

AN ETHNOHISTORICAL
APPROACH TO PIONEER
FARMERS OF SASKATCHEWAN

IAN D. GRAY

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AN ETHNOHISTORICAL APPROACH TO PIONEER
FARMERS OF SASKATCHEWAN

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Ian D. Gray

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NAME OF AUTHOR Ian D. Gray

DEPARTMENT OR COLLEGE Anthropology and Archaeology

DEGREE B.Sc., B.A. (Adv.)

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ADDRESS Box 112, R.R./#2,

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DATE September 29, 1977

ABSTRACT

This thesis is concerned with pioneer farmers in the "Parkland" region of Saskatchewan, Canada, during the years 1905 to 1940. Since this topic has received very little attention from ethnologists, the first objective is to describe pioneer life. With a basic orientation to cultural ecology, and using the farm as the unit of study, the description focuses on the methods of setting up and operating a pioneer farm, and providing a living for the pioneer family. This description takes the form of Julian Steward's (1955) "culture core": those aspects of a culture most closely related to subsistence activities and economic arrangements.

There were three major environmental and technological limitations within which the pioneer had to operate: the climate, the vegetation, and the sources of power. The climate imposed limitations in the form of occasional over-abundant rainfall, and more commonly, through early fall frosts. These frosts severely limited the growing season, and thus the varieties of crops that could be grown. The native vegetation slowed the process of setting up a viable farm operation because of the heavy aspen forest that had to be cleared, usually by hand. The sources of power for traction were oxen (at first) and later, horses. Both of these restricted the range of choices a pioneer farmer had, with respect to crops sown, acreages farmed, hours worked, and so on.

A major theoretical concern of this thesis is an investigation of the peasant concept, and the extent to which it applies to pioneer

farmers. Considering the range of concepts found in the literature on peasants, it is concluded that pioneers indeed can be labelled "peasants", but the application of that label means little more than that they were agriculturalists who produced for subsistence as well as for the market and who were part of a larger society. To consider one aspect of the peasant concept, the theory of the peasant economy suggested by Chayanov (1966) and Franklin (1965), is more useful. They believed that the peasant type of production differs from capitalist and socialist production because of the differences in the use of labour. This theory can be used to analyze the changes in Saskatchewan farming from the earliest pioneer days to the present. Many Saskatchewan farmers (both pioneers and some "modern" farmers) tend to think in the same terms as peasants, and the increasing size of Saskatchewan farms and the increasing use of large machines are logical results of peasant thinking.

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Chapter 1

INTRODUCTION

From about 1885 until the 1930's, there was a stream of immigrants onto the Canadian prairies. In 1880, there were Indians, Métis, buffalo, fur traders, and only a few scattered pioneers. By 1920, the Indians had been forced onto reserves, the Métis had become absorbed or pushed into the northern fringes to become a marginal people, the few buffalo that survived were in parks, and the fur traders had been pushed north. Pioneers had taken over most of the southern regions of Manitoba, Saskatchewan and Alberta. From a few people in hundreds of square miles in the 1830's, the population of Saskatchewan rose to 931,457 in 1936. In some regions, there was one pioneer family on every quarter section, or as many as twenty-five per square mile.

These people came from various parts of Europe. Included were large group settlements of British (the Barr Colonists), Jews, French, and German; a large contingent of "Galicians" or Ukrainians, immigrating in small groups; and thousands who came alone or with their immediate families. Virtually every European country was represented, as well as a sprinkling of pioneers from non-European countries. Many of those who came to the Canadian prairies were sons and daughters of Europeans who had pioneered in Eastern Canada or in the United States.

Almost universally, the attraction was free or cheap land. In general, pioneers came because they were coming to a "land of

opportunity". Certainly, there were some who were obliged to flee their homes for legal reasons. Also, the feeling that conditions at home were unbearable probably played a part in most decisions to emigrate to the frontier. However, the pioneer who did not have a dream of a future farm generally would not tolerate the homestead situation. Emilio Moran (1976) has suggested that successful homesteaders were generally those who perceived the economic opportunities of the new region.

The more attractive regions were the open prairies. Here, the homesteader had no timber to use for buildings or firewood, but he could bring this land under cultivation quite readily. However, the open prairies were more susceptible to drought. Short droughts have struck the prairies every few years, but there was one massive drought, beginning in 1929 and lasting until 1938. There is now a suggestion that an even more severe drought struck in the early 1880's, before there were enough pioneers to be hurt by it. Some agrometeorologists are now suggesting that such a severe drought comes in a cycle of about forty-seven years.

The drought of the thirties was aggravated by a world-wide depression. Those farmers who were able to produce grain were unable to sell it, or sold it for rock-bottom prices. The combination of drought and depression forced thousands of people off their farms to seek work in the cities. There was another migration, from the drought-stricken prairies to the wooded parklands of the north. Many farmers, owners of large tracts of land that was highly productive under conditions of adequate rainfall, loaded up their wagons with personal belongings, and abandoned their farms. They started anew farther north,

some on homesteads, some on rented land, and a very few were able to purchase the nucleus of a new farm. These early farming activities in this virgin parkland region provide the material on which this thesis is based.

PROBLEM STATEMENT

This research was part of a larger project, "Sociocultural Adaptive Strategies of Saskatchewan Farmers", under the direction of Dr. A. M. Ervin. The overall goal was to describe changing farm operations from the homestead days to the present, using a cultural ecological framework, as well as to describe the changing rural community and its social institutions. This project is continuing. To date, sub-projects have been carried out involving the changing roles of women, rural voluntary associations, the decision-making processes of modern farmers, and a study of pioneer farmers.

Within the context of this larger study project, the pioneer segment had the following objectives: first, to gain an understanding of pioneer farming from an ethnological point of view; second, to discover and analyse the forces of change by which "pioneers" become "non-pioneers"; third, to relate pioneer farming activities to the requirements and limitations of the environment and technology; and fourth, to investigate the relevance of applying the anthropological concept of peasantry to Saskatchewan pioneers. These objectives will be explained more completely after a description of the study region.

The Study Region

The study region will be described in detail in Chapter 3. In this section, the reasons for choosing that particular area will

be outlined.

The larger research project, as it was originally conceived, was in part a response to John Bennett's (1963a, 1969) study of farmers and ranchers in southwest Saskatchewan. As this latter project used a cultural ecology framework, the climate formed a basic aspect of the study. Bennett has used (1963b) the expression "arid-variable habitat" to describe the environment. This is justifiable on the basis of the low level of rainfall, and the unpredictable nature of that precipitation. Bennett has also used terms such as "extremely uncertain situation" and "high risk" (1963b:182). Coupled with the capricious agricultural cost and pricing system, climatic "risk and uncertainty" and economic "risk and uncertainty" provide an environment in which selective processes make the operation of a small farm unit extremely difficult. Thus a focus of the study was on "behaviour in economic contexts of high risk" (1963b:182). As a result of this high risk farm enterprises tended to be large (Bennett 1969:112). Fifty percent of ranches were in the "intermediate" class (about seven sections, or 4,480 acres). Sixty-five percent of farms had about 1,000 acres.

The area Bennett chose for study may not be particularly representative of Saskatchewan due to its extreme aridity. The southwest corner of Saskatchewan may be similar to the American Great Plains (or "Great American Desert") but other regions of Saskatchewan must be studied to understand farm conditions in the province. As a result, the decision was made to undertake a study of a segment of the "park belt", that region of rolling prairie and forests that cuts diagonally across the centre of Saskatchewan (see map, Figure 3.1). After

investigating various locations, the decision was made to study the Melfort-Tisdale area. On recognizing the large size of that area, the project was scaled down, and the Rural Municipality of Pleasantdale and the town of Naicam became the focal points.

There are two major reasons why the Melfort-Tisdale region in general, and the Rural Municipality of Pleasantdale in particular, were chosen for study. First, the climate in this region has generally been much more predictable than in the "Jasper" (a pseudonym) region of Bennett's study. The second reason, related to the first, is that farm operations here vary more than in the southwest, and are smaller and more diversified.

The Pleasantdale-Melfort area has only rarely suffered from a lack of moisture. Dey (1973) has investigated the frequency of "dry spells" on the prairies. It was found that dry spells (defined as a period of seven or more days in which no measurable precipitation is received on any one day; this seven-day period is chosen because a longer dry spell can harm young crops) were only slightly less frequent in the Melfort area than in southwest Saskatchewan. Dey also calculated a "Departure Ratio", defined as the deviation from the average frequency of dry spells. This ratio indicates the variability of dry spells, and thus the degree of uncertainty. It reflects both low precipitation and high variability of that precipitation. The Swift Current-Maple Creek region (the Jasper area) has a Departure Ratio of +2 to +3 standard deviations, defined as "High". The Melfort area has a Departure Ratio of +1 to -1 standard deviations, defined as "Low".

The Prairie Farm Assistance Act authorized payments to farmers

in case of crop failures (Agriculture Canada 1973). The frequency of P.F.A.A. payments therefore provides an indication of such failures. Data are presented in the form of payment-years per township (number of years in which payments were made to any farmer in the township). For one hundred and twenty townships in the Jasper region studied by Bennett, the average is 18.9 payment-years. For fifty-four townships in the Melfort-Naicam area, the average is 3.8 payment-years. For the Rural Municipality of Pleasantdale, the average is 3.7 payment-years.

These figures indicate that farmers in the Melfort region should feel a minimum of "risk" and "uncertainty". The terms are not synonymous; Saarinen (1966) has defined them with respect to drought on the American Great Plains. "Risk" is defined as "outcomes with a known probability distribution" and "uncertainty" is defined as the situation in which this probability distribution is unknown (1966:ln). When risk and uncertainty are combined, the situation is defined as "hazardous".

According to these definitions, and in light of the data provided above, farming in the Jasper area is quite hazardous. The Melfort-Naicam area, on the other hand, is risky but not uncertain or hazardous. It was anticipated that farmers under these conditions would be able to plan future operations and make their decisions with much more optimism and certainty than farmers in a hazardous region.

The other major reason for choosing this region is that farms are smaller and more varied, and might display a wider range of "adaptive strategies" than the large grain farms or ranches in the southwest. The average farm size in this area, according to 1971 census data, is 580 acres, of which 438 acres is cultivated. The

modal farm size is in the category of 240 to 399 acres. A variety of income sources were displayed in the census data, including grains such as wheat, barley and rapeseed, and livestock such as cattle and swine. This is in direct contrast to the Jasper region, where the income tends to be provided primarily by either wheat or cattle. Furthermore, there are a number of more specialized operations. Rapeseed is characteristic of the park belt, not of the prairies; some farmers of the park belt grow only rapeseed. A number of farmers in the Melfort area go to considerable trouble to produce registered seed. Some farmers have specialized in the production of alfalfa seed. There are also honey producers, dairy farms and hog growers.

In general terms, the Jasper region is characterized by large, specialized farm operations, producing either wheat or cattle. There is a large portion of the land in the Jasper region that is so marginal for farming that it has been left in native grass and is used for raising cattle. On the other hand, the Melfort-Naicam area is characterized by smaller farms, and "mixed farms", producing a variety of grains as well as some livestock. The smaller and more diversified farms of the Melfort area may be a result of environmental influence. The climate has not acted as a selecting agent, weeding out smaller and perhaps less efficient operations. Whereas in the Jasper region, a farmer must make maximum use of scarce resources, in the Melfort-Naicam area there is more room for inefficiencies and mistakes. The smaller operator, who is content to operate a small family farm, has a greater chance of survival.

There are other, related reasons for these differences. Because of abundant rainfall, there was a heavy stand of aspen forest to greet

the pioneers. The costs (in terms of labour as well as in machinery expenses) of clearing the land has tended to keep farm sizes down. This forest had another effect: it deterred settlement. Pioneers tended to settle on the open prairie as long as open prairie was available. While there were a few scattered pioneers in the region prior to 1905, it was not until after that date that most of the immigration took place. Therefore there are many pioneers still alive and available for interviewing in the 1970's. In fact, a few are still actively farming.

The Melfort-Tisdale region, then, was chosen for the research project because it appeared to be "representative" of the smaller, mixed farm operation found in the park belt. Originally, nine rural municipalities, covering some 2900 square miles, were chosen for study because they included a variety of these farm operations and a variety of land assessments. (Land is assessed for tax purposes on the basis of its suitability for agriculture.) However, it soon became obvious that this area was much too large for the restricted time and resources available to the project. The decision was made to select one municipality from the nine originally chosen. The Rural Municipality of Pleasantdale was picked because it seemed "representative" of the Melfort region. This decision, again, was based primarily on land assessments, which indicate that the municipality includes a range, from very good land to very poor land, and on frequencies of farm types, from large grain farms to large cattle operations and a great many small, diversified operations. Once the initial decision to study Pleasantdale municipality had been made, it was found to be quite acceptable aesthetically; it is a very pleasant region, and the town

of Naicam and the villages are attractive communities.

The Pioneer Segment

The purpose of the pioneer segment was primarily to provide an ethnohistorical background to modern farming. The principal objective of the research and of this thesis was to provide an ethnographic description of pioneer farming. This is a subject that has not received the attention it deserves in ethnology; certainly there are insights to be gained from studying pioneers (see Chapter 2). The focus here is on the operation of the farm unit. It is a study of subsistence activities and farm operation.

A secondary objective of this study was to relate pioneer farming activities to the requirements and limitations of the environment and the available technology. The primary environmental limitation was the forest. The major technological limitation for most of the period was the source of draught power, i.e., horses. Other limitations were, for example, the problems of moisture in the spring, frost in the fall, and varieties of grains that required long growing seasons, physical isolation, and low financial resources.

There were two other objectives that were considered tertiary. One was to analyse changes subsequent to the pioneer period. As defined for purposes of this study this means developments after 1940. Principally, these changes involved an increasing use of power machinery, and a growth in farm size. The other tertiary objective was to investigate the applicability of the anthropological concepts of peasantry. It was hypothesized that pioneers formed a "peasant-like" society as a response to the limitations of pioneering (primarily isolation and lack of financial resources).

There are some limiting factors which must be considered.

First, this research is "exploratory" in nature. There is a distinct deficiency of ethnological research on pioneers and on Saskatchewan. There is a notable absence of ethnological research on Saskatchewan pioneers. The problems associated with doing research in a virginal area (such as the New Guinea highlands) have been explicated (Steadman 1971, reported by Clarke and Ogan 1973:267): an inability to build on the work of earlier researchers, confinement to a small sample because of low population densities, and a heavy investment of time and energy to produce a relatively limited amount of data. Although these problems were associated with "anthropological virginity" in a vastly different situation, some of these problems have emerged in this research. One notable anthropologist (Mead 1971, reported by Clarke and Ogan 1973: 268) has suggested that student researchers be directed to areas where the basic ethnographic research has been done and is available. I would not go that far. I would not want to have missed the opportunity to do this research. However, these problems should be recognized. It is my hope that this thesis will provide the basic ethnography for future researchers on Saskatchewan pioneers. Certainly, there is a wealth of minor and major theoretical problems which emerge from the data outlined in this thesis. Many of these problems would make good thesis topics.

Ethnohistory is a methodology (see infra.) with theoretical implications; it also limits the possibilities for research. There is a wealth of data which is lost if it is not available for direct observation. Most of the informants interviewed for this research had excellent memories and were able to recall many details. Nevertheless,

specific information, for example the amount of land seeded to specific crops in any one year on a particular farm, is forever lost. Census data and written pioneer reminiscences can make up some of this lack, but the problem remains.

The theoretical orientation of the research is cultural ecology. The assumption is that what people do, and the way they do it, is strongly influenced by what they need to do to make a living. The nature of kinship systems, social interactions, religious beliefs and practices, and many other aspects of society, can be seen as a response to the necessities and limitations of the environment, and the requirements for survival within that environment. With this approach, the technology used for survival becomes a major focus. Being an exploratory ethnography, this research is primarily concerned with the methods by which pioneer farmers made a living. Social relationships are investigated, but it is recognized that much work remains to be done on such aspects as local politics, the kinship system, economic institutions, etc.

Because of the lack of previous research in this field, this study cannot rely on a purely deductive approach. As Ronald Cohen has observed (1970:33):

When we know very little about a topic, investigation proceeds with the goal of discovering its variety in time and space. Once this has been done for a fairly generous number of varieties, we start to classify the phenomena and their subparts, then begin thinking of, and observing ways that they and their subparts are interrelated with each other and other known phenomena. . . . in its earliest stages, science is primarily inductive, but its own internal requirements demand more and more deductive work as the enterprise develops.

Being in the earliest stage of the study of pioneers, this thesis is an attempt at what Cohen (1970) calls a "descriptive model",

which is essentially a description of patterns or regularities among a group of people. This thesis ventures occasionally into the successively higher levels of generalization, associational models, functional models, and systems analyses, but the primary thrust must for the present remain at the most basic level. Further research can build on this with comparative data and testable hypotheses, and construct higher level analyses.

If the researcher had the ability to travel through time, a processual analysis of the change from "pioneer" farming to "modern" farming would have been made. The processual model is borrowed from the anthropological study of political action (see Swartz, Turner and Tuden 1966, Barth 1967, Swartz 1969). It takes as a basic orientation the concept that change is part of any system, and that this change is a result of the myriad of decisions made at the individual level. A processual analysis of political situations focuses on the processes by which public goals are implemented, and on the changes in goals and methods of implementation through time. Transferred to other fields of study, a processual analysis looks at individual decisions and the way these decisions aggregate to constitute change.

Because the decisions which influenced the changes under scrutiny in this study were made as much as sixty years ago, the specific, detailed reasons for those decisions are lost. It is, I believe, impossible to execute a processual analysis in such circumstances. However, the orientation basic to the processual analysis can be used, and is used in this study. The focus is not on social structures and how they maintain themselves, but on the processes of change and decision-making through which structures change. Therefore,

the research is an ethnohistorical ethnography, using the theoretical orientation of cultural ecology, and the paradigm of culture change known as processualism.

To a certain extent, ethnohistorical research imposes a theoretical orientation. It combines both history and ethnology, a combination that some anthropologists have recommended (Kroeber 1935, Bock 1956). The use of historical data on a comparative basis can lead to sound theories of change and cultural evolution. The notion that historical events can only be regarded as unique must be abandoned. The ethnological component of ethnohistory seeks out the regularities and general principles in historical occurrences. (See Carmack 1972 for a review of these topics.)

There are two technical aspects of the study that deserve some explanation. These aspects are the boundaries of the study, the temporal and the geographic limits. The time period chosen for study is 1905 to 1940. The year 1905 was not considered fixed and absolute, but it is a working date based on the history of settlement. Prior to about 1905, there were very few pioneers in the region. Soon after that date, a steady immigration began. The year 1940 is somewhat more fixed, as a year marking the end of the depression and the beginning of World War II. The drought eased its grip on the prairies beginning about 1938. Prices began to improve even before the declaration of war in 1939. For present purposes 1940 is a good date because by that time the effects of improved growing conditions, improved markets, and a reduction in manpower due to the war were being felt. This study does go beyond that date, but only to show the later effects of trends begun during the study period. The period is called the

"pioneer period", but that term is used primarily for ease of phrasing. There is some difficulty with the term "pioneer" (see Chapter 2). Furthermore, there was a great deal of variation in farm operations by the 1920's and 1930's, with some being very much "pioneer" and others substantially less so.

The geographic limits of the study were technically the boundaries of the Rural Municipality of Pleasantdale (see map, Figure 3.2). However, most informants no longer live on the land they farmed. Most have moved into one of the communities of the municipality, and some have moved farther, to Melfort or Saskatoon. For the most part, the study population consisted of pioneers who presently live within that municipality, but this includes some who homesteaded outside of it, since municipal boundaries are largely legal and administrative devices. In addition, a few pioneers who now live in cities were interviewed. To reiterate, the municipality of Pleasantdale is formally the geographic study area, but informants actually pioneered over a larger area.

METHODOLOGY

There are two phases to the methods used in this research: field methods and library research. To a certain extent, the methods used are a response to the nature of the research. They are also a result of financial problems, which seem to plague any social science research.

Two summers were spent in library research with occasional short excursions to the study region. The purpose of this library research was to gain background information on agriculture, settlement history, etc. Out of this research came the choice of the study area,

a statistical profile of farming in that area, a questionnaire for the portion of the study concerned with modern farming, and so on.

One summer season was spent in the study area conducting interviews. Because of the nature of the research, data gathering had to take the interview format rather than (for example) participant observation. The method of directed but unstructured interviews was chosen to allow informants the freedom to express what they felt was important about their histories.

Twenty initial interviews were conducted, involving some thirty-two informants (since many interviews involved a husband and wife or brother and sister). Each interview was guided by a set of prepared questions or topics (see Appendix). This list was revised frequently as research progressed, so that later interviews built on earlier ones. Three follow-up interviews were conducted to elaborate on points covered in earlier interviews. In addition to formal interviews, there were numerous informal discussions held (for example) over a cup of tea.

Several interviews were taped and transcribed. Because many informants expressed reluctance to being taped, the majority of interviews involved note-taking during the interview and typing up a reconstruction of the interview shortly thereafter. Informal discussions were recorded after the fact as best an inadequate memory allowed.

The data were organized the following summer. During this organizational period, a few informants were contacted to clear up specific problems or provide more specific data. Also, library research continued, particularly on the history of agriculture in

Saskatchewan and on the history of the study region.

The ethnological literature on Saskatchewan pioneers is truly meagre, but there is another source of information that was utilized: pioneer reminiscences. There are hundreds of volumes of published reminiscences, covering the three prairie provinces. Quality varies both as to literary merit and as to quality of data. In general they have contributed an understanding of pioneer life, an understanding that was of great help in formulating questions and analysing data. Some of the better ones are: West of Yesterday (Shepherd 1965) by the man who became the first curator of the Western Development Museum in Saskatoon and was rewarded for his work by an honorary doctorate; Gully Farm (Hiemstra 1966) a reminiscence in semi-fictional form, by a member of the Barr Colony; Harbinger Farm (Wooff, 1975) by a man who came to Saskatchewan as a young boy with his parents, and became a high school teacher and school superintendent; and Clearing in the West (McClung 1976), an autobiography of the temperance leader and champion of women's rights, who among other things was a member of the Alberta Legislature and the first woman to sit on the Canadian Broadcasting Corporation Board of Governors.

A number of other sources were used to a greater or lesser extent at one time or another. These included archival materials, newspaper files, questionnaires sent to pioneers by other agencies and so on. Also, many hours were invested at the Saskatoon summer exhibition ("Pion-Era") and other such events, watching displays of early machines being put to work.

The interviews and pioneer reminiscences resembled the life-history approach to anthropological research. Common features were

extracted from them, and their validity and consistency cross-checked. The other sources were used to round out the common features, provide historical background, and so on. The end result is a basic ethnography of pioneer farming, a "descriptive" model in Cohen's (1970) classification.

Chapter 2

ANTHROPOLOGICAL CONCEPTS

Anthropology developed in the late nineteenth century and early twentieth century as the study of "primitive" or "pre-literate" or "tribal" peoples. The various terms refer to those people and societies of which Europeans became aware as a result of colonialism and imperialism. A large proportion of these societies had economies based on hunting and gathering, but there were also many whose economies were based on horticulture. Slash-and-burn or swidden horticulture has been amply studied by anthropologists over the last eight decades. Although this technique, whereby forests are cleared and crops are grown for only a few years before the forest is allowed to grow back and new fields are cleared, appears a waste of resources of land and labour, it has been shown to be admirably suited to the tropics (Meggers 1971).

STUDIES OF AGRICULTURE

The generally accepted distinction between horticulture and agriculture is that the former uses hand tools (as in gardening) while the latter uses animal or machine-drawn implements. These implements may be a single wooden plough drawn by a bullock, or a large and complicated combine, powered by its own diesel engine.

Agricultural societies are found around the world. They vary from the highly intensive to the highly extensive. In Java, rural

population densities may reach 2000 persons per square kilometer (Geertz 1971:33), a density of 5183 persons per square mile. This means that a family of five would live on a plot of land about 165 feet square. Wet-rice techniques are used to produce yields of from 2178 tons per acre in Central Thailand to 5170 tons per acre in parts of the Philippines (Hanks 1972:165). However, these yields require intensive labour, from 24 man-days per acre per growing season to over 100 man-days per acre.

At the other extreme is the type of agriculture found in the plains of North America. Here two different forms of extensive production are found. In one, large tracts of poor quality land are used, with little if any cultivation, to raise livestock (usually beef cattle). This may be considered a form of pastoralism, differing from traditional pastoralism in that the rancher has control of the land through ownership or leases. He lives in one place, and raises cattle on the same land year after year.

A grain farmer is the other type of extensive agriculturalist. He may own as much as five square miles or more. Rather than intensifying labour on a small plot of land to make it produce more, as do the Javanese, he invests in machinery to be able to cultivate more land in less time. Through machinery, he is able to increase the output of labour per unit of time. One major limitation is that machinery is very expensive, and world markets are such that capital investments may not be wise.

Anthropological studies of agriculture have tended toward a concern with the more "exotic" regions: Indonesia (Geertz 1971), Thailand (Hanks 1972, Moerman 1968), Melanesia (Barrau 1958),

Nigeria (Netting 1968), and so on. There have been very few anthropologists concerned with large-scale mechanized agriculture of the type found in North America. One early study was by Walter Goldschmidt (1947) of a rural community in California. Here, farming had become heavily industrialized and specialized. The focus was on cash crops, profits, and farming as a business rather than as a way of life. Social relationships between the segments of the community (large landowners, small landowners, various groups of farm labourers) had become "urbanized", that is they were "subservient to the ties of social classes and cliques which are at all times dominant" (1947:viii). Goldschmidt suggested (1947:viii-ix) that there is a direct causal relationship between mechanization and the development of class barriers. However, he rather naively dreamed (1947:272-275) about the utopia of the future: professional farm labourers, who are permanent, stable members of the community, being paid reasonable wages and gaining the respect of the farmer-employer.

John Bennett (1963a, 1969) has conducted the only anthropological study of agriculture on the Canadian Prairies, of which I am aware (other than the present study, of course). The focus of Bennett's study was adaptation to the environment in the "arid-variable" environment of southwest Saskatchewan. I have already (Chapter 1) introduced Bennett's study, and discussed the differences between the southwest and the present study area. Within that "arid-variable" habitat are found four different groups of people, each with its own mode of adaptation: ranchers, grain farmers, Hutterian Brethren colonies, and the Plains Cree Indian Reserves. His study was wide-ranging, including relationships with the larger society and economy (Bennett 1967),

Indian-White relationships (Braroe 1963) and the role of women (Kohl 1976).

