox, Kevin R. 1973. *Conflict, Power and Politics in the City: A Geographic View*. New York: McGraw-Hill Book Co.
- _____. 1972. *Man, Location, and Behavior: An Introduction to Human Geography*. New York: John Wiley and Sons, Inc.
- Cribbet, John E., William F. Fritz, and Corwin W. Johnson. 1972. *Cases and Materials on Property*. Mineola, N. Y.: The Foundation Press, Inc.
- Davitt, Thomas E. 1959. *The Elements of the Law*. Boston: Little, Brown and Company.
- Dick, Everett. 1941. *Vanguards of the Frontier: A Social History of the Northern Plains and Rocky Mountains from the Fur Traders to the Sod Busters*. Lincoln: University of Nebraska Press.
- Durrenberger, Robert. 1972. "The Colorado Plateau." *Annals of the Association of American Geographers* 62, 211-236.
- Friedman, Lawrence M. 1973. *A History of American Law*. New York: Simon and Schuster.
- Froman, Lewis A. 1967. "Some Conclusions on the Study of Public Policy." In J. W. Peltason and James M. Burns, *Functions and Policies of American Government*. Englewood Cliffs, N. J.: Prentice-Hall, Inc. Pp. 416-432.
- Gates, Paul W. 1968. *History of Public Land Law Development*. Washington, D. C.: U. S. Government Printing Office.
- Gladden, Frank H. 1970. "Public School Lands in Arizona: History and Management." *Journal of the West* 9, 110-124.
- Griffing, Virginia G. 1975. "The Significance of the Trust Concept in the Administration and Management of Montana's School Lands." Unpublished paper, the School of Law, the University of Montana (Missoula).

- Hamming, Edward. 1958. "Water Legislation." *Economic Geography* 34, 42-46.
- Harris, R. Cole and John Warkentin. 1974. *Canada Before Confederation: A Study in Historical Geography*. New York: Oxford University Press.
- Harvey, David. 1972. *Society, the City and the Space-Economy of Urbanism*. Commission on College Geography, Resource Paper No. 18. Washington, D. C.: Association of American Geographers.
- _____. 1969. *Explanation in Geography*. London: Edward Arnold, Ltd.
- Hudson, John C. 1975. "Theory and Methodology in Comparative Frontier Studies." Unpublished paper presented at the Oklahoma Symposium on Comparative Frontiers, Norman, Oklahoma, April 11-12, 1975.
- Johnson, Hildegard B. 1957. "The Rational and Ecological Aspects of the Quarter Section." *Geographical Review* 47, 330-348.
- Jones, Harry W. *The Efficacy of Law*. Evanston, Ill.: Northwestern University Press, 1969.
- Knight, George W. 1885. "History and Management of Land Grants for Education in the Northwest Territory." *Papers of the American Historical Association* 1 (3), 86-103.
- Large, David C. 1957. "Cotton in the San Joaquin Valley: A Study of Government in Agriculture." *Geographical Review* 47, 365-380.
- Lokken, Roscoe. 1942. *Iowa Public Land Disposal*. Iowa City: The State Historical Society of Iowa.
- McIntosh, C. Barron. 1975. "Use and Abuse of the Timber Culture Act." *Annals of the Association of American Geographers* 65, 347-362.
- _____. 1974. "Forest Lieu Selections in the Sand Hills of Nebraska." *Annals of the Association of American Geographers* 64, 87-99.
- McManis, Douglas R. 1965. "Regional Reaction to National Law: The Embargo and Northern New York and Vermont." *Professional Geographer* 17, 6-8.
- Mill, John Stuart. 1965. *Principles of Political Economy with Some of Their Applications to Social Philosophy*.
- Miller, Thomas Lloyd. 1972. *The Public Lands of Texas, 1519-1970*. Norman: University of Oklahoma Press.