Most anthropologists who have studied agriculturalists were working on some aspect of the peasantry concept. They were concerned with the social organization of peasants, or the relations with the larger society, or the peasant economy. Goldschmidt and Bennett are two of a very small group who have been concerned with agriculturalists as agriculturalists. It seems to me that this mode of production is as worthy of study as, for example, hunting and gathering. This is particularly so when one considers the time and effort invested in the study of prehistoric agriculture and its role in the formation of states and civilizations.

FRONTIERS AND PIONEERS

Frontiers have been studied by anthropologists from the first days of the discipline. Indeed, the aboriginal peoples of the various frontiers around the world formed the subject matter for most anthropological studies. However, the focus for the most part has been on the "traditional" society and culture of these people, and of the effects of Western expansion (i.e. "acculturation"). There has been very little concern among anthropologists for the culture of the pioneers who invade the frontier zone.

Geographers and historians have paid more attention to this topic. The classic formulation of the effect of a frontier on a society is Frederick Jackson Turner's "frontier hypothesis" (Turner 1920, Billington 1967). Turner hypothesized that the existence of the American frontier, particularly the vast areas of free land, directed

American development away from its European roots. Pioneers had to abandon many of the old cultural methods and values, and turn to a simpler, less civilized mode of life. Eventually civilization re-emerged, but in a much different form: indelibly impressed by the independent nature of the frontiersman coupled with the need for community cooperation in a harsh environment.

Turner's thesis has received a great deal of attention, both supportive and critical. One major shortcoming of this thesis was that it was not based on comparative evidence. While the existence of a frontier may have been one factor in the development of American society, only comparative studies of other frontiers can show that a frontier, per se, was the determining factor as Turner suggested.

Again, it was geographers who provided the comparative material. Isaiah Bowman (1931) initiated a research project which included a volume of papers (Joerg 1932) on the world's frontiers: North and South America, Asia, Africa, and Australia. This material is descriptive rather than analytical, but it did provide an excellent survey of these frontier regions. The impact of Bowman's (1931) volume is indicated by the number of authors who began their work with quotations from it (e.g. Eidt 1971, Casagrande, Thompson and Young 1974, Margolis 1977). Since the 1930's, various works have appeared on a number of frontiers, such as China (Lattimore 1968) and Brazil (Katzman 1975) as well as more general works (Gerhard 1954/55). For purposes of comparison with the Canadian Prairies, a particularly interesting study is den Hollander's (1960/61) account of the development of the Great Hungarian Plain (The Alföld) from the ninth century pastoral nomads to modern farmers. The distinctive settlement pattern, scattered

farmsteads, may have developed from the summer camps of the nomads. There are some parallels with the Canadian Prairies, such as the role of railroads, government involvement, and the primary emphasis on wheat as a cash crop. However, interesting and informative as these studies are, they were written by geographers and historians, with the goals of those disciplines.

Over a decade ago, three anthropologists (Casagrande, Thompson and Young 1964) tried to instigate the anthropological study of frontier colonizers for the contribution they could make to our understanding of culture change. However, as Thompson (1973:3) has complained, they "have hardly been trampled underfoot by aspirants to the bandwagon". This more recent article has not caused any major stir, either (Thompson 1977a). There is some cause for optimism, however. The University of Oklahoma has been publishing a "Comparative Frontier Studies" newsletter since the fall of 1975. Short reports have appeared concerning research on such diverse frontiers as Roman frontiers in Europe (Cooter 1976), Chinese frontiers (Knapp 1976) and the "Mammalian Frontier" (Thompson 1977b), referring to the "frontiers" of biological evolution. Also, a recent edition of American Ethnologist contained an article on frontier agriculture (Margolis 1977). Unfortunately, it is not particularly relevant to this study because it is concerned with a particular type of frontier agriculture: the production of lucrative cash crops with little regard for the maintenance of soil fertility, i.e. "mining the soil". Margolis suggests that this type of agriculture is often associated with frontiers (1977:43), but I found no evidence of it in the study region. I suspect a combination of the lack of good markets in the early years and throughout the thirties, coupled with

pioneers who came from farm backgrounds and were more concerned with building their new farms than with "get-rich-quick" schemes, were the factors that militated against this exploitative agriculture studied by Margolis.

The shift in focus by anthropologists from studies of indigenes to studies of the colonizers brought with it the conceptual problem of definitions. A frontier is generally a geographic region, or, even more generally, a concept. A frontier can be a zone of settlement in the United States, Canada, Siberia, etc., or a zone of contact between two societies (as in a political border). It can also be an ideational zone of expansion, as in a frontier of scientific development or a frontier of biological evolution. The geographic frontier can be static or dynamic, and one of "inclusion" (in which indigenes are assimilated) or of "exclusion". It can be a narrow region or it can be wide, and it can be well-defined or quite indistinct. But it is at times hard to distinguish whether a particular region is becoming a frontier, is already a frontier, or has just passed out of the frontier phase. Among geographers, a population density of two persons per square mile has been accepted as marking the American frontier (Hart 1974:73). Obviously, this criterion is not applicable to other situations. Another requirement is some sort of attempt at colonization, i.e. a movement of people. Hart (1974) delineated three frontiers, all referring to the American experience: a frontier of occupancy (with two persons per square mile), a frontier of settlement (six persons per square mile), and a frontier of agriculture (eighteen persons per square mile).

Wells (1973:6-7) has proposed a formal definition of a "frontier

system":

A frontier system is a dynamic social network of a particular kind which covers an extensive geographic area and which links a number of culturally diverse societies. A frontier system is distinguished by the presence of four characteristics . . . A frontier society is any society within a frontier system.

These four characteristics are: a "focus or foci", the location of ultimate political control, concentrated wealth, prestige, and the communication center; systematic migration and resettlement, often in the form of colonization beyond the political boundaries of the focus; contact with a different society or societies, having a distinct culture or cultures; and "the presence of a single network of communication which unifies the entire frontier system" (1973:8). Communication networks can be political, religious, economic, and so on. Wells appeared to refer here to the reason for the colonization. He described the Roman frontier as being political and economic, the Islamic as being religious, and the American frontier as economic in motivation.

Each of these characteristics can occur alone or in combination, but for a frontier to exist all four characteristics must be present. Otherwise, the correct terms would be "lebensraum expansion, culture areas or diffusion spheres, or trade networks" (1973:9).

One problem with this definition is that Wells did not present the reasons for making these conditions necessary. For example, he excluded from the frontier system a region of expansion which was unpopulated prior to the expansion. However, I can see no obvious reason for this exclusion. Also, he did not adequately define what he meant by "focus" or a "network of communication". One might infer that the former refers to the original place of residence of the colonizers, or it might refer to the national power which has imposed its authority

on the frontier region. If it refers to the former, then the first and second characteristics are redundant: the frontier implies colonization, and the colonizers must have come from someplace. If the latter, then again the necessity for the characteristic has not been made clear. One can imagine a "frontier" which is not under the political or economic control of a nation.

A somewhat different definition of a frontier was suggested by Billington (1967:7)

. . . the geographic area adjacent to the unsettled portions of the continent in which a low man-land ratio and abundant natural resources provide an unusual opportunity for the individual to better himself economically and socially without external aid.

This definition has been criticized (Bodley 1975:24-25) on the grounds that it ignores the aboriginal inhabitants and their rights of ownership--as, indeed, does the process of colonization in most instances. Another problem with it is the phrase "without external aid". Bodley (1975:25) interpreted this to mean that there are no legal restrictions on the colonizers. However, it may mean that the colonizers are not materially assisted by the colonizing nation. Whichever interpretation one uses, the phrase is rather suspect. Throughout the American "frontier" there was at least some legal restraint placed on the colonizers. Also, there are many cases of direct government involvement in frontier colonization programs (see Moran 1975, for example).

There are, then, many definitions of "frontier", implying different things. For present purposes, three characteristics are considered fundamental: a frontier is a region of open resources, it is a region with a low population density, and it is a region undergoing colonization. These characteristics are related, of course. There

are open resources partly because it has a low population density, and it is undergoing colonization partly because the first two characteristics are present. The frontier may have been occupied previously, with the former occupants being displaced, put on reserves, or exterminated, or the region may not have been occupied previously. The colonizers are the pioneers, moving into a region to make use of previously unused resources.

Similar problems are associated with the term "pioneers". The term seems to connote European agriculturalists, but there are Japanese pioneers in Bolivia (Thompson 1973), and the term has also been used referring to the hunters and gatherers who occupied the Americas some twelve thousand years ago (Sanders and Marino 1970:26). The Webster's Third International Dictionary (Gove 1969) gives the derivation of the word from the Old French peon and Latin pedo, both meaning "foot soldiers". The first definition listed is "a member of a military unit usually of engineers equipped and trained especially for road building, temporary bridging, demolitions". Another definition presented by this dictionary is "one that begins or helps develop something new and prepares a way for others to follow . . . one of the first to settle in a primitive territory: an early settler." Obviously, it is this second definition of the word that concerns us here. The two important elements of the definitions are, that pioneers move into a new territory, and they are part of a colonizing movement (i.e. others will follow them). For purposes of this study, the pioneer is such a person. The pioneers of this study were agriculturalists, or members of an agrarian society (storekeepers, bankers, etc.), but that is not intended to restrict the term.

The nature of the pioneer personality has not received much attention. Most authors implicitly accept the stereotype of the independent, rugged individualist. Thompson (1973:7-10) has suggested that this romantic conception may not be entirely accurate. If it does hold some truth, there is also the question of whether the frontier develops these characteristics, or somehow selects for them, with those people who choose to go to a frontier already possessing these characteristics. Certainly, one very typical characteristic of a frontier (almost by definition) is that it is an environment new, even alien, to the pioneer. The pioneer has to be ready to experiment with technology and methods, and to adapt ideas from neighbours, in order to survive. This doesn't necessarily imply individualism; indeed, a high level of cooperation and "neighbourliness" may be just as important on a frontier as a willingness to experiment. Thompson (1973) noted that Japanese pioneers in Bolivia combined nonconformity and conservatism. They were nonconformist in that the decision to emigrate was momentous, and the conformist was more likely to move to a Japanese city. They were conservative in that they emigrated in order to maintain the traditional Japanese attachment to the land and to agrarian values.

Johnson (1972) and Bogue (1958) have shown how traditional agriculturalists and pioneers are constantly experimenting in order to improve methods and tools. Johnson referred to experiments among peasants, traditional agriculturalists, and horticulturalists, concerning crop varieties, new crops, planting techniques, fertilizers, etc. Bogue was attempting to duplicate, through historical records, the type of study of innovations which rural sociologists can conduct in the present. He found that such motivations as the search for the

most profitable enterprise, a spirit of enquiry, and a concern for the welfare of one's neighbours, led to innovations.

Julian Steward's (1955:40-42) concepts of cultural ecology may be useful in the understanding of this combination of conservatism and innovation. He has outlined three fundamental procedures of cultural ecology: 1) analysis of the relationship between environment and productive technology; 2) analysis of the "behaviour patterns involved in the exploitation of a particular area by means of a particular technology"; and 3) analysis of the "extent to which the behaviour patterns entailed in exploiting the environment affect other aspects of culture". Those aspects of culture which are most directly related to the utilization of the environment constitute the culture core. The rest of the culture, the secondary features, "are determined to a greater extent by purely cultural-historical factors" (1955:37). Among societies in the same general environment, it is the secondary features which give the societies their distinctiveness. When pioneers move from one environment to another, the subsistence-related aspects, the culture core, are adapted to the new environment, while the secondary features may be carried along essentially unchanged. In this way, a pioneer society may exhibit a high level of experimentation with regard to subsistence technology and related aspects of the culture, but retain the secondary features such as value system, religious beliefs, etc. Lewis (1977:2) has gone so far as to define a frontier region and a pioneer society in terms of agricultural experimentation:

Agriculture has played a large and conspicuous role in the formation and development of pioneer areas. . . . Rather than viewing agriculture as merely a transplantation of crops and techniques from the mother country to its colony, it must be seen as an integral part of the process of frontier adaptation.

Agriculture in pioneer areas is characterized by experimentation with a large variety of crops: traditional, native, or both. Crop experimentation is an adaptive process of selection. This process is related to the pioneer society's need to modify itself to the conditions of its new social and natural environments. . . . Ultimately, crop experimentation leads to the selection of a few crops, and when that stage is reached, the pioneer area is nearing the end of its frontier status.

By this standard, Saskatchewan may still be a frontier region, since there is continuing experimentation with crops. In recent years, field peas, rape seed, lentils, and others have appeared.

"Frontier" and "pioneer" are terms that have not been used with any degree of rigour. Indeed some authors (such as Eidt 1971 and Bohannon 1967) use them without any definition, under the assumption that everyone knows what they mean. One objective of this thesis is to analyze the processes of change by which pioneer society became non-pioneer society. As with most terms, these cannot be applied to reality with a high degree of precision; and, as with most culture change, there is no sharp line of demarcation between them. In light of the current state of pioneer and frontier studies, the best that can be done at the moment is to reiterate that for present purposes a frontier is a geographic region undergoing some form of colonization, and pioneers are the colonizers. They must be willing to experiment in order to develop strategies of adaptation to the new environment. After a period of experimentation, methods and techniques will become more-or-less refined. The pioneer period will be considered to end when rural immigration has (more-or-less) ended, and when the pioneers will be seen to have developed adaptive methods. In Saskatchewan, adaptive methods include farm size (which is still changing), crop varieties (still undergoing experimentation), methods of cultivation (also undergoing continual experimentation), and so on. While this experimentation

has not ended, the current methods were more-or-less standardized about 1940, the rural population was no longer growing, and the economic situation was improving. Therefore, that year will be taken as the dividing point between pioneer and post-pioneer society for the study area. It is recognized that the selection of that year, while having a foundation in the logical analysis of data, also has a strong element of the arbitrary.

PEASANTS

An investigation of the relevance of the concepts of peasantries to Saskatchewan pioneers was one objective of this study. This objective was not considered primary. Certainly, considering the "exploratory" and descriptive nature of this research, and the lack of agreement among anthropologists regarding terminology, a definitive answer cannot be attempted. However, the question is most certainly worthy of consideration, both for the academic world of concepts and for the practical world of political and economic agricultural policies. As well, it is a problem with some very interesting aspects.

In the early years of this century, anthropologists studied primarily small-scale, non-industrial societies. The larger, more complex societies were claimed as a field of study for sociologists and others. As the former have disappeared, anthropologists have increasingly turned to the latter for subject matter, as well as to that society which has been viewed as standing in the middle: peasant society.

Peasant society is now considered to be an important societal type (Shanin 1971, Dalton 1972, Fitchen 1961), with various implications

for theory. However, the term has been used in various ways, referring to different characteristics. In the absence of any agreement about the meaning or implications of the term, it has very limited usefulness for social science. On the other hand, the term and its associated concepts can serve as a point of departure for more productive considerations.

Much of the disagreement in usage stems from the different aspects of society being considered. Some authors, concerned with economic systems, define peasantry in terms of a specific economic system and a method of production. Others, concerned with political relationships, focus on the interaction between a peasant society and the larger nation state. Still others have defined peasantries in terms of social organization, or class and power relationships, and so on.

The well-known concept of peasants is that they constitute a "part-society with a part-culture" (after Kroeber 1948:284). This conceptualization was derived from the duality between organic and mechanic solidarity of Durkheim, and the duality between community and society of Tönnies (Shanin 1971:293). The tribal society is small, isolated, and close-knit. Kinship is the dominant factor in social relationships. Political institutions are not highly developed and there is a minimum of authority. The urban society is the opposite; large, "depersonalized", and "individualized" (Kroeber 1948:282). Kinship is important only at the level of the immediate family. Relationships tend to be shallow and nonemotional. Tribal and urban societies form a continuum, with folk societies lying on the continuum close to tribal societies. Folk societies have labour specialization, rudimentary class divisions, and the beginnings of towns. Peasant

societies form another intermediate group. Peasants are

. . . definitely rural--yet live in relation to market towns
. . . They lack the isolation, the political autonomy, and the self-sufficiency of tribal populations; but their local units retain much of their old identity, integration, and attachment to soil and cults (Kroeber 1948:284).

The definition of folk and peasant societies was not central to Kroeber's work. Its only utility is that it tells us that the category "peasants" constitutes some sort of intermediate stage on a continuum that runs from urban sophistication to what might be interpreted as rural backwardness.

Robert Redfield (1930, 1941, 1947, 1953a, 1953b, 1956) has used similar terms and concepts, and has had a tremendous impact on the anthropological study of peasant societies. Redfield at first did not distinguish between folk and peasant societies, thereby creating a confusion that, according to some (cf. Foster 1967:5) he did not resolve. Certainly, it contributed to the "Folk-Urban Continuum" discussion (Miner 1952, Mintz 1953/54).

A fundamental characteristic of peasant societies, for Redfield (1939:XV, 1947:306, 1953b:31), is that they exist in relation to cities. There were no peasants before there were cities. Peasants are essentially "folk" societies that have been altered by contact with cities. They show some of the characteristics of folk societies (indigenous, small, homogeneous, self-sufficient, with a simple division of labour, with personal relationships, and with the general characteristic of the "moral order"), but also some characteristics adapted from the city (use of money, taxation, calculation of gain, urban control, and city-defined entertainment). The peasant produces for subsistence and as a way of life rather than for a market. The peasant is attached

to his land by long ties of tradition and sentiment, in contrast to the farmer, who sees land as a commodity. The peasantry is the rural portion of an old, long-established civilization. The peasant controls his land and works it for subsistence. His habits are part of a long tradition, but he is influenced by an urban people whose ways are similar to his.

Others have followed the path of Kroeber and Redfield (vide Foster 1953, 1960/61, 1965, 1967, Fitchen 1961). The "sybiotic spatial-temporal relationship" (Foster 1953:163) with the larger society imposes various characteristics on peasant societies, characteristics which make these societies unique. It is not just agriculturalists that have these characteristics, rural craftsmen may be peasants as well. For Foster (1967:6) a definition of peasants has to be

. . . structural and relational rather than occupational. . . .
It is not what peasants produce that is significant; it is
how and to whom they dispose of what they produce that counts.

This extension of the term to include rural craftsmen was challenged by Oscar Lewis (1960/61:180), who wanted the term limited to cultivators of the soil: ". . . it is the man-land relation which orders so much of what is significant about peasant life."

These conceptualizations which give primacy to the urban-rural relationships lead logically to another aspect of peasant studies. Since influence and control is almost completely from the city (or state) to the village, peasants are seen as oppressed and exploited producers. Important decisions are made elsewhere, and the peasants have very little control over decisions. In rare cases (cf. Wolf 1969) peasants have organized to wrest control from the cities.

An implication of this powerless condition is that peasants

are believed to develop a sense of apathy. This apathy contributes to peasant conservatism (another characteristic frequently attributed), and hence to the cultural lag that is a fundamental distinguishing feature. The peasant realizes he has no power to change his situation, so he becomes apathetic, according to this theory. He then decides that it is impossible to change his situation, and rejects those who would organize the villagers for change. These reformers would upset the equilibrium that is the basis of social health. The peasant also comes to believe that desired things, such as land, wealth, status, respect, and influence, exist in limited quantities: he can improve his lot in life only at the expense of others (Foster 1965). Similarly, another villager who is becoming more wealthy is doing so at his expense. Peasants develop an "Image of Limited Good". However, I have already shown that some peasants and "traditional agriculturalists" carry out experiments quite routinely (Johnson 1972). It may be that peasant conservatism and distrust of outsiders, if such attributes exist at all, has more to do with their experiences at the hands of outside "do-gooders" than with their own self-improvement experiments (cf. Harris 1975:468-474). Wolf (1969) has shown that some peasants are quite prepared to change their situation, and work out new relationships with the larger society. Also, the pioneers of this study undertook a great deal of experimentation in order to improve that economic position.

Another strong theme in anthropological studies of peasant societies is that they are structured and defined by their particular economy. Economic aspects may include the purpose of production (subsistence or market), the level of technology, the structure of the

productive unit, the nature of the exchange system, or the control of wealth and capital. Raymond Firth (1951:87), one of the leaders in this branch of peasant studies, believes that the scale of production, the level of technology and the purpose of production are primary:

The term peasant has primarily an economic referent. By a peasant economy one means a system of small-scale producers, with a simple technology and equipment, often relying primarily for their subsistence on what they themselves produce. The primary means of livelihood of the peasant is cultivation of the soil.

However, Firth has included non-cultivators in the category (1951:87-88):

But it is convenient, for our discussion outside the European field, to extend the term peasant more widely, to cover other types of small-scale producers, such as fishermen or rural craftsmen, who share the same kind of economic organization, and community life . . . Such a small-scale productive organization, built upon a use of or close relation to primary resources, has its own concomitant systems of capital accumulation and indebtedness, or marketing and distribution. The necessary relation of this peasant economy to particular types of social structure gives a characteristic shape to life in peasant communities.

This formulation allows societies with no relation to cities, or even with no system of cultivation, to be studied as peasants.

George Dalton (1964) felt there is a basic difference between primitive (subsistence) economies and peasant economies. In the former, production is solely (or mostly) for subsistence. The market is absent (or "only of minor importance to livelihood"). There is no buying or hiring of land or labour. Modern machine technology is absent. Traditional social organization and cultural practices continue to be important. Where markets do exist, transactions are face-to-face, market prices do not affect production decisions, and most people do not rely on market sales for livelihood. In peasant economies, most people depend on the market for livelihood. Production is therefore for the market, and decisions are affected by market prices. Here,

land and labour are routinely purchased or hired. Like the primitive economy, however, machine technology is rare, and the traditional social organization continues. In these respects, the peasant economy is similar to the primitive. Dalton found it necessary to add that these categories are ideal types, and that in reality one must speak in terms of degree.

That there is a distinct lack of agreement about the meaning of the term peasant should be obvious (see Leeds 1977 for a more detailed discussion of this problem). This confusion is centered on differences between "traditional" peasantries, European peasantries, "modernizing" peasantries and even "peasants in cities" (Mangin 1970). The confusion surfaces when the terms are applied to actual societies. If Firth (1951:102-103) can include the Maori, the Kikuyu, and "the Sioux and some other Indian tribes" under the peasant rubric, surely Fallers (1961) can conclude quite legitimately that African cultivators may be called "peasants". (He decides to call them "proto-peasants" or "incipient peasants" since they are not part of a larger society, with "Great" and "Little" traditions. In particular, they are non-literate, rather than illiterate members of a literate society. Thus, they are peasants politically and economically but not culturally.)

Fallers (1961) decided that the usage of terms was important, not for the sake of playing with definitions, but for a consideration of the features which are variously associated with peasant societies. These features, of course, are not always found together. It is for this reason that there is confusion, since students of peasant societies have not agreed on what those features are (although there is general agreement on some basics), or what portion of them is necessary to

label a specific society as peasant. This problem is exasperated by the numerous "marginal" peasant societies. Shanin (1971) included agricultural labourers, rural craftsmen and tradesmen, frontier squatters, pastoralists and peasant-workers (i.e. in the cities). These people share with "true" peasants most, but not all, of the characteristics he has outlined. Redfield (1956:20) admitted that there are societies that are not really peasant, that are peripheral to the general type, but that are enough like peasants to be considered peasants. Nomadic pastoralists of the Middle East, and frontier settlers who take traditional peasant ways into an area of open resources, are two such peripheral types.

Because of the conceptual difficulty evinced by these examples, the term peasant must be used very generally. It can be applied to a wide range of societies, and thereby implies very little about the nature of any specific society. Rather than juggling terms and definitions, it is more fruitful to consider some of the characteristics attributed to peasant societies: to decide whether these characteristics are present, and if so what are the implications of that presence.

Two students of peasant societies have developed a theory of the peasant economy which is well worth consideration (Chayanov 1966, Franklin 1965, 1969). Chayanov was concerned specifically with the Russian peasantry, and built on the work of a large number of economists, sociologists, agrologists and statisticians who produced thousands of volumes of data between 1861 and 1915 (Thorner 1966). His theories were expounded between 1911 and 1930, when he was arrested by the Russian government. Franklin was concerned with the European peasantry, and peasants in general. The theory he developed was very similar to

Chayanov's, as he found out when Chayanov's work was translated into English in 1966 (Franklin 1969:xiii). Since Franklin intended a more general applicability, his theory will be summarized.

Franklin was concerned with the peasant economy in particular. He recognized that the peasant system of production was distinct from either socialism or capitalism. To distinguish between these three types,

. . . the fundamental differentiator is the labour commitment of the enterprise. In the peasant economy the individual entrepreneur is committed to the utilization of his total labour supply--that of his family, who may, and often do, find alternative or additional sources of employment. This accounts for the diversities of historical peasant societies, but if these sources are not available the chef d'entreprise must employ his kin (Franklin 1965:148).

The supply of labour in the peasant economy is the controlling factor:

The whole logic of the enterprise is founded upon the premise of the adjustment of the scale of operation and of the intensity of operation to the existing labour supply. The farm is the basis of the family's existence. It has been created for this purpose and by these means. Its purpose is to ensure the perpetuation of the family, which supplies its labour force. Labour cannot be dispensed with according to prevailing external circumstances, since the objective is not economic but genealogical, and rarely are alternative sources of employment available. If they are, then usually they are few. Objectively and subjectively therefore the chef finds it difficult to change or alter his labour supply. He is committed totally to what he has got. This does not exclude all attempts to extend the limits of the family's economic horizon or, by various means, to regulate the size of the family; neither does it exclude the appearance of a rural population who are hired occasionally as wage labourers by the peasant family farm households (Franklin 1965:148).

In the capitalist and socialist systems of production, labour is a market commodity, to be hired or fired according to changes in the size of the farm, or the degree of mechanization, or the state of market prices.

Franklin (1965:149) constructed the following table to compare the three systems of production:

The Enterprise	Peasant	Capitalist	Socialist
Labour Commitment of the Enterprise	Total	Non-total	Non-total
Institutional Basis	Family	Family Joint Stock	Combine
Control and Direction	Family	Family-Managerial	Managerial
Means of Distribution	Barter-Market	Market	Prescription-Market
Media of Distribution	Kind-Money	Money	Money
Mechanisation	Possible	Usual	Usual
Ownership (the right of)			
(a) Direction	Chef d'entreprise for family	Chef d'entreprise Managerial	Managerial
(b) Alienation	(1) Agnatic interdiction (2) Testamentary custom (3) Permitted	Permitted	Constitutional Prohibition
Regulator	Labour Supply	Market	State

Figure 2.1. Franklin's Peasant, Capitalist and Socialist Enterprises.