- Montana. Board of State Land Commissioners. 1891, 1892, 1893-94, 1897, 1898, 1900, 1902, 1904, 1906, 1908. *Report*. (Title varies).
- _____. Commissioner of State Lands. 1932, 1934, 1936, 1938, 1940, 1942, 1944, 1946, 1948, 1950, 1952, 1954, 1956, 1958, 1960, 1962, 1964, 1966, 1968, 1970 (with Statistical Supplement), 1971, 1972. *Report*. (Title varies).
- _____. Legislative Council. 1960. *State Land and Investments*. Report Number 4 of the Montana Legislative Council.
- _____. _____. 1959. "A Study of the Tax-Exempt Public Grant Lands Owned by the State of Montana, and Their Effect on Counties." Unpublished Legislative Council Report.
- _____. Register of State Lands. 1898, 1900, 1902, 1904, 1906, 1908, 1910, 1912, 1914, 1916, 1918, 1920, 1926, 1930, 1938, 1942, 1948. *Report*. (Title Varies).
- _____. State Land Office. 1901, 1902. *Report*.
- _____. Territorial Superintendent of Public Instruction. 1882, 1883, 1884, 1885, 1886, 1887, 1888. *Report*.
- Mood, Alexander M., and Franklin A. Graybill. 1963. *Introduction to the Theory of Statistics*. New York: McGraw-Hill Book Company.
- Mosk, Sanford A. 1943. "Land Policy and Stock Raising in the Western United States." *Agricultural History* 17, 14-30.
- Murray, Henry T. 1942. "State Land Management in Montana." Unpublished Master's Thesis, Montana State College (Bozeman).
- Orfield, Matthias N. 1915. *Federal Land Grants to the States with Special Reference to Minnesota*. Minneapolis: University of Minnesota Publications in the Social Sciences.
- O'Riordan, Timothy. 1969. "The Implementation of Legislative Policy in British Water Resources Management: A Case Study from Broadland." *Annals of the Association of American Geographers* 59, 198.
- Osgood, Ernest S. 1929. *The Day of the Cattleman*. Chicago: University of Chicago Press.
- Pattison, William. 1964. "The Four Traditions of Geography." *Journal of Geography* 63, 211-216.

- _____. 1957. *The Beginnings of the American Rectangular Land Survey System, 1784-1800*. Chicago: Department of Geography, University of Chicago.
- Peters, William S., and Maxine C. Johnson. 1959. *Public Lands in Montana: Their History and Current Significance*. Regional Study No. 10. Missoula: Bureau of Business and Economic Research, Montana State University (Missoula).
- Progressive Men of Montana*. N. d. (190-?) Chicago: Bowen and Company.
- Raitz, Karl B. 1971. "The Government Institutionalization of Tobacco Acreage in Wisconsin." *Professional Geographer* 23, 123-126.
- Renne, Roland. 1947. *Land Economics*. New York: Harper and Brothers.
- Ricardo, David. 1911. *The Principles of Political Economy and Taxation*. London: J. M. Dent and Sons, Ltd.
- Salisbury, Robert H. 1967. "Agriculture and Natural Resources." In J. W. Peltason and James M. Burns, *Functions and Policies of American Government*. Englewood Cliffs, N. J.: Prentice-Hall, Inc. Pp. 168-205.
- Schafer, Joseph. 1902. "The Origin of the System of Land Grants for Education." Bulletin 63, University of Wisconsin. History Series 1 (1): 1-53.
- Sheldon, Addison E. 1936. *Land System and Land Policies in Nebraska*, Vol. 22, Publications of the Nebraska State Historical Society.
- Socolofsky, Homer E. 1968. "Success and Failure in Nebraska Homesteading." *Agricultural History* 42, 103-108.
- Sommers, Lawrence M., and Ole Gade. 1971. "The Spatial Impact of Government Decisions on Postwar Economic Change in North Norway." *Annals of the Association of American Geographers* 61, 522-536.
- Steiner, Rodney. 1966. "Reserved Lands and the Supply of Space for the Southern California Metropolis." *Geographical Review* 56, 344-362.
- Stewart, George. 1925. "Land Policy for the Public Lands." *Economic Geography* 1, 90-106.

- Stewart, Granville. 1925. *Forty Years on the Frontier*. Cleveland: Arthur H. Clark, Co. (2 vols.).
- Stout, Tom. 1921. *Montana: Its Story and Biography*. Chicago: American Historical Society (3 vols.).
- Sutherlin, R. N. 1901. "Our State Lands." *Rocky Mountain Magazine* 1, 488-489.
- Taaffee, Edward J. 1974. "The Spatial View in Contest." *Annals of the Association of American Geographers* 64, 1-16.
- Thrower, Norman J. W. 1966. *Original Survey and Land Subdivision*. Monograph Series No. 4, Association of American Geographers. Chicago: Rand McNally.
- Toole, K. Ross. 1972. *Twentieth-Century Montana, A State of Extremes*. Norman: University of Oklahoma Press.
- White, Gilbert F. 1972a. "Environmental Impact Statements." *Professional Geographer* 24, 302-309.
- _____. 1972b. "Views and Opinions: Geography and Public Policy." *Professional Geographer* 24, 101-105.
- Whittlesey, Derwent. 1939. *The Earth and the State: A Study of Political Geography*. New York: Henry Holt and Company.
- Wilson, Paul B. 1972. "Farming and Ranching on the Wind River Indian Reservation, Wyoming." Unpublished Ph.D. Thesis, University of Nebraska.
- Von Thunen, J. H. 1966. *Von Thunen's Isolated State*. Peter Hall, ed. London: Pergamon Press.
- Young, William H. 1966. *Ogg and Ray's Introduction to American National Government*. New York: Appleton-Century-Crofts.