Appropriation is the right to allocate the surplus production. There are, according to Franklin (1965:149-151), three systems of appropriation: feudal, capitalist and socialist. The capitalist system of appropriation is not defined by the profit motive; indeed motive has no place in Franklin's scheme (1965:154). Rather, a system is capitalist if the right of appropriation, and more specifically of alienation, is vested in the family.

Certain combinations of these systems, such as capitalist production and socialist appropriation, are logically impossible. Others are possible but rare. The combination of peasant production and capitalist appropriation is quite common:

As the peasant farmer receives his surplus in the form of profit, as his system of appropriation can be neither feudal nor socialist, because I see no basis for distinguishing a peasant system of appropriation, the system of appropriation associated with the peasant system of production must be considered as capitalist. . . . If the labour commitment is total, if the direction and control of the enterprise, the right to alienate it, are possessed by the family, then the system of production is peasant and that of appropriation must be called capitalist (Franklin 1965:154-155).

Franklin (1965:163) recognized the limitations of this scheme, such as the simplification involved. Very likely the scheme is intended only as a model, not as a theory to be used as an explanation. As a model, however, it can help us understand and thereby explain a complex reality.

One example of a complex reality that the model can clarify is the following question. During the 1920's, 1930's and 1940's, socialism took hold on the prairies, and various socialist policies were proposed. Eventually a socialist government was elected in Saskatchewan, and some of the policies were implemented. But there was no serious attempt to collectivize farm land, although a resolution calling for nationalization

of land was passed at a United Farmers of Canada convention in 1931 (Lipset 1971:passim, Hoffman 1975). This resolution succeeded by a narrow margin, and although it was adopted by the political party which grew out of the U.F.C., i.e. the Cooperative Commonwealth Federation, the latter eventually dropped the idea due to resistance from farmers (Lipset 1971). The object of the resolution was to prevent mortgage companies from foreclosing on mortgages and taking over farm land. In other words, the radicals in Saskatchewan were trying to prevent the development of capitalist production, and the farmers rejected the socialist alternative. They were, I believe, trying to maintain a peasant system of production. Franklin (1965:156) wrote:

The logic of the peasant enterprise is quite different [from the capitalist enterprise]; the enterprise is of the family, for the family, by the family. The right to use the land is the indispensable requirement. The great fear has been of the preemption of that right.

To understand the development of Saskatchewan farms, it is useful to return for a moment to the definition of a peasant economy in terms of the labour commitment (Franklin, *supra*), and compare with Chayanov's (1966) theory. For Chayanov, a capitalist farm operates on the basis of profit. This is determined by a calculation of output, expenses paid for wages, rent, upkeep, etc., and capital investment. The basis for decisions on a capitalist farm is the profitability of the proposed action. Once one of those factors is missing, however, the farm is not, and cannot be, a capitalist farm. In a peasant farm, there is no hired labour, and therefore no calculation of wages. Hence, a peasant farm cannot operate in terms of profitability. Instead, the basis for peasant farming decisions is the "labour-consumer balance".

The labour-consumer balance is a balance between the satisfaction

of the needs of the peasant-family, and the drudgery of labour. Peasant work is drudgery, and the greater the amount of work performed in a given period of time, the greater is the drudgery (Chayanov 1966:81). The level of drudgery increases geometrically as the amount of work increases algebraically. On the other hand, the work is subjectively evaluated according to its contribution to the standard of living of the family. This evaluation decreases geometrically as the amount of work increases. These two curves can be depicted as in Figure 2.2. The peasant will try to increase his labour to point E, but not beyond.

A peasant family that has access to a considerable amount of land will be able to utilize its labour potential at an optimum level. If the family is restricted to a small amount of land, it may deem the acquisition of more land to be very important in order to increase the working hours to the optimum level. The increase in output, with the attendant increase in living standard, may be so important that the family will pay a premium price for the land. This price may, in fact, be much higher than the capitalist would be able to pay, basing his offer on profitability. Similarly, the peasant may be able to pay a high rate of interest, or sell produce for a low price, when the capitalist would have to go out of business. The peasant can work longer hours, sell at lower prices, obtain no net surplus, and still carry on the enterprise. He has a much better competitive position than the capitalist farmer.

Chayanov's theory of peasant economy can be called "substantivist". There are two major schools of theory in economic anthropology, the "substantivists" and the "formalists". The formalists take as their model that of maximizing and economizing man (Burling 1968). This

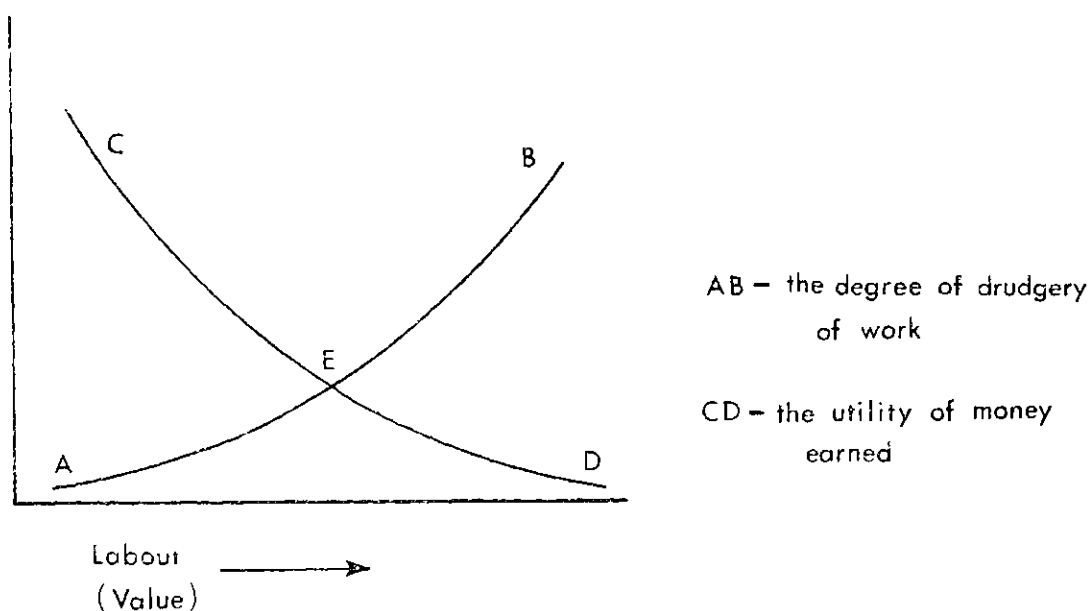


Figure 2.2. Chayanov's Utility vs. Drudgery.

model assumes that human wants are unlimited and resources are limited. Therefore, decisions must be made based on a rational calculation of how to obtain the maximum want satisfaction. It is sometimes assumed that money and profits are being maximized, but this has been expanded to include the maximization of prestige, leisure, power, etc. The general proposition that people act so as to maximize "satisfaction" is, suggested Burling (1968:183) a truism, and says very little. However, the formalists believe that the general concept of maximization must be retained, since it is one form or another of maximizing that guides goal-oriented behaviour and decision-making. The major problem with this model, according to Burling (1968:185), is that it is difficult to place a quantitative measure on prestige or leisure.

The other major theoretical approach, in which Chayanov's model can be included, is the "substantivist" approach (Dalton 1968, 1969, Halperin 1977). The substantivists believe that concepts of economizing and maximizing may not be applicable in societies which do not use

money and which do not operate on the market system (primarily primitive and peasant economies). One reason for this rejection is that substantivists believe formalists have ignored a large part of what is important in economics:

With the minor and recent qualifications of comparative economic systems and economic development, conventional economics excludes from its formal analyses matters relating to social organization and other aspects of culture (Dalton 1969:64).

The substantivists believe that, in economics as well as in studies of religion, politics, or other branches of anthropological inquiry, it is inappropriate to use Western concepts and ideas to study non-Western peoples:

Special analytical concepts are necessary because social organization and culture--kinship, political organization, religion--affect economic organization and performance so directly and sensitively in non-market systems that only a socio-economic approach which considers explicitly the relationships between economy and society is capable of yielding insights and generalizations of importance . . . (Dalton 1969:65)

A fundamental difference between the substantivists and the formalists is the way each defines "the economy". The formalists consider economic activity to be the process of rational allocation of resources. The substantivists define "the economy" as "the instituted process through which humans in society interact with nature to supply the material means of livelihood" (Halperin 1977:2, emphasis in the original). This material-means provisioning system is very similar to Steward's culture core (see *infra*).

While I have not arrived at a perfect understanding of the substantivist and formalist economic theories, it would appear that formal economic theory has been developed to analyse capitalist economics (see Halperin 1977:7-8). Even in the capitalist system, formal economic theory has been concerned with how people can economize more intelligently,

not with whether they in fact economize at all (see Burling 1968:185). It is, therefore, a theoretical and abstract study. The attempt to extend "maximizing" to include prestige, leisure, and possibly all facets of human activity has been called "impossible" and "scientifically untenable" (Halperin 1977:10). Furthermore, Dalton (1969:66) pointed out that the ability to translate socio-economic transactions and exchanges into market terms does not necessarily mean that it is useful to do so.

It is at least doubtful that formal economic principles can be used to explain all actual human behaviour in a capitalist system. In non-capitalist systems, the doubt grows. Chayanov (1966) and Franklin (1965) may be considered substantivists because they recognized that peasant production is not the same as capitalist production, and the bases of decision-making are not the same. The peasant farmer does not calculate profit and loss, costs and benefits, and so on, the way that a capitalist might. Therefore, a different theory, and a different set of concepts, must be developed to explain his actions.

While the theories of Franklin and Chayanov were not the basis for the collection of data--indeed, I only stumbled on them in the later stages of the study--the theories of peasant economy should be kept in mind. In the final chapter, this question of pioneers-as-peasants will be addressed. Also, an attempt will be made to use these theories to explain some of the changes in Saskatchewan farming practices.

ECOLOGY

The theoretical orientation which guided much of the data collection was that of cultural ecology. This approach has roots that

run deep in anthropology, but it owes much to the theoretical writings of Julian Steward. He emphasized the role of the environment and man's relations with the environment in forming and influencing culture. The environment in which a group of people try to survive does not determine the form their culture will take. Rather, these people, trying to survive in and adapt to a particular environment, will develop cultural forms (or "adaptive strategies") which they believe provide assistance, given their particular goals and values. Indeed, as time passes, even goals and values will change in relation to the limits and possibilities of the environment.

There are certain features of a culture "which are most closely related to subsistence activities and economic arrangements" (Steward 1955:37). These Steward called the "culture core". Technological aspects of the culture usually form an important part of the culture core, but it can also include those "social, political, and religious patterns as are empirically determined to be closely connected with these arrangements" (Steward 1955:37). The other features of the culture he called "peripheral", and are more subject to the influences of culture history, such as diffusion. These peripheral features provide an appearance of distinctiveness to cultures having essentially similar cores. However, the cultural ecologist is more concerned with the possible similarities among culture cores than with the differences among peripheral aspects. The cultural ecologist "pays primary attention to those features which empirical analysis shows to be most closely involved with the utilization of environment in culturally prescribed ways" (Steward 1955:37). It is interesting to note the similarities between Steward's culture core and Halperin's (1977:2)

substantive definition of the economy presented earlier.

Steward developed the concept of the culture core in order to be able to compare cultures in similar environments and with similar technologies. However, before "cross-cultural types" (Steward 1955:88) can be outlined, the culture core has to be described. This is one purpose of the present research, in which those aspects of the culture which were most closely related to subsistence activities and the provision of the material means to existence are analysed. One problem with the method of cultural ecology is that the researcher cannot predict prior to the research which elements of a culture will form the culture core. In Chapter 6, one aspect of the culture core, omitted from study in part because of this unpredictability, will be outlined.

The method of cultural ecology set out by Steward (1955) takes as a basic assumption the materialist definition of culture, that a culture is essentially a set of strategies by which a group of people try to adapt to and survive in their environment. The social groupings that are organized to provide labour for such tasks as harvesting or cutting firewood are examples of socio-political aspects of a culture that are part of the culture core. A preference for one crop over another is one aspect of the value system which is directly concerned with exploiting the environment. At the more basic level, the tools used for crop production form an important part of the culture core.

Steward (1955:40-42) set out three "fundamental procedures" of cultural ecology. First, the researcher must analyse the relationships between the environment and the exploitative or productive technology. In agricultural societies, this involves agricultural methods, provision and use of implements, and so on. Second, the researcher must analyse

the patterns of behaviour associated with the exploitation of a particular environment using a particular technology. This may include patterns of co-operative hunting, gathering, or other tasks, the distribution of produce, etc. Third, the effect of exploitative behavioural patterns on other aspects of the culture must be analysed.

The present research uses this basic approach. The primary focus of description is on the formation and operation of a pioneer farm, within the limitations of a particular environment. As well, some aspects of behavioural patterns are analysed.

Steward's method of cultural ecology will allow the researcher to investigate those aspects of the culture that the informants themselves recognize as being related to subsistence. A reasonably intelligent informant would be able to discuss the methods of food procurement, for example. When investigating a culture of the past, this general approach must be used. It does not assume that the informants are completely objective or insightful. However, in this thesis statements of informants were compared with other sources, such as written reminiscences, historical records, and observations of current practices, to arrive at an approximation of "objective reality".

This approach differs from the cultural ecology of Marvin Harris (1965), who applied scientific and objective measures to arrive at quantified data regarding the role of cattle in the Indian economy, and it differs from Roy Rappaport's (1968) study of pigs in New Guinea which also used quantified data. These two studies might be termed "etic" (Harris 1968:568-604), since they used the "cross-culturally valid analytical and quantitative categories" (Harris 1968:316) which are indicative of the etic approach. The basic distinction between

emics and etics is that the former uses categories meaningful to the informants, while the latter uses categories judged appropriate by the scientific community. Apparently scientific categories usually involve quantified data, but there is nothing necessary about this, in my opinion. In some kinds of research, of which this is one, much of the potentially quantifiable data are lost, or otherwise inaccessible. Furthermore, while Harris explicitly stated (1968:577-579) that the two categories are separate and cannot be mixed, still there are situations in which the two approach each other. Harris (1968:576-577) used as an example the case of the informant being taught by the ethnographer to think in ethnographic terms and provide etic data. It seems to me that etic categories are basically categories of Western science. When an ethnographer is studying people who use the same general categories, then the emic and etic distinction becomes very fuzzy. If, for example, the ethnographer was studying a community of people who thought in the same terms as Marvin Harris and Roy Rappaport, the informants might be able to tell the ethnographer how many calories they consume each day, and from what sources, and how many man-hours of work are required to provide these calories. The distinction between emic and etic data is clear when the informants are New Guinea highlanders who think in terms quite different from the Western science-oriented ethnographer. In other situations the distinction may not be as clear.

The present research, concerning Saskatchewan pioneer farmers, is just such a case. Some of the categories used by informants are clearly the same as those used by scientists attempting to establish objective units of behaviour. To a certain extent, the distinction

between emic and etic data does not apply to this research. If the society being studied was in the present, the researcher might be able to quantify more data, and provide a study similar to those of Harris and Rappaport mentioned above. However, this is not possible, so the data that are available are even harder to classify as either emic or etic.

Returning, then, to a description of pioneer farming within the limits of the environment, there were two major environmental constraints, and one technological limitation. First, the climate imposed limits in crop varieties and in methods. The study region is an area of abundant rainfall, and at times rainfall has been so abundant that cropping practices were made impossible. Also, it is approaching the northern limit of agriculture, a limit defined largely by the length of the growing season. One fairly common problem in the study region was a late spring or an early fall, resulting in a growing season too short for many crops grown elsewhere in North America and in Europe.

The heavy stands of aspen forest provided the other major environmental limitation. Pioneers had to expend much time and energy preparing soil for cultivation because this forest had to be felled by axe and roots had to be pulled by hand and animal power before crops could be sown. The immediate result was that farms grew much more slowly than in the treeless prairies to the south.

The major technological limitation was the source of traction power. In the early years many pioneers used oxen. After a few years they switched to horses, and used them as the major source of power until the end of the thirties, when tractors became common. Horses (and oxen) could only be worked so many hours each day. They could

be expected to do only so much work in those hours. Feed had to be provided for them. They could haul only so much grain to the rail line, and they could make the trip only so fast. Horses also imposed limits on the patterns of social activities.

There were other limitations, of course. The varieties of crops available in the early years were not well adapted to the climate. The homestead system imposed by the federal government presented limitations with its artificially superimposed boundaries of ownership. These and other limitations presented difficulties, but the first three (climate, vegetation and traction power) were the most influential and extensive.

A description of pioneer farmers using an ecological approach logically will include such aspects as the process of setting up a pioneer farm, the problems involved, and experimentation with various aspects; the activities associated with subsistence on a functioning pioneer farm; patterns of social interaction associated with pioneer farms; the seasonal cycle of activities; and the use of oxen, horses and tractors. These topics are the basis of the following descriptive chapter.

The justification for including most of these topics should be obvious, given the general approach. However, the seasonal cycle may not be quite so obvious. It is intended to show pioneer farming activities as a cycle that leads from one stage to another, year after year. It is also intended to show that, on the one hand, a pioneer was never so busy that he could not stop to visit (in the phrase often used by informants), but on the other hand there was always work to be done.

There is a considerable body of precedent for including such a

description in a study of this sort. For example, Moerman (1968) included a description of the yearly cycles associated with the cultivation of the different types of fields (irrigated, "flood", and "rain-fall") in a rice-growing region of Thailand. Wallace (1970) included such information in his contrast between swidden and plough agriculture in the Philippines. Meggers (1971) included a description of the yearly cycle of swidden horticulturalists in the Xingu basin of Brazil. These studies have included this information because horticultural and agricultural societies are so strongly tied to the orderly passing of the seasons. Appropriate activity at any given time is, in part, a function of the season.

Chapter 3

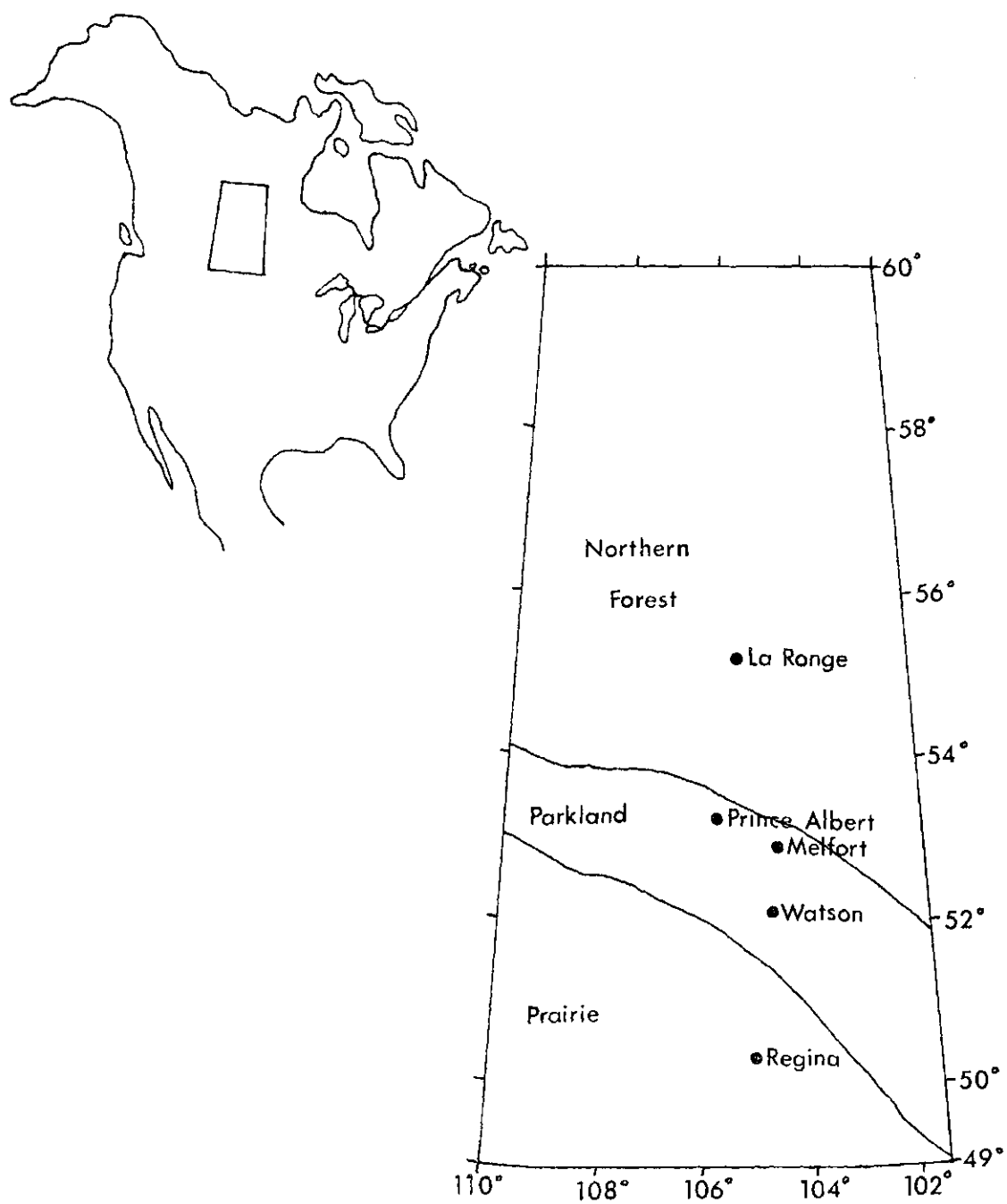
THE STUDY REGION

A description of the study region involves three aspects: a description of the physical environment, including the climate and soils; the history of the region, including a brief overview of agriculture in Saskatchewan and the sequence of settlement in the study area; and a short demographic description of the area.

PHYSICAL GEOGRAPHY

The area chosen for study, the Rural Municipality of Pleasantdale, covers 324 square miles. It is situated in east-central Saskatchewan, toward the northern edge of the agricultural zone (see map, Figure 3.1). It lies in the "park belt", a strip of rolling prairie and aspen forest which cuts diagonally across Saskatchewan, from the south-east corner to the centre of the province at the western border. This park belt constitutes the northernmost extension of large-scale agricultural activities on the North American Great Plains.

For the sake of brevity, and with some over-simplification, Saskatchewan can be characterised as being composed of three physical regions: the prairie, the parkland, and the northern forest. The prairie is found in the south and west. The climate may be classified as "cold steppe climate" according to the Köppen classification system (Chakravarti 1969). This is a semiarid region, with low but variable precipitation. Soils are for the most part brown and dark-brown.



Scale 1" = approx. 140 miles

Figure 3.1. Saskatchewan.

Native vegetation consisted primarily of short-grass or mid-grass prairie. This area is now occupied principally by large grain farms, with some smaller and mixed farms.

The forest region covers the northern half of the prairie. The climatic type is "cold snowy 'forest' climate". Summers are cool and very short, freezing temperatures may occur at any time in the year, and there is generally a higher level of precipitation. The soils are primarily podzolic and organic soils, unsuitable for cultivation. Vegetation is coniferous forest.

Between the prairie and the forest is a transitional zone--the parkland. This zone is imprecisely defined but is roughly seventy-five to one hundred miles wide. The climatic type is "cold 'forest' climate", with cool summers and cold winters. There is a higher level of precipitation than on the prairie. Soils are primarily dark brown, black and grey wooded podzolic. Native vegetation was aspen forest or mixed wood forests of aspen and conifers. Mixed farming now predominates in the parkland.

Pleasantdale R.M. consists of gently rolling hills. In the north east corner, there is an area of much steeper hills (see Figure 3.2). This north-east corner is also very rocky land, to the extent that large parts of it are unsuitable for farming. Part of it has been made into a community pasture administered jointly by the provincial and federal governments. Another part is an Indian reserve, the home of about three hundred Ojibwa Indians. There is also a regional park on the shores of Lake Kipabiskau. The local name for this lake is Stoney Lake, an indication of the soil conditions. Another large part of this area is owned or leased by a local farmer who runs cattle on it, more or less in the manner of an "old west" rancher.

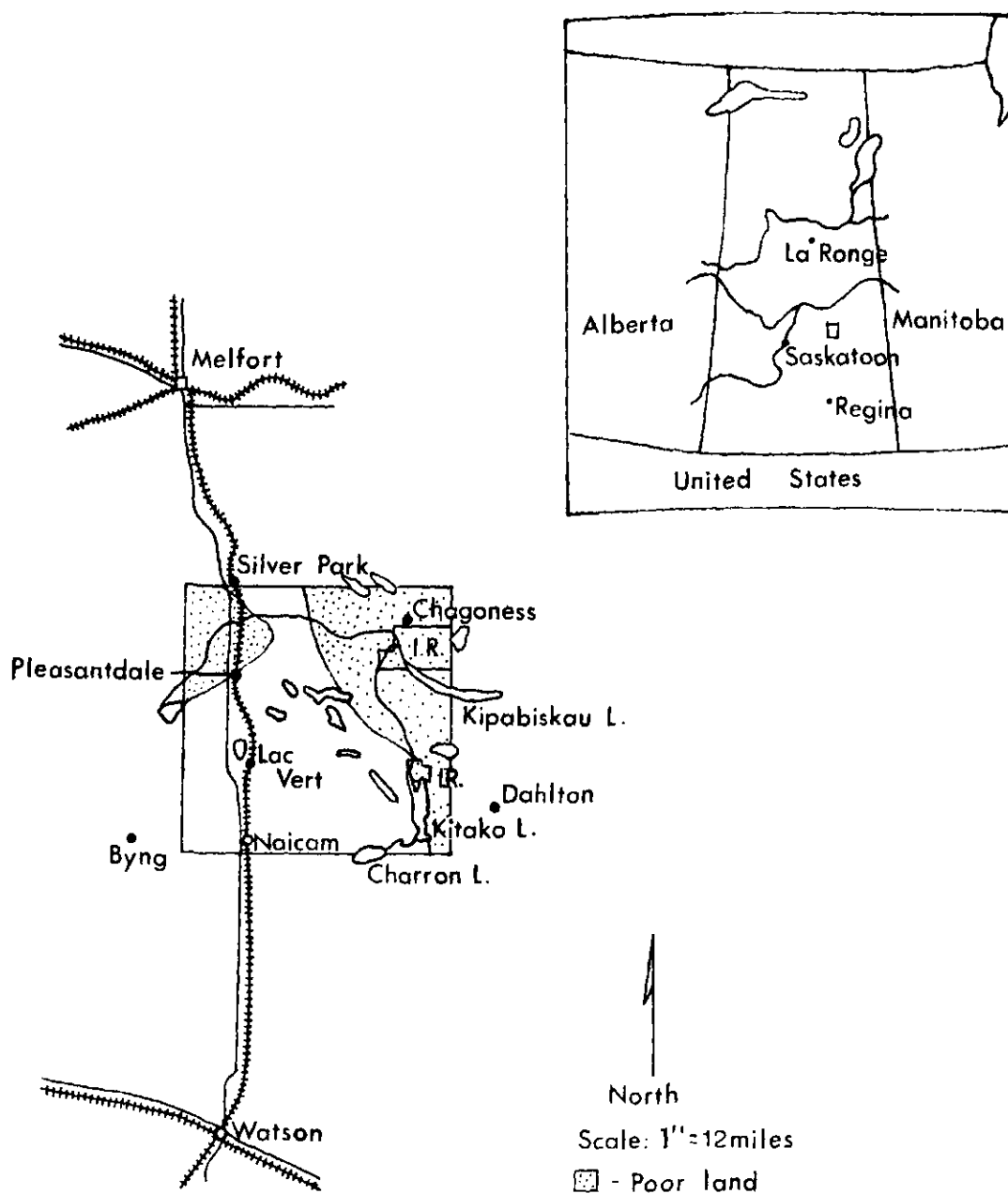


Figure 3.2. Rural Municipality of Pleasantdale No. 398.

There are numerous small and shallow lakes in the region, many of which are or have been used for recreation. There is a regional park at Lake Charron, and many families from Naicam camp there during the summer months. Connecting and feeding these lakes are numerous small creeks, most being only a few feet wide.

To the east and the northwest are areas of marshy land, where farming is carried out on the higher land. The rest of the region contains good land, highly rated as to its suitability for agriculture.

In the Naicam area, there is a growing season of ninety to one hundred frost-free days. There are about 2300 degree-days annually (the number of degrees Fahrenheit above 42° for the year). As a comparison, spring wheat requires approximately 1750 degree-days, Regina (see Figure 3.1) has about 2700 degree-days, and LaRonge has about 2100.

There is little concern for rain because annual precipitation in the study area is about sixteen to eighteen inches, with ten to twelve inches falling as rain in the growing season.

HISTORY

The history of Europeans in Saskatchewan has been well documented (see Morton 1939, Morton and Martin 1938, MacEwan 1952), although not without some lacunae (Thomas 1973). It is not appropriate to present a detailed history here, but there are some land marks which should be noted.

Fur traders began exploiting the prairies in the last decade of the seventeenth century, with the construction of Fort Churchill and later Fort Prince of Wales. It was fur traders, such as Henry Kelsey and Anthony Henday, who were the first white men to travel through

the prairies. It was also fur traders, at various posts, who were the first to conduct agricultural activities on the prairies. They raised some of their own food to cut down the quantities that had to be transported, and to provide fresh vegetables. According to some reports (MacEwan 1952:14 for example) LaCorne was the first to try growing wheat in Saskatchewan, at his post on the Saskatchewan River between 1753 and 1756.

The first agricultural settlement on the prairies was Lord Selkirk's experiment. He brought dispossessed Scottish crofters to the banks of the Red River in southern Manitoba, in 1812. This attempt was plagued with difficulties, such as early frosts, grasshoppers, mice, floods, and, not the least of these, the animosity of the two rival fur companies. Somehow, the settlement managed to survive.

Gradually, a few intrepid pioneers ventured away from the Red River, west into what is now southern Saskatchewan. But these were very few indeed, and they were hardly noticeable on the expanse of the prairies. More notable was the settlement of Métis along the South Saskatchewan River centering on Fish Creek and Batoche. This colony was established with an exodus of Métis from the Red River after the collapse of the rebellion of 1869-1870.

Throughout the nineteenth century there were a number of scientific expeditions across the prairies. These expeditions were commissioned by the governments of Great Britain and (later) of Canada, to explore the west (such as Franklin's expedition of 1819-1822), and to report on its resources (such as Palliser's expedition of 1857-1858). The Palliser expedition reported that there was a large area (later called the "Palliser Triangle") covering much of southern Saskatchewan

and Alberta, which was arid and unsuitable for agriculture. This report was contradicted by the recommendations of H. Y. Hind, who surveyed a much smaller region of Saskatchewan. He was more enthusiastic, and since the Canadian government wanted to believe that the West was fit for settlement, his view was accepted. As a result of his recommendations, the Hudson's Bay Company transferred control of Rupert's Land to the government of Canada in 1870.

In 1872, John Macoun, a professor of geology and botany, made a trip to the West. The purpose of the expedition (under the leadership of Sandford Fleming) was to analyse the potential of the prairies with a view to locating the future Canadian Pacific Railway (C.P.R.). Macoun was highly optimistic about the potential of the prairies for agriculture (in MacEwan 1952:43):

In a very few years the crop will be limited by the means of export, and just as the carrying capacity of the roads increases, so will the crop. No sane man can doubt this, for a glance at the map will tell him that there is no limit, but the want of a market, to the wheat crop of the North-West.

The C.P.R. eventually was constructed through the middle of the Palliser Triangle, with branch lines north to Saskatoon and Prince Albert (1889-1890) and Yorkton (1886-1890). These railroads preceded most of the settlement, and influenced the homesteader's decision as to where to locate. Furthermore, early settlers realized the advantages of homesteading on the open prairie rather than in the bush. As a result, settlement prior to 1905 was largely restricted to the open prairies.

An important aspect of the settlement of the Canadian West was the Dominion Land Survey, begun prior to the transfer of 1870 (Thomas 1975). This survey was based on the American system, but the open expanses of the Canadian prairie allowed more consistency. Thomas

(1975:3) presents a clear summary of the system (see Figure 3.3):

. . . by 1880 meridians had been established from Winnipeg to the Rockies and base lines from the international boundary to the North Saskatchewan [River]. The principal meridian was established just west of Winnipeg and the boundary, the 49th parallel, provided the first base line. A system of numbered sections of six hundred and forty acres each, townships of thirty-six sections numbered north from the boundary, and ranges, thirty between each initial meridian, provided a simple method of land description. Thus North West Quarter, Section 22, Township 42, Range 3, West of the 3rd Meridian, gave a precise statement of exact location and bounds. The base lines running east and west were four townships, approximately twenty-four miles apart. Between every two base lines correction lines were established to accommodate the curvature of the earth's surface. These lines jogged where the base lines intersected with the meridian lines on the west side of each block of four townships.

The end result was that when homesteaders arrived in the West ready to claim land and build farms, this system of land ownership was already superimposed. It took no account of physical features, natural resources, or varying fertility. But it was, in Thomas' (1975:3) phrase, "as convenient as it was colourless". Together with the system of land registration, it prevented many of the disputes over land ownership which plagued some other pioneer regions.

A large portion of the surveyed land was opened for homesteads by various Orders-in-Council, beginning in 1870. The federal government was (at least formally) committed to the concept of large numbers of settlers obtaining land at very low cost (Martin 1973:139). By an 1871 Order-in-Council, provision was made for homestead entries on quarter sections (160 acres each), with a fee of \$10 and a required residence of five years before title ("patent") could be granted. Later Orders-in-Council and acts of parliament changed the provisions somewhat. For example, the Dominion Lands Act of 1908 allowed a homesteader in certain areas to purchase ("pre-empt") the adjoining quarter, if unoccupied, for \$3 per acre.

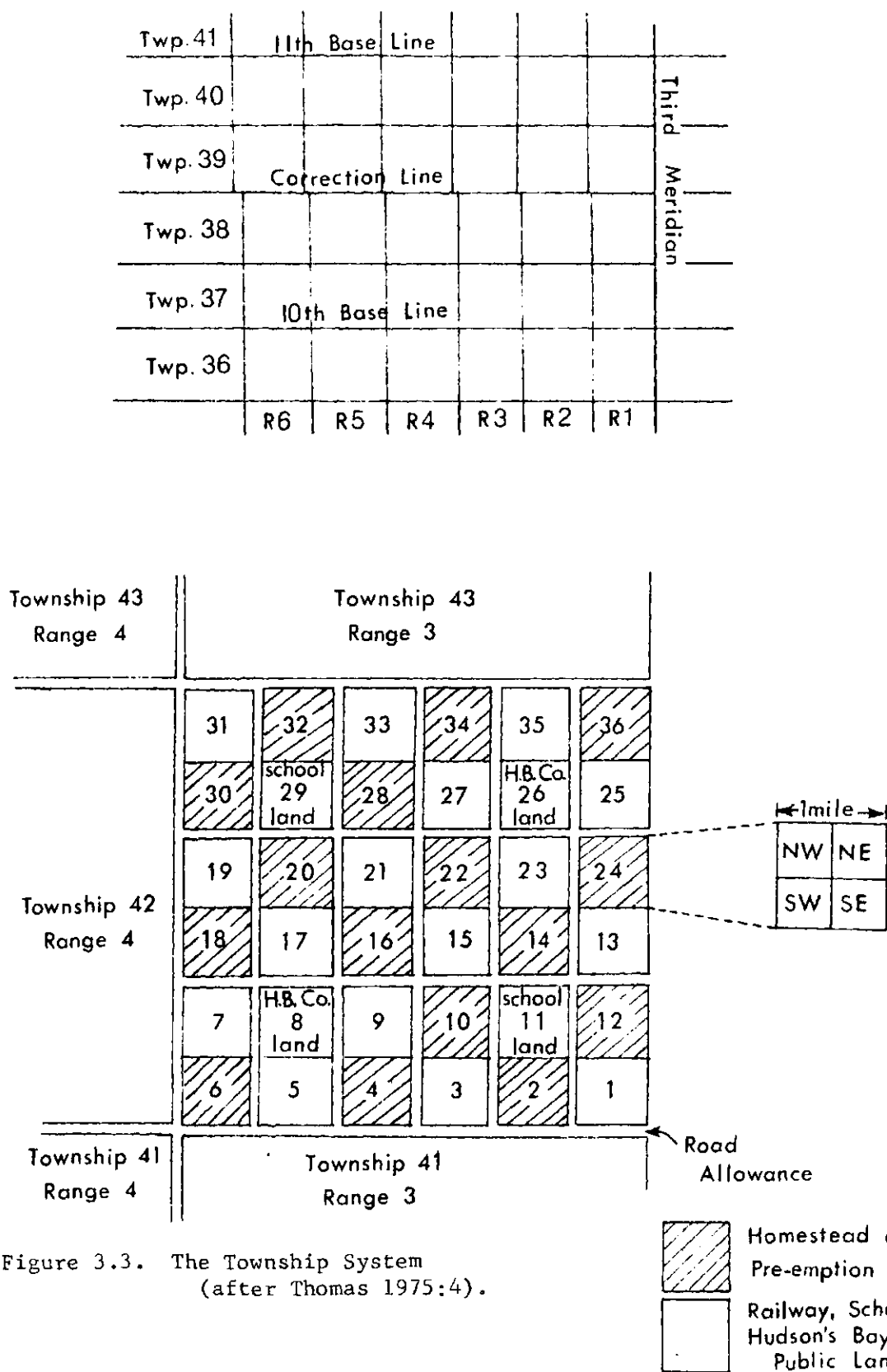


Figure 3.3. The Township System (after Thomas 1975:4).

Not all the land was opened for homesteading, however. Sections 8 and 26 of each township were turned over to the Hudson's Bay Company as part of the agreement by which Canada gained control of the Northwest. Sections 11 and 29 were reserved as school lands. They were to be offered for sale to support the future local schools. Odd numbered sections were to be reserved for land grants to colonization companies, or to railroads as added enticement for construction, or for sale by the federal government. A large portion was turned over to the Canadian Pacific Railway as part of the agreement by which the railroad was constructed. In Saskatchewan, an average of 17,000 acres of land was given to the C.P.R. for every mile of railroad constructed, a total of 15,190,000 acres (Martin 1973:75).

When this system of land tenure was set up, the concepts of "Agrarian Democracy" were popular (Brown and Bens 1971:2-4). This philosophy was based on the idea that land ownership was necessary for political freedom and access to social and economic opportunities. Having as many people on the land as possible, and with those people owning the land they occupied, was a basic requirement for the protection of democracy.

The originators of the land and settlement policies believed that the wide diffusion of ownership among those who cultivated the land would ensure the fullest and most effective utilization of the land resources. They felt also that farm-owning operatorship would give the greatest measure of security to the cultivator and would provide for the most effective organization of rural life. Quite as important they felt that farm-home ownership would furnish the type of political environment and the degree of political stability necessary for a strong democracy (Van Vliet 1941:388, in Brown and Bens 1971:2-3).

Morris Wills (1977:4) has suggested that this belief was characteristic of the nineteenth century, and that its effects were felt elsewhere:

Many of the more important commercial and political leaders in California and Australia were very much men of the nineteenth century. They were ambivalent in their attitude towards the city and believed that land and its intensive cultivation was the ultimate basis of wealth and social order.

Homesteads of 160 acres each were originally believed to provide the most viable homesteads. Since 1870, there has been a continuous process of readjustment toward larger farms. The Dominion Lands Act of 1908, providing for low-cost pre-emptions, was one step in this readjustment process. It arose from the recognition that prairie land was not as productive (per unit of size) as land in southern Ontario, and a viable farm needed considerably more than 160 acres.

Settlers did not immediately pour into the West, as was hoped (Hill 1967:162-164). There was a depression and a severe drought in the 1870's. There was not yet a good system of transportation, and there was still much land available in the United States. With improved economic conditions through the 1880's, the completion of the C.P.R. in 1885, and a massive publicity campaign in Europe (presenting the potential of the prairies in somewhat exaggerated and unrealistic terms), settlers began to fill the West. In 1901, there were 90,000 people in what was to become the province of Saskatchewan, a figure which includes roughly 25,000 of native origins. By 1911 there were more than 490,000. As the open prairies of the south filled, settlers headed farther north, where homesteads of good land were still available. Although bringing this land under the plough required a good deal more work, clearing bush to create a farm was the only feasible choice for the pioneer lacking the financial resources to buy an established farm.

The first settlement in the Melfort area was established in the 1870's along the Carrot River near the present town of Kinistino.

However, few settlers entered the Melfort area prior to 1900. The census for 1901 shows less than 1000 people in the Melfort-Tisdale region, and only 15 in the Pleasantdale municipality. Not until after 1906 did the population increase significantly (67 persons in 1906, 511 in 1911). What little immigration there was tended to follow the railroads, such as the line between Hudson Bay and Prince Albert. That line reached Melfort in 1904.

Those who settled away from a railway line generally contented themselves with getting established, constructing buildings, and clearing land for gardens and feed crops. One early settler of the Carrot River Valley has written:

The land, the dreamed of wide acres of wheat and barns full of stock, could wait. They would come as markets were opened up, elevators built, stock yards and loading platforms provided, but in the meantime there was nothing to do but improve the dwellings, clear and break land, acquire another cow or two, and dream of the 'great future' that lay before them (Crampton n.d.:29).

Immigration into the Pleasantdale area was fairly steady until the First World War (see statistics below). During the war, immigration declined because the armed forces drained off a lot of manpower. Following the war, however, immigration resumed. Now it was aided by the Soldier Settlement Board (S.S.B.), a government agency formed for the purpose of assisting veterans to settle on unoccupied land. The S.S.B. assisted individuals, but it also sponsored group settlements such as at Porcupine Plain, some fifty miles east of Pleasantdale (see Morgan 1968). For individuals, the S.S.B. provided loans for the purchase of land, livestock and equipment, and for the erection of buildings (Morgan 1968:42). Interest was at 5%, with loans payable over four years (for livestock and equipment) and twenty-five years (for land and buildings).

The first installment on the loan was deferred for three years. The S.S.B. also provided advice and assistance regarding the selection of land, livestock and implements. There were a number of problems with the program (see Morgan 1968) and by the spring of 1923, 14.5% of the soldier-settlers had abandoned their farms. But the effects of the program were felt in the form of increased population and economic activity, particularly in the less populous areas such as the Pleasantdale municipality.

A railroad was constructed from Watson to Melfort between 1921 and 1924, and reached Naicam in 1922. (Naicam was named after the railroad contractors, Naismith and Campbell, according to Russell, ed. 1968: 220.) This railroad did not lead settlement (as other railroads had), so much as it followed settlement. There were, by 1921, some 1600 people in Pleasantdale municipality, and 1400 in the municipality adjacent to the west. Most of these 3000 people were located on the good land which was near the municipal boundary. Some pioneers had settled where they thought a railroad might be built in the future, and once the railroad was built others settled on unoccupied land close by.

Railroad construction had two other effects on pioneer life. First, it provided a source of employment for pioneers, many of whom were hard-pressed for cash. These people were employed constructing the railroad, provisioning and supplying the construction crews, and constructing elevators along the right-of-way. Second, the railroad provided a much more accessible market for farm produce. There was not much stimulus to produce cash crops such as wheat when it had to be hauled twenty, fifty, or one hundred miles. In a 1919 letter to the provincial treasurer from a southwest Saskatchewan farmer (Anon. 1967),

the author said that many of his neighbours were unable to work their land properly in 1917 because they had to spend much of the summer on the trail hauling wheat forty-five miles to the rail line. The author said he was planning to increase his crop acreage from 400 to 500 acres in 1919, but if a branch line was promised, he would increase it to 625 acres.

Throughout the period of settlement on the prairies there have been periodic droughts and economic depressions. Usually the two have not occurred simultaneously, and usually they were both relatively minor. The years 1919 and 1924 were years of widespread drought (Chakravarti 1969), but it was the period from 1929 to 1938 which was devastating. There were three years of severe drought (1929, 1936, and 1937), with years of low precipitation, high winds, dust storms, and grasshopper plagues occurring throughout the period. While the Palliser Triangle was the area hardest hit by these conditions, a situation which supported Palliser's assessment that this region was unfit for agriculture, most of Saskatchewan south of Saskatoon experienced crop failures.

A number of factors contributed to the crop failures, a lack of rain being the most obvious. In the years when enough rain fell to produce a crop, plagues of grasshoppers or infestations of wheat stem rust destroyed the crops. The system of summerfallowing did not help the situation. The method of summerfallowing prior to 1930 was to work the land so much that there would be a layer of dust lying on the surface ("dust mulching"). According to James Gray (1967), a journalist who witnessed the events, the drought did not just end, it was wrestled to defeat by the newly-formed Prairie Farm Rehabilitation Administration (P.F.R.A.), a federal agency. The P.F.R.A. instituted such programs

as returning submarginal land (land which should never have been cultivated) to pasture; planting shelterbelts; digging dugouts for water storage; and perhaps most important, encouraging farmers to adopt "stubble mulching". This method of summerfallowing consisted of cultivating as little as possible, and using an implement that left the stubble and weeds ("trash") lying on the surface. This trash cover protected the soil from wind erosion.

The Pleasantdale area did not suffer much from the drought (see Table 3.1 and Figure 3.4). But along with the drought came a world-wide depression, during which the bottom fell out of the international farm produce markets. When a farmer was able to produce a wheat crop, the price he received was as low as 10¢ per bushel (Gray 1967:55). For the pioneers of the Pleasantdale area, it meant more years with little or no money.

Besides the poor prices, the drought and depression had another effect on the study area. Many farmers from the drought-stricken region abandoned their farms. They loaded a wagon with whatever they had left, and headed north to start over again. The entire northern fringe of settlement, from the Interlake region of Manitoba to the Peace River district of Alberta, experienced a wave of immigration.

Some of these people were able to receive aid from the Saskatchewan Relief Commission, established in 1931 and terminated in 1934 (Neatby 1950). They were allowed to ship up to two railcars of personal belongings with the cost being divided among the provincial and federal governments and the railway (Neatby 1950:282n). In addition, the Commission provided food and clothing until the family was able to produce its own. The relief was considered to be a loan, and recipients

Table 3.1. Approximate Wheat Yields^a, 1918-1959.

	R.M. 160 ^b	R.M. 398		R.M. 160	R.M. 398		R.M. 160	R.M. 398
1918	15	c	1932	12	23	1946	22	22
1919	20	19	1933	10	23	1947	20	18
1920	15	c	1934	8	20	1948	20	23
1921	14	28	1935	8	12	1949	11	26
1922	22	28	1936	15	16	1950	18	21
1923	21	26	1937	1	11	1951	21	26
1924	20	9	1938	15	16	1952	28	28
1925	30	23	1939	11	30	1953	21	28
1926	22	24	1940	13	23	1954	5	9
1927	23	18	1941	18	17	1955	27	22
1928	23	18	1942	25	28	1956	23	25
1929	7	20	1943	14	16	1957	18	20
1930	5	25	1944	22	25	1958	19	22
1931	2	25	1945	13	29	1959	14	25

^aYield in bushels per acre.

^bR.M. 160 is a municipality west of Regina. It is used for comparison because it has many large grain farms, and it is in the area which suffered most from the drought.

^cData not available.

Source: Saskatchewan Department of Agriculture Statistics Section
1918-1959.

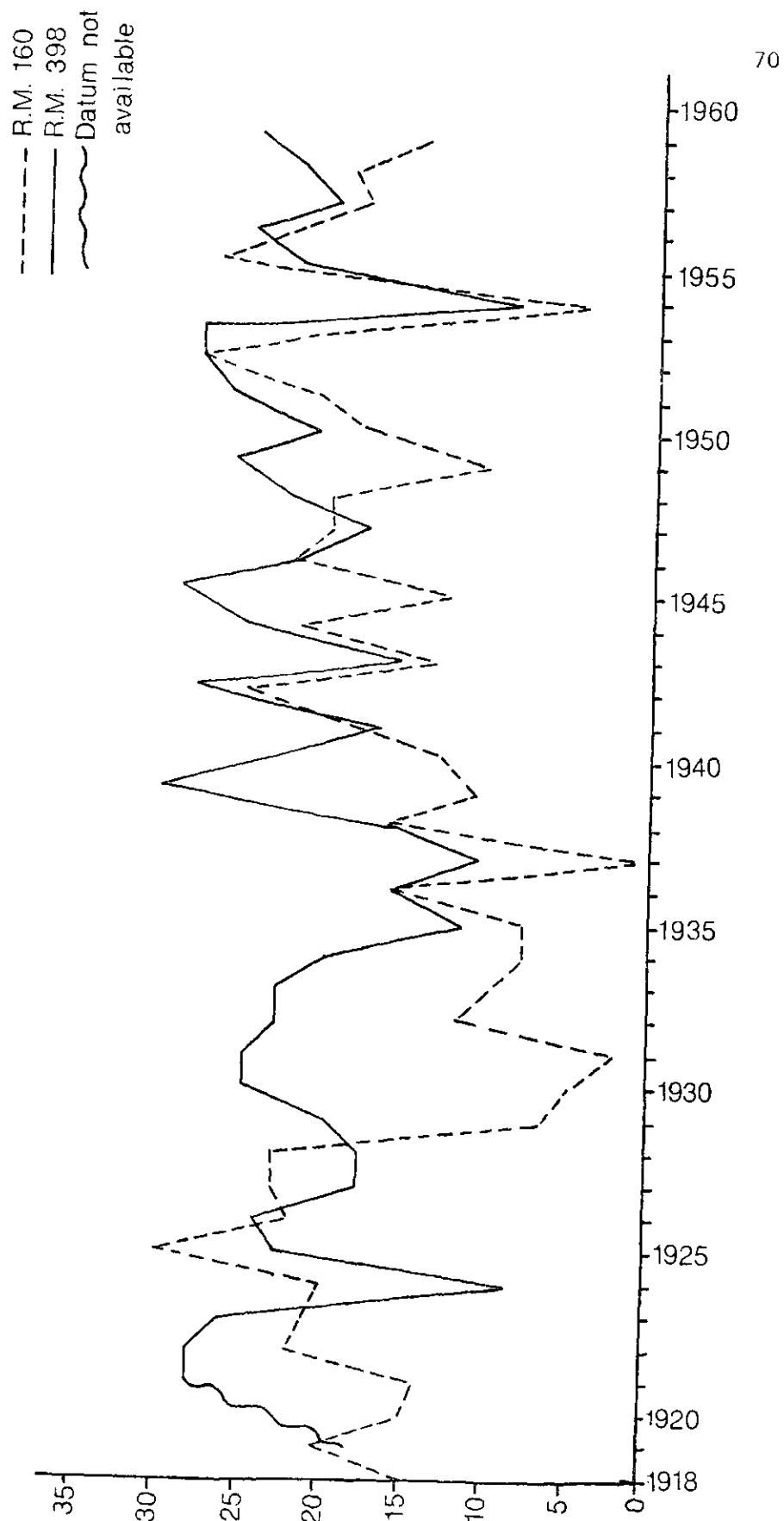


Figure 3.4. Approximate Wheat Yields, R.M.'s 160 and 398, 1918-1959.

in some areas worked on municipal road construction as repayment. The Commission also encouraged recipients to haul firewood to the railroad in payment for relief. The wood was distributed as relief fuel in needy areas in the south. However, recipients were sometimes unable to haul loads of firewood, as will be made clear in the following chapter.

By 1938, conditions began to improve. There was more moisture, the P.F.R.A. was making headway with its programs, and the depression was lifting. It was World War II, however, that brought prosperity. The federal government instituted programs to encourage diversification, and wheat acreages declined. But because of good growing conditions, the total yield declined only slightly (Fowke 1945), and farm incomes rose tremendously. The total cash income from the sale of farm produce in each of the years 1939 and 1940 was double that of 1932; increases were experienced in 1941 and 1942, income for 1943 was double that of 1939; and income for 1944 was almost triple the 1939 income (Fowke 1945). The money was used to pay off debts, to buy land and machinery, and to buy urban property. Since then, farmers have experienced good times and bad times, but they have not seen anything like the conditions of the Thirties.

DEMOGRAPHY

Census data are subject to many problems, and can be misleading. The following data are intended to provide a summary profile of the study population.

The populations of Pleasantdale municipality and of Saskatchewan are shown in Table 3.2. Between 1906 and 1911, the immigration of settlers became significant. For the periods 1911 to 1916 and 1916

Table 3.2. Population, R.M. 398 and Saskatchewan, 1901-1971.

R.M. 398 ^a					Saskatchewan		
	Rural	Urban	Total	% Rate of Increase	Rural	Total	% Rate of Increase
1901	b		15		b	91,279	
1906	b		67	346.7	b	257,763	182.4
1911	b		511	662.7	b	492,432	91.0
1916	b		974	90.6	b	647,835	31.6
1921	1516	119	1635	67.9	538,552	757,510	16.9
1926	1734	163	1897	16.0	578,206	820,738	8.3
1931	2018	553	2571	35.5	561,407	921,785	12.3
1936	2276	846	3122	21.4	573,894	931,547	1.1
1941	2004	946	2950	-5.5	514,677	895,992	-3.8
1946	1759	826	2585	-12.4	434,019	832,688	-7.1
1951	1692	827	2519	-2.6	399,473	831,728	-0.1
1956	1445	867	2312	-8.2	362,231	880,665	5.9
1961	1164	1103	2267	-1.9	305,740	925,181	5.1
1966	1180	1108	2288	0.9	281,089	955,344	3.3
1971	976	1056	2032	-11.2	233,792	926,242	-3.0

^aDoes not include Indian Reserves.^bData not available.

Source: Census of Canada: Agriculture, 1901 through 1971.

to 1921, there were further increases. The immigration during the latter period occurred after World War I, as will be shown in Chapter 4.

The population continued to grow in the period 1921 to 1926, but at a greatly reduced rate. In the next period, 1926 to 1931, the rate of increase rose again, reflecting the migration of farm families out of the Palliser Triangle. The population grew by 551 during the years 1931 to 1936, also reflecting this migration.

The population of the municipality and of Saskatchewan peaked in 1936. Since then, there has been a slow decline in the population of the municipality. The urban population has not declined, so the decrease in the total population is rural depopulation in part due to the growth in farm size. It also must be recognized that part of the growth in urban population is a result of farm families moving into town but continuing to operate their farms.

Saskatchewan experienced a modest growth in total population in the 1950's and early 1960's, a trend that was not felt in Pleasantdale. However, the rural population of Saskatchewan has declined steadily since the peak in 1936. The growth in the 1950's and 1960's was an urban growth.

A rather interesting statistic is provided by the census of 1911: 86% of Saskatchewan residents over five years of age were able to read and write. Assuming this figure is accurate, the statistic is rather amazing. There seems to be a conception among laymen that pioneers were a rather ignorant and illiterate sort. I have found no indication of this. The frontier attracted a varied group, which included the well-educated and trained, as well as experienced and knowledgeable farmers and tradesmen, and some with no particular training or skills. For example, one

informant came with his father, who had been a "draper" (a seller of dry goods) for many years. Another informant talked about regular gatherings of neighbours where training and ability with musical instruments was put to use.

The sex distribution of the municipality in 1911 is given in Table 3.3. These data indicate that only 57.9% of the residents were male. This statistic is interesting in light of the common belief that there were very few females in pioneer areas. It may be true that there were few women in a region during the very early stages of pioneering, but it would appear that women soon followed the men. A high percentage (65.5%) of the males, and 56.2% of the females were single. However, these figures include children. Included in the table are estimated figures for adults 20 to 65 years, based on statistics for the province. They indicate that 63.3% of the adults (20 to 65 years) were males, and 41.4% of adults were single males. Only 20.7% of adults were single females. This suggests that while single males formed the largest group, women, both single and married, were certainly present.

Table 3.4 shows the ethnic origins for Pleasantdale municipality (R.M. 398), for Naicam, for R.M. 399 immediately west of Pleasantdale, and for St. Brieux, the only town in R.M. 399. The data show quite clearly that the bulk of the population of Pleasantdale was either from the British Isles or from the Scandinavian countries. (Note that the categories are as presented by Statistics Canada.) In the neighbouring municipality there was a large settlement of French from Brittany, as shown by the data.

In general, then, there was a slow influx of immigrants, with

periods of higher immigration after World War I and during the Thirties. While most European countries and some non-European countries were represented, the majority came from the British Isles, France, and the Scandinavian countries. Many were single men, but there were also large numbers of married men with their families, and single women.

Table 3.3. Sex and Conjugal Condition, R.M. 398, 1911.

	MALES			FEMALES			TOTAL POP.	FAMI- LIES
	Single	Married	Total ^a	Single	Married	Total ^a		
Total	194	93	296	121	86	215	511	159
Per Cent of Total Pop.	38.0	18.2	57.9	23.7	16.8	42.1	100.0	
Adults 20-65 (Est.) ^b	116	56	178	58	41	103	281	
Per Cent of Adults 20-65	41.4	19.9	63.3	20.7	14.7	36.7	100.0	

^aIncludes divorced, widowed, separated, etc.

^bFor Saskatchewan, 1911, 36.9% of males and 49.8% of females were under 19 years.

Source: Census of Canada: Population, 1911, Vol. I, Table 2.

Table 3.4. Ethnic Origins, R.M. 398, 1921.

	Total Pop.	British Races					European Races				
		English	Irish	Scotch	Other	French	Austrian	Belgian	Dutch	Finnish	German
R.M. 398	1516	398	169	186	6	93	45	6	7	-	53
Naicam	119	17	15	15	1	5	-	-	-	-	22
R.M. 399	1492	373	71	57	2	434	2	4	8	-	287
St. Brieux	144	6	3	15	-	107	-	-	-	-	5
Indian Reserves ^a	624	-	2	6	-	-	-	-	-	-	-

	European Races							Asiatic Races		
	Greek	Hebrew	Italian	Polish	Russian	Scandinavian	Ukrainian	Other	Chinese Japanese	Syrian Other
R.M. 398	-	-	1	-	8	516	3	25	-	-
Naicam	-	3	-	-	1	37	-	1	3	-
R.M. 399	-	-	29	11	9	9	9	109	3	-
St. Brieux	-	-	-	1	-	6	-	-	1	-
Indian Reserves ^a	-	-	-	-	-	-	-	-	-	-

Table 3.4. (continued)

	Indian	Negro	Unspecified
R.M. 398	-	-	-
Naicam	-	-	-
R.M. 399	-	1	-
St. Brieux	-	-	-
Indian Reserves ^a	616	-	-

^aIncludes Indian Reserves in all of census division No. 14.

Source: Census of Canada: Population, 1921, Vol. I, Table 27.

Chapter 4

PIONEER FARMING

In this chapter, the background of Pleasantdale pioneers, the methods and problems of starting a farm, and the activities by which a living is made from the farm will be discussed. The final section will focus on the use of oxen and horses, and the role that horses played in pioneer affairs.

BACKGROUND OF PIONEERS

By definition, pioneers enter a new area from outside (see Chapter 2), whether the new area is a field of knowledge, an artistic style, or an agricultural region. There is an element of self-selection involved, for the less adventuresome individual is less likely to undertake a pioneering venture. Saskatchewan pioneers came from a wide variety of backgrounds, including highly traditional peasant societies of Eastern Europe and completely non-agricultural cities such as London. In general, those who came had in common the characteristic that they were willing to try new methods, to gamble a little. In some cases this was part of the pioneer's personality. (See Thompson 1973 for a discussion of the pioneer personality.) If he was not homesteading in Saskatchewan, he might have been a settler someplace else or breaking new ground in a different field of endeavour. In other cases, however, the pioneer was forced into the adventure. It was not of his choosing, but once he was in it he was either forced or determined to endure.

Of course, there were many who failed. They abandoned or sold their homesteads, and headed for the cities or returned to the old country. Many Jewish pioneers, for example, drifted into the cities (see Kurelek and Arnold 1976).

The countries of origin for the pioneers in the study area are primarily Norway and England. Other countries are represented, notably Scotland, Sweden, and France. The latter is well-represented west of Pleasantsdale, since a large settlement of French pioneers was established in the St. Brioux district. The United States and other parts of Canada were well represented, but these people had come from one of the countries previously mentioned, or their fathers had. For example, three informants came from Minnesota, where their fathers had homesteaded. Their fathers in turn had come from Norway (2) or Sweden (1).

Southern Manitoba and southern Saskatchewan were also well represented. Some of these came to the region after World War I with Soldier Settlement Board help. The rest came during the Thirties, trying to escape the drought.

The time period represented by immigration is 1906-1934. The sample is too small to draw conclusions regarding the number that came in any one time period (see Chapter 3 for statistics). However, it is interesting to note that those who came during the Thirties had previously farmed on the prairies.

About half the informants moved to the homestead with their entire families: parents, brothers, and sisters. In some cases, the family was young, the informants being under ten years old. In a few cases, the informant was old enough to take out his own homestead. In one case, for example, the father and three grown sons (including

the informant) each took homesteads in the same area.

The other half came alone, with wives, or with "partners". A "partner" can be a male friend with whom the pioneer travelled from the old country, or a new friend met somewhere along the way. The relationship can include joint ownership of the farm (a relatively rare arrangement) or it can mean simply homesteading in the same area.

One somewhat exceptional informant came to Saskatchewan on his own at the age of 12. He worked for a farmer until he was 15, when he took out his own homestead. Though he was underage, the homestead inspector granted the homestead on the basis of the great desire he had shown. By the age of 23, he had expanded his farm to the maximum of land available in that region, so he sold out and bought more land in a region of greater potential (all of this being in southern Saskatchewan). He was wiped out in the drought, so he moved to Naicam district and started over again--at the age of 42.

This example typifies the motive behind homesteading: the desire to obtain a piece of land for oneself, on which one can build a "decent" life. As one informant expressed it, most homesteaders came to the area because they wanted a "decent livelihood". This informant said he thought he could get this decent livelihood on a farm. He had dreams of selling great quantities of wheat.

This desire to "make a decent living" arose from the circumstances in which the individual found himself. In many cases, the pioneer had grown up on a farm (in Minnesota, Ontario, Manitoba, or Norway) where there was little likelihood of obtaining his own farm. His father owned the farm, but the pioneer had three brothers who also

wanted farms, and only one could inherit the father's land. Or perhaps the father rented, and there was very little land for sale, and what was for sale had a high price. In some cases the whole family moved, in others the pioneer came by himself.

The pioneer who came from a city (less common than the pioneer with a farm background) also saw a homestead as a potential source of a "decent living". In one case, the pioneer prepared himself by working on a farm in the old country for four years before emigrating. His whole family emigrated, some going to Australia or New Zealand. He chose Canada because it was closest and the transportation was therefore cheapest. Other pioneers came directly from cities, with little knowledge of farming. One such person told me he had an uncle farming in Saskatchewan. The uncle had written to him, telling him it was a "free and easy life".

In general, then, pioneers became pioneers because they saw farming as a good way to make a living. This meant different things to different people. Some envisioned a large farm, making a lot of money. Others were satisfied with an adequate living from a small farm. The opportunity for most pioneers arose because of the low cost homestead; for some, it came through the Soldier Settlement Board.

A steady stream of refugees moved into the north, including the Naicam area, during the Thirties. The drought had forced them off their southern farms. Many areas, such as St. Walburg and Nipawin, were opened up primarily as a result of this migration. Although these people were "forced" into the pioneer situation more than those who had come earlier, their general characteristics were the same. Many of these people had homesteaded a few years earlier on the prairie

and consequently were moving from an unsuccessful homestead to one they hoped would have greater potential. Further, many did not migrate north to start again, but went instead to the city and gave up farming. So during the Thirties, too, those who became pioneers were those who saw in farming an opportunity to "make a decent living". They were the ones with some ambition.

Here are some comments regarding "millionaires". They come from two taped interviews, and, I believe, reflect a little of the goals or ambitions of pioneers:

"It was hardest on greenhorns that came out to get a quarter of land for \$10. They all thought they were going to be millionaires."

". . . then them other ones came from the old country, figured we were millionaires . . ."

". . . my mother . . . used all flour sacks. For dresses for us. This is what we had. We thought we were dressed up like millionaires."

"Don't ever think--we're not millionaires. No farmers around here are millionaires."

While the use of a term like "millionaire" is an exaggeration, and while these quotations have a strong element of denial, the use of the term shows that the concern, the goal, was to build an economically viable, productive farm, one which could support the pioneer and his family at a certain level of comfort.

SETTING UP THE FARM

Those who came in the early years, and many of those who came

later, had as an initial task the enormous job of clearing the land. There was a sprinkling of natural clearings in which some pioneers were able to build log houses, but for most, clearing came before all else. Until enough land was cleared to build a cabin, most new pioneer families lived in tents, or boarded with neighbouring families.

Besides clearing land (and collecting logs) for a cabin, another priority was clearing and breaking enough land for a garden. In most cases, the garden would provide a major part of the food for the first few years. In fact, so important was this garden that even today, fifty years and two generations later, the vegetable garden is the focus of much attention during the summer. A farm wife is measured in part by the quality and abundance of her vegetables.

Later immigrants, those who were buying land or homesteading on abandoned land, might be lucky enough to find 10 or 20 acres broken. This was something of a godsend, for it meant that a garden and a small crop could be seeded the first summer. For those who had to start from scratch, it might be a few years before any land could be seeded to crops.

Felling large trees with an axe, clearing the undergrowth, grubbing, blasting, and pulling out stumps, and finally breaking and leveling the land, are slow and hard tasks. One informant broke 13 acres in four years. Another put in his first crop on a 3 acre field. One man hired a neighbour to break the first field, and had 10 acres done in one year. Another, after three years of work, had 10 acres broken. Still another hired a team of oxen to break some land and did 4 acres the first summer, in time to seed it to oats. One informant broke a total of 30 acres in the first five or six years. He said,

"I was so darned lazy, I hated work of any sort." Despite his claim to laziness, one can see that he was no slower at breaking land than many, and he was faster than some. He worked those 30 acres for some years, until he could hire a bulldozer to clear more land.

The general tendency was to prepare some land for crops one year, then seed it the next. After seeding, the rest of the summer would be used for clearing and breaking more land. While the typical rate of progress was slow, there were exceptions. One particularly energetic man was determined to build a farm as fast as possible. He brushed the land in winter, and pulled roots and broke it in summer. He claimed that his goal was to break 1 acre per day. There were 7- $\frac{1}{2}$ acres broken when he bought the land, and he broke an additional 135 acres in the first four years--a rather phenomenal 34 acres per year. Another pioneer was able to break 20 acres the first year, in addition to the 45 acres already broken when he bought it. But these two were exceptions. One informant suggested that the average rate of clearing was about 10 acres per year. Clearing 15 to 20 acres per year would be a very good rate.

To fully understand the implication of this task for the homesteader, it is useful to compare it to the experience of one informant who homesteaded on the prairie about 1905. In his region, south of Davidson, the prairie was mostly clear of trees, with scattered groves. This man hired himself and his team of oxen out to neighbours, charging three dollars per acre. He was able to average about 2- $\frac{1}{2}$ acres per day. The standard method was to break one year, and seed to wheat the next. By the second season, a homesteader might have his whole quarter section seeded to a cash crop.

The difference between the prairie and the study area is even more striking when steam breaking is considered. For a variety of reasons, steam engines were used on the prairies many years before they became common in the bush. With steam, a prairie pioneer could break 25 acres in one day since no clearing was necessary.

In contrast to the homesteader who tried to average an acre a day, or the homesteader who said he was too lazy to work at it, one homesteader told of clearing the land just for something to do. His father bought a few axes, and the father and three sons went to work. They brushed nearly 15 acres the first winter, but only succeeded in breaking 8 acres the next summer. The following summer they seeded it to wheat, which they ground for flour. The reason given for brushing that first winter was ". . . we wanted something to do, and no place to go. It was tiresome to live in that house, and nothing to do."

In addition to clearing some land, building a house had a high priority. The first house was invariably a log cabin, built with poplar logs that were made available by the clearing operation. In most cases, the cabin was built with the help of neighbours. After the pioneer had collected the logs and prepared the site, neighbours would gather for a day and erect the cabin. The pioneer would be left to add the finishing touches. Many pioneers did not know the first thing about building a log cabin, but there was usually a neighbour who knew the procedure and was quite willing to give directions and advice.

It was not just the pioneer family that needed shelter. A log barn was required for the livestock. Eventually, a homestead would have a number of buildings: house, barn, woodshed, smoke house, outhouse

and perhaps more exotic buildings such as an ice house, a garage for the buggy, or even a sweathouse or sauna. But the first tasks were constructing the cabin, and putting in a garden, as well as obtaining feed for the livestock. One pioneer said he put in the entire first summer on these tasks, and was unable to get any crop land cleared.

Once a piece of land was broken, it was seeded to crops for animal fodder, for marketing, or for personal subsistence. In the Naicam area, the first crop was usually oats for a number of reasons. Quite often the land was broken and seeded the same year, so seeding occurred late in the growing season. Oats matured more quickly than other crops or, as an alternative, it could be cut for hay if it had not matured by fall. A wheat crop, even when seeded in the spring, was believed to be under some risk of being frozen before it matured, whereas the faster maturing time of oats implied less risk. The most important reason for seeding oats was that oats make good feed for oxen, other cattle and horses. As long as animals provided traction power, the first consideration when deciding crop acreages was to provide enough feed for the animals. The health of the draught animals was necessary for the farm to continue. Milk cows could be allowed to forage on their own, or even slaughtered and butchered, if feed was in short supply. The draught animals were a basic necessity.

In the first few years there might be no land broken for seeding and therefore no oats available. So for these first years, the pioneer cut wild hay from dried slough or hay meadows. One homesteader fed his livestock wild pea vine hay, cut by hand with a scythe. It was in such circumstances as these that oxen were preferable to horses, since they could do a full day's work on just wild hay. Horses, in

order to be able to work all day long, needed oats at the rate of three gallons per day. This is about one hundred bushels of oats per year. In the first few years, yields of eighty or even one hundred bushels of oats per acre were not uncommon, so a few acres seeded to oats (assuming a good yield) would provide feed for the horses.

When wheat was sown at all, it was in small acreages. Wheat was valued primarily as a cash crop, but it had to be hauled to a railroad. Prior to the construction of the railroad in 1922, those who had wheat to sell had to haul it to Watson or Melfort, distances of thirty miles or more. This trip could take two full days with oxen, or a little less with horses. Since a wagon box held only sixty bushels of wheat (any more was too much weight) this meant a long two-day trip to sell the wheat grown on two acres of land.

One man seeded a few acres to wheat each year. Some he burned to make a coffee substitute. He used this himself or sold it to neighbours. The rest of the wheat he hauled to Watson to provide a little cash. Another pioneer sowed his entire first field, eight acres, to wheat. Some was ground into a coarse flour with a hand grinder. The rest was hauled to Melfort or St. Gregor, distances of over fifty miles round trip, and exchanged for bags of milled flour or other groceries.

Wheat would eventually become the principal crop, once fields were cleared and trails improved. One informant commented that farmers did not think of themselves as farmers unless they were growing wheat. This may be an exaggeration, but it has an element of truth. Another said, "Wheat was the principal thing." A third said, "Wheat was the only thing you could sell and depend on making anything." (A check of prices received for wheat shows that in some years, "anything" was

mighty little!)) A fourth said pioneers were ". . . labouring under the illusion that wheat and coarse grains were the thing to grow."

Perhaps wheat and coarse grains (oats and barley, the latter grown both for feed and for sale) were the thing to grow because pioneers were experienced with these crops. Those who came from farm backgrounds usually came from farms where these crops were grown. Those who came from non-farm backgrounds learned from this experienced group. While wheat, oats, and barley may not have been the best crops for the climate and soil conditions (and this is a matter of some debate), they certainly did well enough. One pioneer sowed his first wheat on three acres, and harvested ninety bushels. Another said he harvested seventy-eight bushels of wheat from two acres. Yields of this order seem to have been common enough in the early years, particularly on the "fresh breaking". One informant told me the best yields he ever had were fifty bushels per acre of wheat, and one hundred bushels per acre of oats. Another said his best were forty and eighty respectively. When I mentioned the first set of figures to him, he said that the first man could say fifty and one hundred as easily as forty and eighty, and it is hard to know what the actual figures were. But the general consensus was that forty bushels per acre of wheat and eighty bushels per acre of oats would not be very surprising.

While these three crops were standard, others were tried. Some seeded the odd field of rye or flax. Flax was difficult to harvest since it needs dry weather in the fall, a condition that is usually absent in the Naicam area. In damp weather, it gets tough and hard to cut or thresh. One man tried flax in 1912 or 1913, and he was successful. But, he said, some years it froze and was worthless.

Another informant said that flax grew better on new soils than on older soils. In addition, handling flax sheaves was a miserable job, since they stick together. Flax requires a buckwheat binder, a special implement that was not common in the West. Furthermore, while horses and cattle liked flax straw, if they ate too much it balled up in their stomachs. So flax was touchy to grow, miserable to handle and of questionable value as feed.

Rye was a little more suited to the area. Since most rye in Saskatchewan was (and is) fall rye, seeded in the late fall to germinate as soon as the ground thaws, it had an early start in the spring and there was little problem with freezing or snow in the fall. Also rye does well in lighter soils, such as are found in the northeast part of the study area. However, rye has no value as feed; it is strictly a market crop. Until the system of marketing was improved, there was little reason to grow it.

One informant said he had some land seeded to tame pasture right from the beginning (i.e. 1934), probably a grass such as Timothy. Another grew alfalfa and brome grass mixed together, a very good hay for cattle or horses. He first seeded this mixture about 1938 or 1940, after learning about it from the Dominion experimental farm at Melfort. "We used to take notice of the experimental farm," he said.

Alfalfa was also grown for seed by a number of pioneer farmers. One said his land was not much good for grass crops because it was too light and stoney, but alfalfa grew well. An old Swedish neighbour of his started growing it in 1936 or 1937. This Swede had heard it was easy to grow, so, without knowing anything about it, decided to try it. The informant watched his neighbour, saw that in spite of his ignorance

this neighbour did well with it, and started growing it himself in 1938. Another informant seeded some alfalfa on high land in 1928. He claimed it forms ("sets") seed better on high land. He had read about it in a magazine, but none of his neighbours were growing it. One year, he said, his brother made one hundred dollars per acre on twenty-one acres of stoney land with alfalfa seed. A third informant said he did not seed alfalfa because it would not ripen on his type of land (black soils). He claimed it needed clay land.

In addition to the problem of having the right type of soil for alfalfa, there was also a pollination problem. Alfalfa is a plant which needs to be cross-pollinated by insects, usually bees. Because of the structure of the flowers, tame honey-producing bees cannot pollinate them properly. In the early days, the pollinator was a species of wild bee called "leaf-cutter bees". They were indigenous, and quite common at one time. They used bits of alfalfa or other leaves to construct their hives in the bush. But they would travel only short distances in search of leaf material and pollen. As long as fields were small, only ten or twenty acres, the bees would pollinate the whole field, and there was enough woodland around a field to provide a home for the wild bees. The pioneer could seed a field to alfalfa, and rely on the wild bees to pollinate it for him. Since alfalfa is a perennial, after the first year the only task involved was harvesting the seed.

As more bush was cleared and fields expanded, two problems arose. First, since wild bees only travel short distances, the central portion of large fields would not be pollinated, and would produce no seed. Second, as the habitat of the native wild bees was cut down, the bees

disappeared. The alfalfa seed producer of today must import or raise tame leaf-cutter bees, and go to some considerable trouble and expense to look after them properly. The Canada Department of Agriculture estimates that five thousand to ten thousand bees per acre are required to set seed properly (Agriculture Canada 1974:26). Of course, to produce hay no bees are required. As more land was cleared and the wild bees disappeared, those who wanted to grow alfalfa switched from seed production to hay production.

Wheat, oats, and barley remained the principal grain crops in the early days. Wheat was, and is, grown for sale, holding back a small amount for seed and to trade at a mill for flour. Oats and barley were, and are, grown for feed and for sale. As horses were replaced by tractors, trucks and cars, the need for oats decreased and oats acreages declined. From 1921, when oats was at its maximum popularity, to 1971, Saskatchewan oats acreages declined by 49.7%. Oats acreages as a per cent of total farm acreage in Saskatchewan went down from 11% to 4% (Statistics Canada).

Another area of experimentation with crops concerned the varieties of seed, particularly wheat. There have been dozens of varieties of hard red spring wheat, and at any one time there are two or three varieties in common use. When another variety is introduced, many farmers will try it on a small field, looking for a variety that will produce well. Wheat is susceptible to several forms of rust, a fungus that can seriously reduce the yield. Another concern is to reduce the growth period so the wheat can be harvested before it freezes in the fall. Plant breeders have tried to develop faster maturing, rust-resistant varieties, as well as looking for a number of other characteristics.

Table 4.1 shows the most common varieties of wheat, with the year they were introduced and the average time to maturity.

The standard variety for the first settlers was Red Fife, a variety which took until late August to mature, and consequently was often frozen or snowed under. So, too, was Marquis. One informant sowed his first wheat, Marquis, in 1928. It was frozen, and "wasn't worth nothing". The only reason that Red Fife and Marquis weren't frozen every year was that with horses, the pioneer could seed his land early in the spring. (This will be explained in more detail later.)

Table 4.1. Varieties of Wheat

Variety	Introduced	Maturity
Red Fife	1870	111-114 days
Marquis	1911	109-112 days
Red Bobs	1921	106-109 days
Red Bobs ^a	1925	105-108 days
Garnet	1926	102-105 days
Thatcher	1935	95-97 days
Selkirk	1956	95-97 days
Neepawa	1969	97-100 days

^aA development of the earlier Red Bobs, also known as Supreme and Early Triumph.

Source: Bracken 1920, Saskatchewan Department of Agriculture 1976, Northwest Crop Improvement Association 1933, Loegering et al., 1967, MacEwan 1952.

One informant kept track of seed catalogues and government publications, looking for new varieties. One year he saw an ad for Red Bobs in a Steele-Briggs (a seed company) catalogue. He bought two bushels at twelve dollars per bushel, and sowed two acres. With the seventy-eight bushels it yielded, he sowed thirty-eight acres the following year. That year it rained too much in July, the plants rusted badly, so he gave up that variety. A neighbour was growing Garnet. My informant bought some from this man and seeded it. In the fall he stooked it as usual, but it rained and the seeds germinated. The stooks were all green with new shoots. This was not the fault of the variety, of course, it was just one of the problems of farming. At the time, Garnet was being graded No. 1 at the elevator, so it commanded a good price for the producer. Two years later, according to this informant, "they discriminated against it", and graded it No. 3. At that point he stopped growing Garnet.

A pioneer who came with the help of the Soldier Settlement Board bought some Garnet from that agency in 1926. He was only allowed enough seed to sow four acres, but the following year used the wheat produced as foundation seed, i.e. seed for the rest of his land. He switched to Garnet because it matured earlier. Frost, he said, was the "bugbear" of farmers well into the Thirties.

The introduction of Thatcher wheat made a big difference in the amount of wheat hauled to elevators, according to one informant. Marquis froze and Garnet rusted, but Thatcher matured earlier and was rust resistant. This man read about Thatcher in a newspaper, and decided he would try it if he could obtain some. He bought twelve bushels from a storekeeper for \$3.80 per bushel in 1937, although the

market value was only 35¢ per bushel at the time. (Seed grain commands a higher price than standard market grain.) These twelve bushels were all he could afford, and even then he had to charge the bill until the fall. He sowed 12 acres, and they yielded enough to seed all of his 150 acres the next year, plus a surplus to sell to his neighbours at \$1.50 per bushel. His gamble paid off.

One pioneer, who purchased land through the Soldier Settlement Board in 1923, represents the epitome of individual experimentation. This man believed that the strong orientation toward wheat was a mistake, since wheat was not particularly suitable for that area. He tried different crops and varieties, attempting to find one that yielded well in the short season. He tried flax for a few years, but it did not yield well. He tried alfalfa, but it did not set seed properly on his black loam. In the 1920's he tried brome grass, which did better on loam, and sold the seed to the Forage Crops Co-op at White Fox (a distance of over seventy miles).

This man's closest neighbour tried brome. The informant watched him, saw that he harvested a good crop, and tried it the next year. He ordered one hundred pounds of seed from Early's seed catalogue, and seeded ten acres with it. The most he ever had in brome was about twenty acres. Not many pioneers tried brome, though. He suggested that only 10% or 12% of farmers raised brome. He stopped when the price went from seven or eight cents per pound to three cents per pound in the 1940's.

He tried Timothy grass in 1958, seeding forty acres with wheat as a "nurse" crop. (Timothy takes two years to mature, so the first season it is sown with an annual which is harvested in the usual way.)

He had a beautiful crop in 1959, but it was wiped out by hail just before harvest. Some sprouted the next season, and he was able to harvest a reasonable crop.

He tried sweet clover in the late Twenties or early Thirties. He used it for hay as well as taking the seed. He said he "kidded the cattle that they should eat it." When the price of seed went down, he held on to it, hoping the price would go back up. Finally he sold it when the price went from five cents to three cents per pound.

Experimentation of this sort was a frequent phenomenon. The search for a crop that yielded well eventually led to the rapid acceptance of rape seed in recent years. In the 1951 Census of Agriculture (Statistics Canada) rape seed was so uncommon as to be included in the heading "Other Field Crops". According to the 1961 census, 6250 acres were seeded to rape seed in the R.M. of Pleasantdale. By 1971, that figure had increased to 23,065 acres. According to one rape seed-growing informant, most of the information on growing rape seed in his area had come from one man, a registered seed grower who became a grain commissioner in Winnipeg. This man instructed farmers on the basics of growing rape seed, and from there they "played it by ear". (See Johnson 1972 for a good analysis of innovators and the adoption of innovations.)

It should be clear that pioneers would take many routes to learn about new methods: advertising, government publications, newspapers, magazines and word of mouth. This last was perhaps the most important method. An innovation might be introduced to an area through the printed media, but it spread by word of mouth and personal observation. As one informant pointed out, some would try something, and others would watch. The "moccasin telegraph", he said, works pretty well.

One final aspect of planting crops should be explained: the basis for the decision regarding acreages of specific crops. The first consideration was to have enough oats to feed the horses--approximately 100 bushels per horse per year. For example, one pioneer with ten horses would seed perhaps fourteen or fifteen acres, relying on a yield of at least sixty-five bushels per acre. Second, he had to have enough feed for his cattle. He would feed them oat straw, barley straw, sweet clover, brome grass, or anything else that might be suitable and available, with chopped barley mixed in. He would seed enough barley to provide for the number of cattle he expected to feed the following winter. The rest he seeded to wheat, since it was the cash crop. A portion of the land (about one third) he left in summerfallow each year.

These acreages were variable, of course. In the early years less land was summerfallowed. "New" land produces high yields without summerfallow, perhaps because it has a high organic matter content and a high moisture reserve. In later years, the standard practice in the Naicam area was to summerfallow one third each year. In some parts of southern Saskatchewan, as much as one half is left fallow each year.

Another factor that influenced acreages was the price of wheat. During the Thirties the price went down as low as 40¢ per bushel for No. 1 Northern. Since most wheat was graded No. 3 or No. 4, with a discount up to 10¢ per bushel, and since farmers had to pay for delivery to Fort William, the actual return might be as low as 10¢ per bushel (Gray 1967:54-55). In response, many farmers seeded less wheat. One pioneer said he never had more than about 3600 bushels of wheat at any one time (roughly 150 acres). But he did have a lot of livestock, about 100 head of cattle and over 60 pigs, and he required a lot of oats and

barley. When prices went down in the Thirties, he decided he might as well feed his grain to cattle, since it was not worth selling. He cut down on wheat, and increased oats and barley even more. Another informant grew more feed grain in the Thirties to feed to cattle, since he could milk them and sell the cream. Cream was worth more than wheat, he said.

The price paid for cattle was not good, either. One informant used the opportunity to build up his cattle and swine herds, saying, by way of explanation, that the price of nothing was good, so one might as well have a little of everything.

Just as there were standard crops, so too were there standard machinery and methods; and just as there was experimentation with crops, so too was there experimentation with methods and implements.

When breaking land, the first operation was to plough with a breaking plough (once the land was cleared and the stumps pulled). This plough had a long ploughshare with a gentle curve, so it turned the sod slowly. On the prairies, some pioneers took pride in being able to turn an entire half-mile furrow without breaking the strip of sod. Stubble ploughs were shorter and had a sharper curve. They were used once the initial breaking was completed. Ploughing was usually done with either a four-horse team or a yoke of two oxen. With horses, one might be able to plough two and one-half acres per day.

The next operation was to disc, first a few times parallel to the ploughed furrow, then a couple of times across. On each pass, the operator had half the discer overlap the land disced on the previous pass. One informant called this "double discing".

After the discing came the harrowing, essentially a levelling

and smoothing operation. Finally, rocks and roots had to be picked, a slow and back-breaking task. After this, the field was ready for seeding.

This sequence was the ideal. Many did follow it, but there were also many exceptions. For example, a pioneer might have only a stubble plough, so used it instead of a breaking plough. Or he might be trying to get the crop in the same summer, so only disced it a couple of times in order to speed up the operation.

Once the field was in use, there was a standard method of cultivating to prepare the field for subsequent seedings. The order was to plough (with the stubble plough), then harrow, then go over it with packers to make it firm. Each of these operations required a separate pass over the field. With horses, a rate of four or five acres of ploughing per day was excellent. Some homesteaders used a cultivator instead of a plough. With this, they could work up to fifteen acres per day, depending on the width of the cultivator. With modern equipment, a farmer can cultivate at rates of five to twenty-five acres per hour. Considering the work involved, it is no wonder that fields were brought under cultivation slowly, and that the first fields were small. One informant said (speaking of the period before 1915) that each farm had only five or ten acres under cultivation, the largest being about fifteen acres.

One reason that methods were standardized was that many pioneers came from farms in other parts of North America--Ontario, Manitoba or Minnesota--and they brought their methods with them. Those who came from significantly different backgrounds, from small farms in France, from cities, or from Scandinavian fishing and farming villages, learned

by working on more established farms for a few years or by watching and talking to neighbours. There were more farm magazines than today according to some informants, magazines that provided advice and suggestions. Those who were open to innovation tried some of these suggestions. If successful, the ideas rapidly spread. The Dominion experimental farm at Melfort (opened about 1930) did much to introduce and standardize some practices.

The other reason that practices were fairly standard, and perhaps the more important reason, was that various factors combined to limit the choices available. Given the goals and values of farmers, the limitations of the various crops, the available machinery, and the restrictions of the environment, there was only a certain range of options from which to choose. Generally the specific choice was based on the farmer's perception of what appeared to work the best, with these terms being defined by the individual according to his own needs and values.

A good example of standardization concerns summerfallowing practices. On the prairie, where many pioneers worked or homesteaded before they came to the Naicam area, summerfallowing has been a standard practice since the 1880's. It was found that if a field was left fallow one year in three, it would produce more than if it was seeded each year. In some drier areas, and in drier years, as much as half a farm would be summerfallowed each year.

The purpose of summerfallow was to conserve moisture. When land was "new" it had high reserves of moisture and high organic matter. Therefore summerfallowing was not required with new breaking, and yields were high. In the Naicam area, some pioneers did not summerfallow for

the first four or five years, leaving the pioneers more time for breaking land. Once the land had been cropped a few times, summerfallowing became necessary. This operation took some time, since it required ploughing, and discing or harrowing a number of times through the summer. The ideal was to have a layer of fine dust on the surface to reflect the heat and light of the sun, and to prevent moisture from evaporating. This meant the land had to be worked after each rain. It also meant working the field as often as required to prevent any weed growth. (However, I was told that in those days weeds were not the problem they are now.)

In the Naicam area, in contrast to the prairies, concern with moisture conservation was unnecessary so a field only required summer-fallowing once in three or four years, or more (prior to 1930). The drought of the Thirties did not affect the Naicam farmers as much as those down south, but it was dry enough that they adopted a three-year summerfallow system.

A couple of informants who moved into the area from the prairies, fleeing the drought, said farmers in this area were the "poorest [i.e. worst] farmers on earth". One attributed this to their machinery. Since they were financially poor, they could not afford to buy good machinery, so they used old, worn-out machines. "Their machinery was no damn good", he said, and as a result they did not work the land often enough. The other attributed it to the heavy bush. Since they had to put in many hours of hard labour clearing land, they did not have the time to work it properly. Regardless of the reason for being poor farmers, both men judged their neighbours on the basis of their summerfallow. A "good farmer" was one who had a proper dust mulch on his summerfallow, with no weeds.

This dust mulch was considered necessary prior to 1930, but it was a direct contributor to the disaster of the Thirties. It was found that the dust mulch was easily eroded by the wind, and was one reason why there was so much dust in the air (and why the period was called the "Dirty Thirties"). The Swift Current Experimental Farm developed a method of summerfallowing which leaves the stubble, straw, and weeds on top. This "trash cover" was just about the opposite of a dust mulch. The farmer did not work the land until there was considerable weed growth, and then only enough to uproot weeds. The field was left with lumps and trash on top to catch and hold water and snow. Federal workers had a long, hard fight to get farmers to accept this new method, since it contradicted the values held by farmers. (See Gray 1967 for an account of this conflict.)

One final example of standard methods vs. individual variation should be mentioned. On the prairie, the standard rate of seeding wheat was a bushel and a peck (one and one-quarter bushels, or seventy-five pounds) per acre on summerfallow, and one bushel per acre on stubble. (Stubble was seeded lighter because there would be less moisture available for the second year of cropping.) In the Naicam area, the standard rate was the same. But one informant said he sowed one and one-half bushels per acre (ninety pounds), and he said the prairie rate was often only three-quarters or one bushel per acre. In this area, the land was better so it could take the heavier seeding, and it also had the effect of speeding up maturation--a benefit in a region of early fall frosts. This informant claimed that rates in his area varied from one to two bushels per acre.

Seeding a little heavier does have the effect of speeding up

maturation--not much, but every little bit helps. One informant said he seeded one and one-quarter bushels on summerfallow and one bushel on stubble, until he talked to a farmer in Scotland during World War I. The Scots sowed seven bushels per acre since they had enough precipitation but a short growing season. Wheat "stools", that is it sends out extra shoots from the main stalk, if seeded lighter. This is fine, since each shoot has a head, thus increasing the yield. However, while it is stooling the plant is not ripening. Therefore, if allowed to stool the wheat will take longer to mature. To prevent this, and speed up maturing, the pioneer seeded a little heavier. In southern Saskatchewan, heavier seeding produces lighter yields because of the lack of moisture. On the other hand, the growing season is longer, allowing time for stooling. Therefore, farmers in southern Saskatchewan had to seed lighter, and had the benefits of stooling and larger yields. Pioneers in the Naicam area were able to seed heavier, with the benefit of faster maturation. After talking to the Scottish farmer, this pioneer seeded two bushels on summerfallow, and one and three-quarters bushels on stubble.

A somewhat different approach was presented by another informant. He said that while the standard rate was one and one-quarter to one and one-half bushels per acre, he said he usually skimped and put in one bushel. He did not think anyone seeded as heavily as two bushels per acre. He thought that anything over about three-quarters bushels per acre was throwing away seed. He did admit that if he was seeding later in the spring (with less time for maturation) he would seed a little heavier and avoid stooling.

PATTERNS OF ACTIVITY

As with most societies, pioneers did not consciously follow set patterns of behaviour. The social scientist extracts patterns after the fact. Some aspects of pioneer behaviour can be described in terms of activities related to subsistence, daily and seasonal farming activities, and social interactions.

Subsistence Activities

Most of what a pioneer family required for subsistence was produced on the farm. This was in part because stores were somewhat inaccessible, particularly in the early years when the nearest towns were Watson or Melfort. After the rail line was built, there were more towns and more stores, and they were closer. But even the townspeople did not rely completely on the stores. Many of them had small gardens for turnips, potatoes and onions. The stores lacked refrigeration facilities so they could not sell meat. Many townspeople bought their meat from farmers.

The more important reason why farmers were self-sufficient was that they had little money. If they were able to produce an item on their own, so much the better; what money they had could be used for items they could not produce, such as flour, sugar, salt, tea and coffee. According to one storekeeper, Swedes and Norwegians bought chicory (an inexpensive coffee substitute) instead of tea and coffee. Topping the sales list were snuff, chewing tobacco and cigarette papers. Yard goods were sold, and many farm wives sewed clothing for their families. Hardware items, such as tools, nails, lanterns, bulk oil, kerosene and binder twine were all purchased. In order to be able to purchase these

items, though, pioneers had to conserve money by producing whatever they could on their own.

While many pioneers purchased the staples mentioned above, there were some who saved by producing their own. One homesteader kept a few hives of bees and used his own honey instead of sugar. Another burned wheat and ground it for a coffee substitute. One homestead family drank milk most of the time, so used very little tea. Flour could be handled in one of four ways. Some homesteaders purchased grinders and hand-ground their own flour. It was reported to be a very slow and arduous method of producing low-quality coarse flour. Some homesteaders hauled a wagon-load of wheat to the flour mill at Humboldt, where they could exchange it for bags of flour. The storekeepers occasionally brought in flour by the boxcar, and sold it in bulk. A few homesteaders purchased their flour in small amounts through the year.

An important source of subsistence items was the vegetable garden. That the garden was one of the first priorities when setting up a new homestead has been explained. Once the land was ready, the major responsibility for the garden lay with the wife. It was her task to seed it, to weed it, to make sure the vegetables were harvested at the appropriate time, and to dispose of the harvest. She would have help from the men of the farm at seeding and harvesting time, but the responsibility was hers. The garden was an obvious sign of the ability of a farm wife. Its appearance (neatness, weediness) and its productivity were two fairly objective measures against which she could be judged.

The garden produced a large portion of the food the farm family required. Many informants made comments such as, "We practically lived

off our garden". So strong were the values for a large garden that when money became available, garden produce still formed a large part of the diet. Even today, retired pioneers and modern farmers alike usually have large gardens.

The range of vegetables grown in the garden was somewhat more restricted than it is today. Varieties of vegetables which could survive the prairies were yet to be developed. The staple vegetables were potatoes, carrots, onions, turnips, beets and cabbages. It is significant that most of these are root vegetables, which will keep well late into the winter if put in a root cellar. This cellar was a common part of pioneer homes, consisting of a hole in the ground under the cabin, with a trap door in the floor and a ladder down into it.

In addition to garden vegetables, the farm wife (and children) often collected wild strawberries, raspberries, or saskatoons. She would "can" these in glass jars for use during the winter. The jars would also be stored in the cellar, on shelves. There has been the odd case of someone finding a jar of fruit that was "put down" many years earlier. On opening, often the contents are quite edible. Home canning can be a source of health problems, but if done properly the food is well preserved.

Meat for the farm family was also produced on the farm. While raising large herds of cattle for beef was quite rare, most homesteads had a few head of cattle for milk, cream, and for their own meat. A "cattle beast" (as some informants called a cow or steer slaughtered for meat) would be slaughtered in the late fall, when the temperature was cool enough that the meat would not spoil. With luck, the temperature would go below freezing shortly after the animal was butchered,

and the meat would stay frozen all winter. In the spring, any meat left would be put in an ice house (if the farmer had one) or smoked or canned.

Chicken and a few turkeys supplied some variety, particularly for special occasions. They would be slaughtered when they were needed, avoiding the problems of preservation. Quite frequently a pig would also be slaughtered in the fall. The meat was usually smoked and salted, or put in salt brine. One informant said he killed a pig every fall and spring.

Eggs and dairy products also formed a part of the diet. Again, collecting eggs and milking the cow (or cattle) was often the task of the farm wife. Usually there were children old enough to be given the chore of collecting eggs or helping with milking. Many farms produced more eggs than they needed, which were collected for a few days and sent into town. They were usually sold to the storekeeper who credited the family account at this store. Sometimes the farm wife sold eggs to farmers who did not raise chickens, or to townspeople. In this case, the wife would have a number of regular customers.

Cream was also collected and sold to the store. In the early days, when shipping methods were slow, the cream would be churned into butter on the farm, and the butter was sold. This of course cut down the bulk and butter was easier to preserve. With eggs and cream (or butter) being sold to the storekeeper, many farmers had to supply only a minimal amount of cash to balance the account. Thus, while not everything was produced on the farm, that which was not, was purchased by exchanging surplus farm produce.

The store in turn either sold the eggs, cream and butter to

townspeople or shipped them to larger centres. One storekeeper said it was a nuisance to be buying these items from farmers. He said he only did it to help the farmers because there was no profit in it. Of course, since the farmers did not have much money, the storekeeper had to accept produce or he would not have any business. In many towns there were at least two stores and the storekeeper kept a careful watch on the prices charged by the competition. They also kept track of which customers went to which stores, and made an effort to entice customers away from the competition.

The prices paid by the stores were not high. Cream brought the farmer \$1.50 for a five gallon can, according to one informant, \$1.90 for "first rate cream" according to a second, and \$2.50 for five gallons according to a third. (Perhaps the prices varied from one storekeeper to another, and also from year to year.) Butter brought 5¢ per pound when it was shipped to Watson in the early years. Eggs earned 6¢ a dozen.

Of course neither prices nor wages were very high in that period if judged by standards of the 1970's. One informant's partner had a job paying \$1 per day plus room and board. This money was used to hire a man to break some land. Many informants cut and hauled cordwood to earn some cash. A cord of wood (a pile 4' x 4' x 8') takes a lot of work to cut and haul, particularly in winter when most of this work was done. One common problem was the load would tip over, requiring complete reloading. It was, in one informant's expression, a "bearcat" to haul. The price received for this cordwood (sold to the storekeeper, who shipped it to the larger towns for firewood) was only \$1 per cord.

The construction of the railroad line from Watson to Melfort

provided employment for many pioneers for a few years. After it was built, there were some jobs available maintaining and operating the line. Many of these jobs were taken by townspeople but a few homesteaders were able to get permanent part-time work. One homesteader down on the prairies worked as a brakeman on a railroad for a few weeks every fall through the twenties. Also, the construction of the rail line stimulated other construction, such as elevators and stores. Many pioneers worked on these projects when they could take the time.

Other tactics for getting some income were less common. Some homesteaders left for Ontario or for lumber camps for the winter. This was easier for single men, and not many married men did it. The wages at a lumber camp were good, \$25 per month with a \$5 per month bonus for staying the winter, but the work was dangerous.

A few homesteaders sawed wood and sold lumber. One man constructed his own sawmill. But again, the price of lumber was hardly worth the trouble: \$8 to \$10 per thousand board feet according to one who did this, \$6 to \$8 per thousand according to one who didn't.

Another rather enterprising informant put in the winters from 1935 to 1940 buying and selling frozen fish, turkeys, hides, honey, or other items. The fish was sent to him by a fisherman in Northern Saskatchewan, the other items were produced locally. His territory was fairly large, including Melfort and part way to Tisdale.

After a few years of farming, many homesteaders had not just one cow, but a number of them. One homesteader received one cow as a wedding present, bought three more, and gradually built up his herd until he was milking nine or ten. He usually sold three cans of cream per week (five gallons each, for \$4.50) all summer, and one can per week

in winter. A rough estimate of the cash return of this cream would be \$170 for a year. With this money he had to buy any extra food, also clothing and hardware. Another homesteader built up a herd of about one hundred head of cattle, and was milking twenty-two. Another had his children milking seventeen cows. On a smaller scale, one homesteader had a herd of twenty, and milked five cows in the summer, but they dried up in winter. Cows were bred every spring. They would dry up for two or three months before calving, thirty-nine to forty-one weeks later. Some farmers controlled the breeding so that some cows were calving in late winter, January or February. Most cows calved in March, April or even May. Therefore, December, January and February were months in which little milk was produced. By staggering the breeding, some farmers arranged to have some milk produced at all times of the year.

Those who sold cordwood, cream and eggs to the storekeeper might be able to balance their accounts without further payments. One informant said that by selling only butter to the store, his account balanced. But a storekeeper informant said that there were only a few who traded enough to pay for groceries and hardware. Most homesteaders accumulated a bill which they paid in the fall, after harvest. If the account did balance, or nearly balanced, it may be that the farmer had a good idea of how much credit he had, and bought accordingly. In other words, he matched his buying to his selling, rather than vice versa.

Once the cream was separated from the milk, there were immense quantities of skim milk left. Some of this was sold to town families, and some was consumed by the farm family. A few informants said their families did not drink much coffee or tea, just milk. Another method of putting the milk to use was making cottage cheese or other types

of cheese. This method was not reported in the Pleasantdale area, but homesteaders in other parts of Saskatchewan used milk in this way. Skim milk was also fed to calves over the summer. On some farms, any milk left over was fed to pigs. Since milk could not be sold the way cream was, if it was not used it would have to be thrown out. By feeding it to pigs, good use was made of an otherwise wasted resource.

Another source of food was from the wild. Mention has been made of picking berries. Some pioneers also went hunting for deer, moose, or (in the early years) bear. Hunting was not standard practice, by any means. One informant said he did not shoot deer since he disliked the taste. Another said he has not fired a rifle since World War I; he had had enough of killing. In general, wild meat did form at least a small part of the diet, and provided some variety.

Variety came in the way of fish, too. One informant said that just about every lake (there are many very small lakes in the area) had lots of fish. Some fish was smoked and salted for storage. Another informant said there was no need to store fish because a farmer could obtain them whenever he needed them. Of course, this would assume that a lake or stream was near his farm.

During the Thirties, purchasing items from the store was more of a problem, since the price received for produce was very low. Also, there were many who came into the area during the Thirties, after having farms on the prairies destroyed by drought. While some of these people were able to bring some food and livestock with them, there were many who had nothing. As a result, relief payments made by the municipality formed an important source of income. According to one report, relief for a family of four might be \$15 per month. This informant claimed

that half the people in the municipality collected relief. Often the relief payments were not enough to support a family. One informant told of a municipal councillor giving his own sugar and potatoes to families that were particularly hard up.

A homesteader's subsistence, then, came from a number of sources, the majority connected with the farm. As an example, it is worth considering the experience of one homesteader who entered the area in the Thirties, fleeing the drought. He and his wife brought a lot of food with them, in canned and preserved form. They grew vegetables, and canned them or stored them in the dirt cellar. Since they brought little meat with them, they had to buy it for the first few years after what they had ran out. He constructed a small sawmill, and traded sawed lumber for food. He also had a grain crusher and crushed grain for neighbours (crushed grain was used for feed). One neighbour gave him a sow in return for crushing some grain, and a year later they had their own pork. After a few years they also had some chickens and cattle, but it took several years to clear enough land to grow feed for livestock. This man did his own blacksmithing and carpentry. His wife spun wool on a homemade spinning machine, and knit socks and mitts. She bought cloth from a catalogue, and sewed their clothing. They made an occasional trip to Humboldt to trade wheat for flour. They brought furniture and machinery from the south, and consequently their only store-bought items were tea, coffee, sugar, salt and shoes.

The immediate priority of homesteaders was to obtain the necessities of life. To be successful required that a number of strategies be employed. In contrast to middle class urban life in North America, where the necessities are taken care of very easily, mere subsistence

was a serious problem. As one homesteader said, "people lived a more simple life; they produced what they needed." Another said, "Nobody was trying to get rich because all they were trying to do was to get enough to eat."

Seasonal Cycle and Daily Activities

Daily and seasonal activities varied from one homestead to another. If a homesteader felt short of cash, he might work for a neighbour for a few weeks, or go to Melfort or Prince Albert to get a job, or go to a lumber camp near Tisdale for the winter. On the other hand, a homesteader who felt his time was put to better use by working his farm stayed there all year, and might work for a neighbour for an occasional specific task. Activities varied, too, depending on whether a man had a son, a brother, a partner or a hired man to help him. Such a man might take on more and larger tasks than a man working alone. Perhaps most important, activities depended on how much land the homesteader had under cultivation, and how ambitious he was to increase crop acreages. Within this variation, there were clearly discernible patterns of activities (see Figure 4.1).

When asked about the yearly cycle of events, informants invariably began with spring seeding, first wheat, then oats and barley. The calendar year began January 1, but the more important year began with the beginning of the agricultural cycle. Seeding was usually under way by late April or early May, particularly in the dry Thirties. Since the seeder plugged up if the ground was too moist, a farmer had to wait until the ground dried from the spring run-off. If it rained, seeding was delayed a day or two until the land dried. This was a frequent problem in the study area. Less frequent, but still a problem,

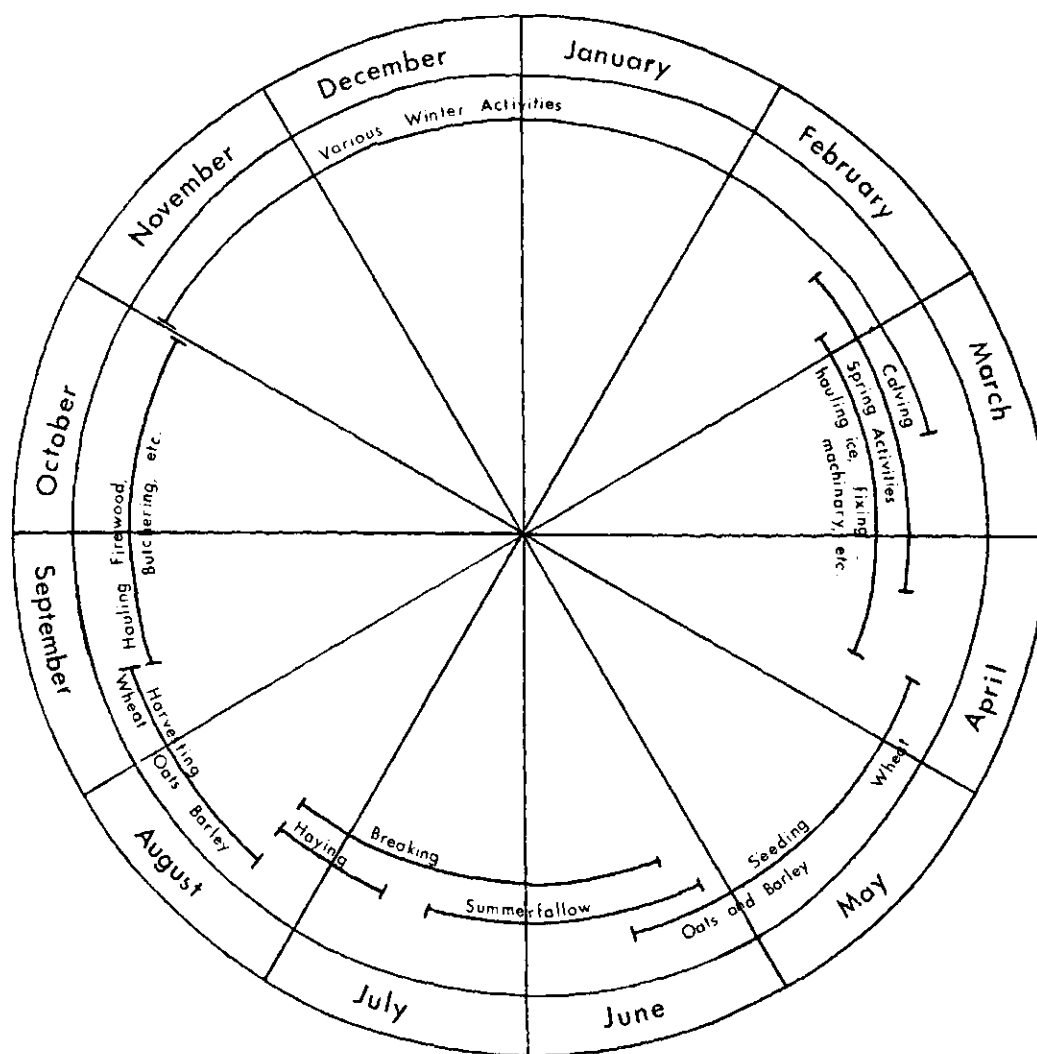


Figure 4.1. Seasonal Cycle of Activities.

was a "wet spring", when it rained so frequently that the fields were rarely dry enough for seeding.

Horses had an advantage over tractors at seeding time. A tractor requires a much drier field to avoid getting bogged down, but horses can pull even in a field that is quite damp. Also, horses can pull when the frost is not yet out of the ground (i.e. very early in the spring, just after the snow has melted). However, such a field does not provide firm traction for a tractor, so the farmer runs a good chance of getting stuck.

As explained earlier, one major problem faced by early farmers was harvesting the crop before it froze or winter set in. The crops in use were all of the type that matured in a certain length of time rather than maturing in a given season. Marquis, the most common variety through much of the period, took 109 to 112 days to mature. Therefore, seeding the crop as early as possible in the spring was an advantage, since it would give the farmer the edge in the fall.

Modern farmers in Saskatchewan cannot seed as the first operation in the spring. Usually there are weeds which have to be eliminated, by cultivating, rod-weeding, and/or spraying. In the early years, weeds were not perceived as the problem that they are today. One explanation offered was that birds brought the weed seeds from other areas. Another possible explanation was that the use of combines has amplified the weed problem by spreading weed seeds all over the field. This informant indicated that in the early years, when threshing machines were used, the machine was stationary, so all the chaff (and the weed seeds along with it) was dumped in a pile and burned. Alternately, the operator could adjust the threshing machine to separate the weed seeds, which

could then be loaded into a wagon and hauled away.

These explanations are not supported by the observations of a crop scientist (Austenson 1976). Weed seeds can be destroyed by burning, but many straw fires do not get hot enough. The weed seeds can be hauled away, but the wagons used were typically rather leaky affairs, leaving trails of weed seeds behind them. The weed seeds were often used as livestock feed, but a large proportion passed through the animal's digestive system intact, and were spread by the animal. Consequently, the reason for the spread of weeds (if in fact this has occurred) is an open question. In any event, pioneers did not have the weed problem that exists today, so they were able to seed without having first cultivated the land.

Various dates have been given by informants as a target date for completion of spring seeding of wheat: wheat should be in by May 8; if it was a late spring, and seeding was not done by June 1, then it was too late to seed wheat; wheat was usually seeded by the middle of May; seeding was usually done by May 24--any later and the farmer would not get a crop; sometimes seeding was being done in April in the early years; 1911 was an early spring, and some pioneers were seeding on April 15; there is no advantage to seeding early, it just lies there and does not germinate; in 1937 or 1938, wheat was headed by June 29, which suggests that it was seeded by May 1. According to crop scientists (Bracken 1920:115), the optimum time to seed wheat was April 20 to April 30.

Of course, much of this variation was due to personal preference. Also, the dates were only guidelines; specific situations might require variations. One homesteader claimed that it was too wet in the early

years to get on the land early in the spring. Therefore crops were not usually seeded until mid-June. Some farmers "mucked it in" (seeded on wet land), but, he said, the seed does not grow as well. Then too, the soil may "bake", i.e. form a hard crust when it dries. Loam will not bake when it is new, he said, but after a few years it tends to. Then when the wheat shoots come to the underside of this crust, they are not able to grow through it. They will curl around looking for an opening, and if they do not find one they will die. Therefore, the farmer who "mucks it in" stands a good chance of losing his seed. After more land was cleared, the sun and breezes were able to get at the soil a little more, and dry it out in the spring. Thus the homesteader was able to seed earlier still.

If there was a late spring, the homesteader might seed less wheat and more barley, which matured in about ninety-five days. Even then, some wheat was still sown. Another tactic was to seed a little heavier. As mentioned above, wheat does not stool as much if it is seeded more heavily and consequently matures a little faster. Therefore, in a late spring one way to speed up maturation, reducing the chances of freezing in the fall, was to sow a little heavier than normal. No matter how late the spring, however, wheat was always seeded first, since "wheat was the principal thing".

There is one way in which this priority given to wheat may work as a disadvantage. Summerfallow conserves moisture; that is its purpose. Since it conserves moisture, it takes a little longer to dry out sufficiently for seeding in the spring, as compared to stubble. The crop usually seeded onto summerfallow was wheat, since summerfallow produced better crops than stubble and "wheat was the principal thing". Stubble

fields would be sown to barley, oats or whatever. In other words, the field that was to be seeded first (summerfallow with wheat) took longer to dry out than the field that was to be seeded later (stubble with oats or barley). So this emphasis on wheat actually imposed a delay on seeding operations. Again, the delay was likely not much, but even a short delay could prove disastrous in the fall.

As soon as the wheat was sown, the pioneer carried right on seeding oats, which took almost as long as wheat to mature. Barley was sown immediately after the oats.

I pointed out earlier that oats could be taken off as hay before it matured, and that this characteristic provided an alternate strategy in certain situations. One such situation was when, for some reason, a field had to be seeded very late in the spring. A homesteader had been farming "down on the prairies" during the Thirties. One year his flax was completely eaten by grasshoppers--100 acres destroyed in two days. By that time it was too late to reseed the field for threshing, so he sowed oats. He could take the oats off as hay in the short season that remained, thereby getting at least something from the field.

After seeding came the summerfallowing, if any. Since "new" land (i.e. land recently brought under cultivation) produces a heavy crop, many pioneers did not summerfallow any land for the first few years. This allowed them more time for breaking new land. Later, a portion of the cultivated land would be left fallow each year. On the drier prairies, one third or even one half of the land would be summerfallowed. In the Thirties, the portion was commonly half. In the study area, where moisture was more abundant, the standard practice was to summerfallow one third of the land each year, so a particular

field would lie fallow one year in three.

The rate of working summerfallow was somewhat faster than breaking. A pioneer could cultivate about five acres per day with a plough, or up to fifteen acres per day with a cultivator, depending on the width of the cultivator and the number of horses pulling it. However, working even a small field of summerfallow took a lot of time, since (as explained earlier) the goal was to leave a fine layer of dust on the field, with no weeds or lumps. This meant that a field should be worked after each rain, or at least every couple of weeks.

If the pioneer summerfallowed part of his land, he would leave breaking until after the summerfallow was done (after the middle of July or so, it no longer needs such frequent working) or squeeze sessions of breaking in between stints of summerfallowing. If he was not leaving any land fallow, he would be able to devote the entire period from seeding until haying to breaking more land. Breaking consisted of pulling the stumps on land already cleared (often during the winter), and then ploughing. This ploughing was a complex, multi-faceted operation, and took much time to complete. First the land was ploughed with a breaking plough. Then it was worked with a disc, a couple of times parallel to the ploughed furrow, then a couple of times perpendicular. Some pioneers "double disced", overlapping by half the width of the disc on each pass. After the discing came the harrowing, an operation similar to raking, the function of which was to level the land and break up lumps. Next came the back-breaking chore of picking roots and rocks. For this operation, the farmer had to walk across every square foot of the field, picking up all the pieces of roots left from pulling stumps, and picking up any rocks large enough to cause trouble for machinery (roughly five

inches in diameter). The land was then ready for seeding the following year.

Following the summerfallowing and/or breaking came haying season. Hay tended to be ready at a certain time of the year, about August 1 for wild slough hay. Therefore summerfallowing and breaking were variable-time chores which could be expanded or contracted to fill the available time between the end of seeding and the beginning of haying. Since hay could only have a certain maximum moisture content when it was piled, haying was dependent on the weather. Rainstorms during haying could delay the operation and occasionally delayed it so much that the farmers had to switch to harvesting, finishing the haying after the harvest. Tame hay should be cut before it gets too mature, but there is no real problem if this isn't done--it can still be cut and used for hay later. Wild grass, however, had to be cut before foxtails formed. These long, needle-like seeds can catch in the throats and teeth of horses, and cause a great deal of trouble.

The first operation in haying was to cut the hay with a "sickle bar", a horse-drawn machine that cut a swath about four or five feet wide. While horse-drawn sickle bars were most common, there were a few pioneers who used scythes to cut wild hay for the first few years. It was then raked into piles with a horse-drawn rake. The piles of hay were loaded onto wagons and hauled to the farmyard, where they were unloaded onto haystacks. The loading and unloading were done by hand, with hay forks. Rain could delay the operation at any point. One informant said that it seemed it always rained as soon as the hay was cut.

If the haying took longer than two weeks or so, it was postponed

until after the harvest. Since the harvest was far more important than haying, it had priority. Livestock could be fed many things in a tight spot: wheat straw or other types of straw, some of the crop, or even vegetables such as potatoes. The continued existence of the farm might depend on the harvest.

As long as horses were used for seeding, the date for beginning the harvest was fairly dependable--about mid-August. One homesteader gave a date, August 12. Bracken (1920:115) suggested specific dates for wheat varieties as follows: Red Bobs about August 14; Marquis about August 18; Red Fife about August 21. Bracken gave the impression that these dates are more or less fixed, with the assumption that the crops were seeded within the optimum period of April 20 to April 30. Note that the oldest variety, Red Fife, took longest to mature, and the more recent variety (Red Bobs) was a week earlier.

When tractors became common for seeding, the date of seeding became much more variable, and so too did the date of harvest. With tractors, the farmer had to wait until his land was sufficiently dry, a condition that varied greatly from one year to the next.

Usually the first crop harvested was barley, since it matured a little earlier than the others. Next came oats, then wheat. The workers put in long hours trying to get the harvest finished as soon as possible, to avoid the winter snow. Although farms were small, there were only a few threshing outfits in the area to do all the work. The harvest required long hours of work with the ever-present danger of winter arriving before it was completed. In later years, when farms were getting larger, threshing machines and tractors were manufactured in smaller and cheaper versions, so an individual farmer could afford an

outfit, or a few neighbours might purchase one as a group.

Fall rain would delay the harvest a little, with the operation shutting down until the grain dried. Stooks shed the water quite efficiently however, so the delay was usually not long. Also, in those days damp ("tough") grain was not considered undesirable, as it is today, so there was less concern about threshing the grain soon after a rain. Still, threshing occasionally had to stop for two or three days at a time in a wet year. One homestead wife told about having a threshing crew (up to fifteen men) on her hands for a whole week. She and her husband lost a pig and four acres of oats trying to keep the crew and its horses fed. They finally had to ask the crew to leave, and were not able to get the crop harvested for another two months. They were lucky that because of a late fall, they were able to get the crop harvested at all. For a homesteader with a small farm and little of anything to spare, such an experience could easily spell disaster.

The Thirties were dry years, so the crops were usually harvested before winter set in. However, prior to the Thirties, and in the Forties, crops sometimes had to stay out all winter. Stooks survived such treatment better than the swaths of today (which can be flattened to the ground by the weight of snow), and could be threshed in the spring without too much trouble. Mice could do a lot of damage over the winter, however. These rodents can set up house in a stook, and by spring half the grain will be eaten.

Threshing required a lot of manpower. Some of this labour was provided by the sons of local farmers, trying to earn some extra money. Some of it was provided by local farmers, who were so in need of money that they considered it better to leave their own farms in order to

make a few dollars. A significant part of the labour was provided by neighbouring farmers, who exchanged work (discussed in a later section). Farmer "A" would help with the harvest at Farmer "B"'s and Farmer "C"'s, and in return "B" and "C" would help with his harvest. There was a need for labour beyond what was available by these methods. This labour was brought to Western Canada from the East, on the railroad's "harvest excursions". According to one informant, these men were mostly from farms in southern Ontario, coming west for a holiday or to see the country. Some were from Europe, and some were unemployed city men, who knew little about farming. The harvest excursions were organized by the railroads, which gave the men special low fares. A farmer who wanted a worker would ask the storekeeper to send out a worker when the train arrived, or sometimes he would meet the train since he would usually know the train schedules. The workers rode on the train until they felt like getting off. They generally did not have preset destinations.

The schedule for a threshing outfit in an area was decided some time beforehand, even as early as spring. Since all the crops (of a particular type) in an area would mature about the same time, there would be a number of farmers trying to get the services of the thresherman at the same time, and arguing over priorities. Those who were threshed last the year before felt they should be threshed early this year (again, to avoid the snow). Moving a threshing outfit is a slow process, so the thresherman would usually set up his schedule based at least in part on location, to avoid unnecessary or unnecessarily long moves.

Those homesteads that were short of money hauled wheat direct

from the threshing machine to the elevator. Since most pioneers were financially insecure, and many owed the store, this was the more common practice. The price was generally lower in the fall, therefore if he could afford to wait, the pioneer would store his grain on his farm in granaries, and haul it to the elevator during the winter or even the following spring or summer. Often, the price was 10¢ to 15¢ per bushel higher in the spring than in the fall. This made a difference of \$2 or \$3 per acre of wheat, a significant sum at that time. There was a story (unconfirmed) about a man who kept his wheat from 1915 to 1917. According to the story, the price rose significantly, and he made \$1.50 per bushel just for storing it. There were not many that could afford to do that. Therefore, the pioneer who had little had to sell his wheat at a low price. The pioneer who already had extra money could make more, by storing his grain.

After harvest was over there were a few chores to be done to prepare for winter. One of these was butchering a cow ("killing a cattle beast", as one phrased it), and a pig. This was usually done in late fall, when the meat could be frozen naturally and kept all winter. Usually each farmer supplied his own meat. The "beef rings" which were common on the prairies (in which a cow was butchered once a week, with the meat divided among all the families participating) were almost unknown in the study area. Some farmers gained reputations for being good butchers, and shared their skills with other farmers in their areas.

Another late fall chore was cutting the winter's supply of firewood. Wood often supplied all the heat for a farm, so this meant a lot of wood had to be cut. There were a few cases of a number of neighbours getting together to do the job co-operatively, at each farm in turn.

Some men would haul the logs from the bush where they had been cut the winter before, or even two winters earlier, so they would be dry enough for firewood. Others would cut them to stove length and stack the logs. One man had a saw driven by a stationary engine set onto a sleigh, which he hauled from place to place. With this saw he and his neighbours could cut about fifteen wagon loads (about twenty-two cords) at each farm in about five or six hours. They would move to the next farm the following day, and so on until everyone had his firewood supply.

Winter activities varied much more than summer activities. A farmer had to do certain tasks at specific times during the summer, but he could leave the farm during the winter if he could have someone look after his livestock. Some took this opportunity to earn extra money in Prince Albert or in lumber camps near Tisdale. One man worked in these camps for three years until he decided it was too dangerous. Some men returned to families on the prairies or in Ontario for the winter. One man travelled through the region buying and selling fish, cattle hides, honey, turkeys, etc. This man had a hired hand at home to look after his cattle. Some left their livestock with brothers, neighbours, or wives.

While many left for the winter, there were more who remained on the farm. Many combined the necessary chore of clearing land with an opportunity to make a little money, and hauled cordwood to town for \$1 per cord. A few sawed their timber and sold it as lumber for \$3 to \$10 per thousand board feet. Those who were more ambitious, and wanted the land cleared in a hurry, simply cut down the trees and burned the wood. In any case, a common activity of those who stayed on the farm all winter was preparing land for breaking the following summer.

One homesteader reported that his father, his two brothers, and he spent the first winter "brushing" just for something to do. There was no place to go, and "it was tiresome to live in that house, nothing to do". The father bought some axes, and they shovelled snow off the bases of trees to chop them down. They cleared about fifteen acres that winter.

Those who stayed on the farm all winter still had chores to do. Horses and cattle had to be fed and watered. Horses are able to forage for themselves during the winter, pawing through the snow to get at the grass, and eating snow for water. Cattle cannot do this. They must be provided with feed and water which required hauling hay from the stacks made during the summer. Therefore, in most situations chores involved more work in winter than in summer. One man did not have water on his place, so he had to melt snow for his cattle all winter. He had to haul two loads of snow each day, and a load of firewood every two days, just to water the cattle. He said he used to look forward to spring, when he would be able to have a rest.

In addition to feeding the livestock, clearing up after them required work in winter. Cattle were generally confined for the winter, often in a barn. Therefore, cleaning manure out of the barn was a bigger job in winter than in summer, when the cattle would be in the pasture all day.

One task required less work in winter than in summer. I have already explained that cows tend to dry up, that is produce no milk, about two or three months before calving. Some farmers staggered breeding times for their herds, so calving time and dry periods were also spread out. However, there were limits to the range of time in

which calving could take place. It was believed that calves were not able to withstand very cold weather, so calving had to be timed to occur after the worst of the cold weather. Some farmers today are timing calving to take place during the cold weather, when their cattle are in the winter shelter. Perhaps the older practice was not strictly necessary. Another limitation was that calves should have enough time to mature before the next winter sets in, so calving should not take place too late in the spring. Therefore, while the dry periods could be staggered, these limits tended to insure that there would be at least a short dry period on any farm. Then too, many farmers allowed nature to take its course as far as breeding was concerned. On these farms, the dry period was longer. In addition, cows generally give less milk during the winter, when their diet is not quite as good--hay, rather than fresh green grass. Consequently, these two factors resulted in the milking taking less time for the person doing winter chores.

Toward the end of winter, the pioneer had a few tasks to prepare for spring. Those who had ice houses had to cut and haul ice from the nearby lake or slough, and pack it in sawdust for the summer. The other major task was preparing machinery for the next season of fieldwork. This involved repairing any breaks suffered last summer which had not been fixed, sharpening those implements that needed it, straightening any bent implements, repairing horse harness, and so on.

By completing one year, the next year was begun. New land was cleared and made ready for breaking, and broken land was prepared for seeding. The horses, machinery, and harness were prepared for both.

Social activities also varied by season. The obvious reason is that more outdoor activities were held in summer. There was also

less time for socializing in summer, when there was fieldwork to do and long hours of daylight. In winter there were more evenings available for visiting, and more Friday and Saturday night dances, or Sunday gatherings. This topic will be covered in a later section.

A man's work day was fairly standard. There was a very strong value placed on being at work by 7 a.m., particularly in the summer when "being at work" meant being in the fields. One informant said he "liked" to get to work by 7 a.m. Another said he "tried" to get to work by 7. But almost everyone generalized that fieldwork started by 7. However, starting fieldwork by 7 implied actually being at work much earlier. Before leaving for the fields, the horses had to be fed, brushed and harnessed, the barn had to be cleaned, and, of course there was breakfast for the farmer. Many homesteaders were up at 5 a.m. in order to be in the field by 7 a.m. One man, who had thirty-three horses (after some years of farming) and two hired men, said he was up at 4 a.m. every day. In addition to looking after all those horses, he had pigs to feed, and he had to assist his wife to herd ten or twelve cows into the barn and milk them.

The 7 a.m. starting time was based on the standard amount of ploughing, ten lineal miles, to be done by dinner. This custom probably was brought into the area from the prairies, where the fields were often one mile long. The farmer would then make five trips up and back in the morning, and another five in the afternoon for a total of ten miles in the morning and ten in the afternoon. Those prairie fields that were not one mile long were usually one-half mile long, so ten round trips would make the ten miles. In the Pleasantdale area, fields were much smaller, and irregular, broken by stands of poplar, sloughs, creeks,

and so on. But the goal was still to plough ten miles before dinner and ten miles after dinner. One informant, by no means unusual, said quite bluntly that the standard was to put in two five-hour half-days, and make ten miles in each. That, he said, was "enough for the horses".

Dinner time varied from informant to informant and, I suspect, it varied depending on how well the fieldwork went any given day. Some said the noon break was 11:30 to 1:15, others said 12:00 to 1:30. The break of about one and one-half hours was usual and largely determined by the horses. During the break, the horses were taken to the barn, fed and watered, and given time to rest and digest their meal. Since the farmer's work day was a long one, this gave him a chance to eat a good meal and have some rest.

The afternoon work period was from 1:15 to 5:30, or from 1:30 to 6:00, or similar. Many farmers quit for the day at 6:00 p.m., but a few went out again after supper to work until dark. In any event, there were chores to be done after the day in the field. There was feeding, watering, milking, and cleaning to be done. One man said that as long as he used horses, his work day was six or eight hours in the field, plus two hours in the morning and two hours in the evening doing chores. Another man said that his work day lasted until dark all spring, summer, and fall, until he purchased a tractor and a combine in the forties. These speeded up his work, so as he remembers the situation, he had more time for relaxation after he purchased a tractor. Other informants suggested that eight or ten hours of fieldwork was all that should be required of a team of horses in a day, so any work done after supper should be the kind that does not require the team. Again, there would be some difference according to the level of drive and ambition.

The more ambitious pioneer would be inclined to fill his time with repairing machinery, clearing land or whatever work needed doing. The less ambitious pioneer, while working to build a viable farm, would be more inclined to feel satisfied with a little relaxation after a day's work.

One informant, who was a member of a large family, recalled that he and his brothers and father worked hard all day, then played baseball or football (soccer) or went swimming in a nearby lake almost every evening throughout the summer. For some, the day ended when work ended. As one informant said, "After you do a day's work you're satisfied to go to bed." Others, such as the family that played sports in the evening, were not ready for bed. Some informants said that visiting a neighbour for a game of cards was common during the week.

This daily schedule was in effect from Monday through Saturday, during spring and summer. In the fall, with the harvest, the work day was generally longer, from 6 a.m. to 7 p.m. with only one hour for dinner, according to one informant, or fourteen hours per day according to another informant, or fifteen hours per day according to a third. Allowing for exaggerations and distortions of thirty-five to sixty-five years of memory, the harvest days were still quite long, since the time was limited and the farmers were under pressure to get the job completed.

Saturdays were generally much the same as any other day, with chores morning and evening and fieldwork in between, except that Saturday evening was the time to go to town for shopping and visiting. Stores were open until 10 or 11 p.m. every Saturday night. As one informant said, going to town on Saturday night was a "must".

Sunday was the day of rest. This did not mean that the pioneer

slept in late, and relaxed all day. It meant that he only had to work a few hours, since the chores still had to be done. If he had a hired man, the pioneer might trade Sundays with him, the pioneer doing chores one Sunday, the hired man doing them the following Sunday.

Sunday was also the day for going to church, for those who had access to a church. In many cases, the church was also the school, used as a church every few weeks by a minister who traveled over a large area.

The other activity that was particularly characteristic of Sundays was visiting with neighbours. In some cases there were regular gatherings of a number of families at one homestead every Sunday afternoon. In one such instance the farm wife made large quantities of food (with the help of the visiting women, of course) and put out a pile of plates. She would not know beforehand how many would be having Sunday dinner, but whoever was there joined in. Visiting might be on a smaller scale, one family going to a neighbour's, or perhaps one family having as a regular Sunday visitor a neighbouring bachelor. There were a lot of bachelors living on homesteads, and Sunday was a particularly lonely day for them. The other days were filled with work, so they did not have much time for loneliness during the week.

In some districts there were regular Sunday picnics or baseball games. In others, there was only the occasional such event, usually organized by the school teacher and the older students. One informant said there was a baseball game at a nearby lake every Sunday in the summers of 1912, 1913 and 1914. The war took all the young men, though, and there were no more games. Another, whose parents homesteaded near Lac Vert, said his parents' house was full of people visiting from

all over the district every Sunday, as far away as Pleasantdale and Naicam.

There were occasional Friday night dances in the summer, but these were not common. They cut into the time available for work on Friday, and made work on Saturday morning just that much more difficult. Therefore, since there was a lot of work to be done in summer, there were few dances. The winter schedule was more relaxed, and that was the time of year for dancing.

The winter schedule for week days was basically the same as summer, since there were chores to be done in the morning and evening, and there was always work to be done. Machinery needed fixing, there was firewood to be cut, there was land to be cleared, and there was cordwood to be hauled to town. The major difference between the summer and winter schedules was that winter work was less structured. Summer fieldwork needed to be done by certain times, so the pioneer was under some pressure to complete a given task. In winter, clearing could wait a day if something came up, or hauling a load of cordwood to town could be put off for an hour or two if a neighbour came for a visit or to ask for help. The loss of daylight hours in winter reduced the time available for clearing land, hauling cordwood, or other outside tasks. Therefore, the pioneer tended to quit work earlier on a winter day than in summer. As a result, there tended to be more visiting in winter than in summer. Also, there were frequent Friday night dances. In some districts, a dance was held every Friday night throughout the winter. According to one informant, every school had a dance every Friday night. While that is likely an exaggeration, it would appear to have an element of truth.

Much of the work could be incorporated neatly into a schedule of summer and winter activities, but there were also many tasks that were carried out when time allowed. For example, fences usually consisted of barbed wire strung on poplar posts. Since a poplar post only lasts two or three years before it rots there was a constant need to cut new fence posts and replace old ones. While cutting new posts could easily be done in winter, the task of replacing rotten posts had to be squeezed into the summer schedule, since it could not be done when the ground was frozen.

One task which varied greatly from farm to farm and from year to year was hauling the grain. Prior to 1922 grain had to be hauled to Melfort or Watson. With poor trails for roads, this could be a long and tiring trip. From some parts of the study area the return trip could take over two days when using oxen. Then a wagon box could only hold sixty bushels of wheat--any more was too much weight. Hence, selling wheat implied a long, slow, difficult trip to sell not very much grain. As a result, not very much wheat was sold, just what was required to provide some cash.

After the railroad came through the area in 1922, the amount of wheat that was sold increased. Now many farmers lived less than five miles from an elevator, and could make two trips in one day. Certainly, most farmers could make the trip in one day.

A large percentage of grain was hauled in winter, both prior to and after 1922. One reason was that other tasks were not as pressing, so the farmer felt he could afford the time. Also, grain prices tended to be higher in the late winter than at harvest time. Those who could afford to, stored their wheat until late winter. Many who needed the

money sold the wheat direct from the threshing machine. Another reason for hauling grain in winter was that the crude trails tended to be more usable at that time. In summer they were often badly rutted and blocked by mud holes. In some parts of the area, there were creek or river crossings that were difficult in summer, and marshes and muskegs that forced detours. In winter, with everything frozen and with a good layer of snow, the route could be more direct and the trip made with less difficulty.

Although the pioneer always had a lot of work to do, most informants agreed that the pace of life was slow and relaxed. While there were pressures to complete work at particular times, in general pioneers did not choose to feel the pressure as much as farmers in more recent years. As one informant said, a person was never so busy that he could not stop to visit.

Patterns of Social Interaction

I have already discussed some of the ways in which pioneer farmers interacted with their neighbours. In this section I will try to draw all these interactions together to show more clearly the patterns involved.

Interactions in pioneer life can be distinguished into three types: activities related to subsistence (such as the house-raising bee) and production for home consumption; activities related to income-producing farm production, such as buying and selling livestock; and activities that were purely social in nature, such as Friday night dances. This is not to suggest that the distinctions between the three types are clear. On the contrary, most activities involved elements of two categories, if not all three. Also, this is not to suggest that

the distinctions were made by the pioneers themselves. These categories are seen by the outside observer, and are somewhat heuristic.

The house-raising was an activity that was usually organized soon after a pioneer family entered the area, except in the situation where a house already existed. Of course this latter situation was more common in later years.

The initial problem facing most new pioneers was how to provide shelter and food for his family until he had a house built. One common way of dealing with the problem was to put the family up at a neighbour's house. This was a very short term solution, an arrangement of only a few days, so it was more delaying the problem than solving it. And those who were helped in this way felt a debt to the host. One informant gave his cow to a neighbour, in exchange for boarding his wife and children and for helping gather logs for a house. He could not really spare his cow, but that was all he had with which to pay the debt. The debt was likely not imposed on him by the neighbour; rather, his own sense of pride imposed the debt.

When enough logs were gathered, neighbours came to help build a house. At least, this was common once there were neighbours. The first few homesteaders in an area would be on their own. One such homesteader had to build his own house by himself, as well as building a house for an elderly couple that had accompanied him.

The house-raising bee must have been a memorable event, for it was the first thing mentioned when informants were asked about co-operative work. Usually, the logs and foundation (logs, stones, or just levelled dirt) would be ready in advance. Neighbours would gather (after morning chores), then the men would put up the walls and, if

time, the roof. Women would prepare meals. After work was done, there was often a period of socializing or perhaps a dance. Generally this did not last too long, since there were chores to do at home, and work to do the next day.

Usually only the house was put up in this fashion. There was one case in which a homesteader put up both his house and his barn in one day with co-operative labour. Neither building was very elaborate, of course, and construction would have proceeded quickly.

Labour donated to these events was generally considered well spent, and to be worth very little anyway. The basis of the system was that most pioneers had had such help when they first arrived, and they reciprocated with a new neighbour. Besides, there was a strong belief in helping in times of difficulty. However, one informant kept track of the number of days he worked out on these projects. At one point, after having worked out for twenty-two days, he wanted to build an outbuilding (i.e. neither a house nor a barn, but one of the many auxiliary buildings found on a farm). He put out the word for help, but only one neighbour came. After that, he refused to volunteer his labour. When he built a new two-story frame home some years later, he built it himself with his wife's help. There were quite a few frame homes being built at that time (mid-twenties) and he thought most farmers built them on their own.

This case is a classic example of discovering a rule by determining when a rule is broken. In this case, the homesteader expected help to build a building which was not required for survival, the way a house is. He should be able to build the building himself, or with the help of a neighbour who owed him work. In any case, the construction

of the building does not fall into the realm of subsistence, for which neighbours would go to great lengths to be helpful, but into the realm of farm production, where more direct labour exchange relationships come into play. This man was unable to get the help he expected because he was asking for the wrong kind of help. Similarly, the construction of a frame house would be considered a "frill", for which he was responsible, and not particularly deserving of help.

There were other problems involved in setting up the homestead. For example, one pioneer was given a load of hay by a neighbour. He felt obliged to give something in return, so later, when he had the time, he cut a load of firewood and delivered it to his neighbour. Also, since many pioneers knew little about farming, the earlier settlers provided much valuable advice. One informant's father had hitched up the plough wrong, so it was not working the way it should. His neighbour came over and showed him how to work the implement. Another informant said his neighbour came over and gave advice "whenever we were doing something".

Those who pioneered in the Thirties were often without any resources; they came with little money and they had little food. The municipality provided these people with relief, about \$15 per month for a family of four. Nevertheless, this was often not enough. Many cut and hauled cordwood, but this required draft animals, oxen or horses, and many did not even have those. There were reports of one municipal councillor giving such people potatoes and sugar from his own supplies in order to help them.

Some informants knew about beef rings, although no one was found who was a member of a beef ring in the Naicam area. It seems

that this institution was more common down on the prairie than in the study area. One informant suggested that no one wanted to do all the work, and there was considerable work in a beef ring. Twenty or thirty families co-operatively created a ring, each family in turn providing an animal for slaughter. One man did all the butchering, a task performed usually once each week. In addition to butchering the animal, his job was to distribute the cuts in such a way that each family received the equivalent of a whole beef over the period of a cycle.

The beef rings served two important functions on the prairies and there is no obvious reason why they did not develop to fulfill these same functions in the study area. First, their use avoided the problems of keeping beef fresh through the summer without proper refrigeration facilities. Secondly, they performed a socially integrative and supportive function by providing neighbourly assistance during times of stress. Both these conditions were apparent in the study region but no beef ring appears to have developed. This is perhaps an example of the danger of confusing functional correlations with causal explanations.

One type of co-operative work that was done on a regular basis was sawing the winter's wood supply. Although this was not done co-operatively in all cases, it was fairly common. About a dozen neighbours would get together at each farm in turn, some hauling logs in from the bush (where they had been cut some time previously in order to be dry enough for firewood), and some cutting and stacking the firewood. In one case, a neighbour had a stationary engine mounted on a sleigh, driving a saw. This would be pulled to each farm. Fifteen or twenty loads were hauled and cut, taking about five or six hours.

The next day another farm's supply would be cut, and so on.

One other example of co-operative work was mentioned. One pioneer had a wheat grinder which was operated by hand. It was hard, slow work operating the grinder, resulting in a small supply of flour. His brother, a neighbour, his son, and he would put in a day on the grinder, with the flour divided among those helping.

There was considerable exchange of labour as part of the operation of the farm. These exchanges tended to be on a day-to-day basis. One pioneer would have a task for which he required help, and he might ask his neighbour to give him a hand. There was usually no direct payment for this assistance, but there might be a more or less formal accounting of time. That is, in some cases a pioneer kept track of how much labour his neighbour owed him, but in other cases no real record was kept. Even in these last situations, a farmer would eventually get annoyed and reluctant to help if he was being called on by one neighbour too frequently.

A variation of this was the situation where a farmer worked for his neighbour in order to earn some extra money. In this case, he would be employed in a hired-hand role. This was a longer-term situation, with the man being hired for a specific task (such as to help with seeding) or for a season. One informant worked out like this from the time he first started farming, in 1934, until 1938. He was paid \$1 to \$1.50 per day. This was similar to hired-hand rates, about \$25 per month in summer, and \$10 per month in winter, plus room and board.

Another variation was the case where a pioneer owned a grain crushing machine. Oats and barley were considered to be better live-stock feed if they were crushed. This man did a lot of crushing for

his neighbours, and kept a rough track of the labour. Then when he needed help, he asked a neighbour who owed him time. When he was crushing grain for people some distance away, he took money in payment, since a labour exchange was not quite as convenient. As a result of his grain crushing activities, he often had one or several neighbours at his place helping him to clear land or do other heavy work.

The other major labour exchange was at harvest time. A number of neighbours would join together to haul sheaves or grain, finishing one farm before moving to the next, until they were all done. The thresherman was usually contracted for the job, and he brought his own crew. The farmer and his neighbours provided the teams, wagons and labour for hauling.

In the early days machinery was borrowed and loaned frequently, because many pioneers had only some of the necessary machinery. However, most pioneers soon bought their own equipment. If one neighbour was considered to be borrowing too much, the farmer might start making excuses to avoid lending to him. However, some refused to take the hint. One pioneer loaned a tractor to his neighbour, who kept it for a year. Some time later, this pioneer wanted to borrow one of the neighbour's machines, but the neighbour wanted to charge \$1 per acre rental. This rental fee is not unknown in present day agriculture, and government departments of agriculture publish suggested rental rates. However, frequently no rental fee is even considered when neighbours are lending machinery for short periods of time. The story was told to me as an example of how selfish and stingy this neighbour was. It was partly to avoid this dependence on the generosity of a neighbour that most pioneers soon had all the equipment they needed.

The threshing rig was usually owned by a local farmer, whose crew consisted primarily of local farmers' sons hired for the threshing season. The thresherman was paid by the farmer in cash or in grain, or in some cases in labour. One informant, who threshed for his neighbours and took labour in payment, also performed other tasks for his neighbours in exchange for labour. As a result, most of his neighbours owed him time, and he said he always needed help. He claimed there was hardly a day when there was not someone extra for dinner, either working or visiting.

Frequently the threshing rigs were owned by a "syndicate" of farmers, i.e. two, three or four neighbours banding together to purchase the machinery. The father of one informant was taken in as a partner by a man who owned a rig, because the father had five sons that could do most of the work. This would greatly reduce the need to hire a crew each fall. Another informant came to the area with a partner. These two partners went in with another neighbour on the purchase of a threshing rig.

This last example was one of the few instances of a partnership running a farm. There were a few other cases, such as the two brothers who ran a farm together for a couple of years until one brother decided he wanted his own land (and the land they worked in partnership was owned by the older brother). My informant said they never had any arguments, they just discussed what they were going to do, then proceeded to do it.

The more frequent partnership was not for running the farm, but for the purchase and operation of a machine such as a threshing rig or a combine. Even these partnerships were not common, likely because

they were often the cause for bad feelings. For example, one farmer bought a threshing machine with a neighbour. The neighbour used it for his own crops and did custom work, collecting the money yet leaving the informant to pay the bills and make repairs. An experience like this could cause bad feelings for many years.

Money for the purchase of land and machinery usually came from the bank as a loan, or the farmer waited until he had enough cash. There was one case of a farmer approaching a neighbour for a loan to buy some land. The neighbour turned him down with the explanation that he did not have any money to spare, but then bought the land himself. This was a rare situation however. As one informant said, "I don't think anyone ever thought of asking a neighbour for money". Of course, a major reason for not asking was that most neighbours had no money to lend.

Another situation was reported only once. One informant had a neighbour who lost his horses to a disease. The neighbour wanted to borrow \$500 from the bank to buy another team, and asked the informant to co-sign for the loan. When the informant refused, his neighbour got angry and accused him of being a poor neighbour. The neighbour managed to find another neighbour to back the loan, but two years later he defaulted on the loan and the co-signer had to pay the bank.

Explaining his reluctance to lend seed to a neighbour, one informant expressed what many seemed to feel:

". . . it was a case of some of them you couldn't trust. You didn't dare take that chance . . . (We) all helped one another, but when it came to money and you didn't have it, it was a different proposition. Course, you take your feed and seed and

stuff, that was just the same as money."

But they would help each other with work: ". . . you had to use quite a bit of judgment." If a pioneer helped a neighbour put in a crop, he would not charge the neighbour, he would expect the same help if he needed it. He might help some neighbours and not others, depending on the individual. He would be more inclined to help those that made an effort, rather than those who were foolish or did not even try. Also, he would worry about the neighbour's wife and children, who might be regarded as innocent sufferers as a result of the foolishness of the neighbour. This would provide added incentive to help a neighbour who otherwise would not merit assistance.

The type of help one neighbour gave another varied considerably. One informant made a two day trip to Watson, helping a neighbour drive some sheep there for sale. Another had a neighbour who was sick one year. The informant worked his farm for him for the summer. Since this required more time and effort than most episodes of help, there was a verbal agreement including rent: the informant rented the farm for part of the crop. Sometimes a pioneer might get sick just when it was time to do a particular job, such as seeding. The neighbours might then "hold a bee" to get the land seeded. The neighbours would come over with their machinery on a set day, and get the work done, perhaps in the one day or in a few days. This did not happen very much, but the mechanism did exist as a kind of insurance. The reward was the knowledge of having helped someone, and in any case a neighbour might need the same help some day.

There was no formal method of arranging for these exchanges. Since neighbours were getting together frequently, they would know

when one needed to butcher or another was going to saw wood, or that someone was sick and they would hold a bee on such-and-such a date.

There were very few that did not need help. As a result, there were very few that did not join in, and give help when it was needed. Similarly, there was only the odd one that asked for help too often, i.e. asked for help in situations which he should have been able to handle on his own. If a man earned a bad name, according to an informant, people would not "bother" with him. Another said there were only a few who "imposed" by asking for help too often and these people could be corrected with a gentle reminder.

The third major type of interaction concerned more purely "social" situations. I have already described the major social activities as they occurred throughout the year: the Friday night dances, Saturday evenings in town, Sunday picnics, and so on. There was a general consensus that nearly everyone went to these events. One reason was that there was little else to do for relaxation, since there was no television and only a few radios toward the end of the period, and since poor transportation restricted pioneers to the local community. Other reasons suggested by informants were that there was more time for visiting, and that "people were friendlier then". This topic will be covered in more detail in a later section.

There were suggestions that a few people took no part in social activities. One report concerned a man who was thought to be from the southern United States. This man apparently wanted to kill all Negroes. He ran for reeve of the municipality, and only polled one vote. Most people thought him a little "daft", and just ignored him, according to the informant.

Another informant said there were the odd queer ones, queer because they had strange ideas and did not want to mix. However, no one paid them much attention. This happened more often with bachelors, the informant said, because they were more often "the hermit type". One of his neighbours, around 1945, was sociable one day and thought the informant was his enemy the next. He died in a provincial institution for the mentally ill.

The Ku Klux Klan was active in the area for a short while. Its purpose appears to have been an attempt by Irish Protestants to intimidate Roman Catholics. However, there were quite a few Catholics in the area, so the Klan had to stay under cover. Also, it appears to have been made up in part by people from the Melfort area, with only a few from the district. The informant said it was "just a foolishness" that people would rather forget.

Some activities were organized by formal associations, others were very informal or ad hoc. The ladies of the Lac Vert district formed a "Country Club", and held meetings and quilting bees every month. They put on a dance each month, too. There were no ladies from town in the country club, but some rural ladies who lived close to town were members of a town ladies' group. One difference between town people and rural people, as expressed by one informant, was that there was liquor at town dances, but not at rural dances. "We were just plain country folk." However, this informant seemed to have an antagonism toward townspeople that did not surface in other interviews.

There have been some suggestions that pioneer society was (and present day rural society is) highly organized, in that there was an over-abundance of community clubs, social clubs, etc. (see Willmott 1964

for an account of rural organizations in a different part of Saskatchewan). While there was no attempt made in this segment of the study to gather data that would support or refute this suggestion, certainly there were many organizations. There was a community club in the Dahlen area, which put on a minstrel show during the winter for a few years. The show was staged at the local school, and also at Naicam and Archerwill (twelve miles east of Dahlen). There was a Ladies' Aid and a Homemakers Club in the Kipabiskau area, but no clubs for men. There was a literary society in the Lac Vert area, which sponsored debates attended by "most people". There was even a report of a library in that area in the early years. A pioneer who homesteaded some miles east of Lac Vert also reported these debates, and said that competing teams often came from Lac Vert or other towns. After the debate a dance was held. Women brought lunches, and bachelors (who were not expected to supply lunches) gave cash donations. These debates were always held at one pioneer's home, since it was unusually large.

An example of an organization formed for a more utilitarian purpose was the rural telephone company. There were many of these throughout Saskatchewan. Each one served a fairly small area and, because it owned its own equipment, it was often in debt. Many of them have survived to this day, although the government-owned telephone company is in the process of buying them out. There was a rural telephone company in the Lac Vert area when one informant arrived in 1923, although he did not get a phone for some years. He considered it too expensive for the benefits.

Anyone who wanted to be active in the community organizations had many opportunities. One informant, for example, was a school

trustee for some years. He was also active in the local church, having held a number of offices. This did not mean much, he said. The church was small enough, and there were enough official positions, that most of the (male) members of the church held some position. They basically just traded positions every few years. He also served a term as councillor for the municipality. He ran for this office because he thought the incumbent was getting too old, and it was time for a change. His campaign for office was not elaborate, just letting it be known that his name was on the ballot. There was one case reported of a man running for councillor and putting on a big campaign, visiting the farms to get support and so on.

While there were many organizations and many organized activities, it would appear that many, if not most social activities were informal, or formally organized on an ad hoc basis. Any kind of gathering was also a social event. When one pioneer went to a neighbour's to borrow something, it was also a social visit. When an auction sale was held, it was a social event attended by everyone in the district, just as it is today. When a new pioneer family came into the district and needed to board with a neighbour, it was seen as a chance for some visiting, so it was as much a pleasure as a burden for the host family. Then too, the informal events were the basic and most common form of socializing: visits to a neighbour's to play cards in the evening or to play ball on a Sunday afternoon; or a gathering at the lake for hockey on a Sunday afternoon in winter; or the regular dances that were not organized so much as they "just happened", and they could "just happen" because they were regular, and because everyone knew they were going to be held.

There were many comments to the effect that "everyone was

friendlier then". In fact, this sentiment was just about unanimous. One informant said people were more neighbourly, they thought nothing of a whole family coming in and sleeping on the floor in a time of need. It did not matter what little the host family had, if someone passed by they fed him. Another said that people were more thoughtful. For example, if someone was ill, the neighbouring women would make hot soup or something, and bring it over, or look after the children while their mother was sick. There were many reasons put forth for the change. One said that in the early days, everybody was the same. No one had any money, so the people were friendlier. Increasing wealth, and such items as radios and television, have decreased the friendliness. Another informant said that during the Thirties, people were friendlier again--the depression being the equalizer. Another informant suggested the change was a result of the expansion in farms. Farms are getting too big, and the rural areas are being emptied of people. There is less neighbourliness now because there are fewer neighbours. A third suggestion was that the change is a direct result of television. Instead of going to a neighbour's to visit, people can now stay at home and watch television for the evening. There is not the same need for visiting as a form of relaxation.

A fourth explanation was hinted at by the informant who said that in the early days "a person was never so busy that you couldn't stop to visit". Another informant expressed the same opinion in more detail. In the "horse and buggy days" a person always had time to help or visit. With the switch to power machinery, farmers were too busy at home. They felt they had to keep the tractor busy all the time.

This fourth explanation is one that I think more accurately

describes and explains the change. The constraints of horse power were such that work was performed slowly, in contrast to power machinery which can accomplish more in a unit of time. The constraints of horses are also such that the farmer had to stop at certain times. He was forced to work at a more leisurely pace, and take frequent breaks. These aspects and the results will be explained more fully in the next section.

Before leaving this explanation of social activities, perhaps some further examples of people helping each other should be given.

One notable example occurred when a pioneer wife and her young son were lost in the bush. They eventually found an old trail and followed it, until it came to the local post office, some eight miles from home. The postman provided them with a lunch, then accompanied them home on foot. He walked sixteen miles in order to make sure they arrived home safely.

Another example was the mother of an informant, who delivered most of the babies in the area over a period of years. She had no training, and prior to homesteading, had no experience. Despite this if someone came calling in the middle of the night, she felt she had to go. Somebody had to help.

A third example concerned an informant who was about ten or twelve years old at the time. He and his father were taking two loads of wheat to town one winter. When they stopped at a farm along the way to spend the night (and they did not know this farmer) the informant found he had frozen his foot. The next day, the farmer took the informant back home, while his father and the farmer's son continued on with the loads of wheat. These two families were from different countries, and were unable to speak each other's language.

HORSES

When a pioneer first entered the area and took out a homestead, most likely he used oxen to pull his plough and his wagon. This was particularly noticeable in the early years. As soon as he was able, he would switch to horses. By the later years of the period, many of those who entered the area were farmers from the prairie, fleeing the drought. They brought with them the teams of horses they had used on the prairies. Toward the end of the period, there was a slow but general shift to tractors, cars and trucks. In this section I shall describe the use of oxen and horses in more detail, and I shall try to explain the reasons behind the change. In the following chapter, the switch from horses to tractors and trucks, and its effect on pioneer life, will be investigated in detail.

Oxen were almost universally used to start a homestead, particularly prior to the mid-twenties. One informant, who came prior to 1910, said there was "nothing but oxen" for some years. Perhaps the most obvious reason for this was that a team of oxen was considerably cheaper than a team of horses. A team of horses could cost \$600 or \$700--one informant bought a team of Clydes for his first horses in 1915 and paid \$500--but a team of oxen would cost \$80 or \$100. Since most homesteaders did not have much money, they would use oxen for the first few years until they could afford a team of horses.

There were other advantages to oxen, and while they are not as obvious, these other advantages may have been just as important as the price. One advantage was that oxen were considerably more available than horses. Most homesteaders had a milk cow, which was bred every

year, and produced a calf. There was not much market for these calves. Most of them would be "fed out" until they were old enough and large enough to be butchered. Some bull calves, however, would be castrated, then trained to harness. These became "oxen". One informant told of breaking steers to harness with his brother's help. When the steers were a year old they put the harness on them, and hitched them to the stone boat. When the steers were two years old, they were graduated to the plough, but it took longer than that for a team to mature. Full grown oxen were eight or ten years old, and weighed about seventeen hundred or eighteen hundred pounds. As an informant said,

"That's a big critter . . . And you can hook it onto a tree stump, say about that big [gesturing], put a chain on there and by God they'll just hang there, they ain't going to go and jerk. They'll just hang there. Oh boy, they're strong!"

Another advantage to oxen was the feed they required. In the early years and in the first years of a homestead, there was not much grain available for feeding livestock. Wild slough hay was the basic feed. However, if horses are going to be put to work, they require some oats every day. Oxen, on the other hand, can get by quite well with just the wild hay. A homesteader who has to put in the first few years just clearing and breaking land, did not have to worry about getting oats if he had oxen.

A third advantage of oxen was that they pulled with the head down. With the head down, the plough stayed down in the furrow. According to one informant who still did some work with horses in the 1970's, horses pull with their heads up. This tends to pull the plough up, out of the furrow.

There was some disagreement over the relative strength of oxen and horses. For example, one informant said that there should be a four-horse team on a breaking plough--fewer than four was straining them. However, two oxen could pull a breaking plough quite nicely. Also, there were stories about oxen just going where they want, pulling a wagon through bush or swamp, seemingly with no regard to obstacles. On the other hand, an informant declared that a good horse would outpull an ox. I have not seen any objective tests of the relative pulling abilities of horses and oxen but I suspect the oxen might outpull horses, based on the type of stories told about them. They commanded a grudging respect, based on their strength. Even the informant who said a good horse was stronger (a statement which is qualified by the word "good"), admitted that "some oxen are stronger than horses".

The most important quality for a farmer working with oxen was patience. One informant explained some of the advantages of oxen, then said, "But with oxen, you need a lot of patience." Another said that oxen are "the slowest animals there is on earth. It's a wonder we didn't go crazy." There were many remarks to this effect. The consensus was that horses went about twice as fast as oxen ("took two steps for every one the ox takes"). Horses could plough at about two miles per hour, but oxen went at about one mile per hour. It was the same pulling a wagon. One informant told a story about going home from town one time, with his oxen pulling his wagon. Since his oxen knew the way home, he walked on ahead. The oxen came into the yard some time after he got there.

The other frustrating aspect of oxen is that they were hard to control. Frequently they would just lie down, and refuse to get up.

Some farmers used a whip on them, or a stick with a nail in it, poking them hard with this prod. Even then they might not respond.

They were particularly disobedient in hot weather. One informant told about using the oxen to pull the wagon to Melfort. While in town, he unharnessed the oxen, and they went into a slough to cool off and to avoid the flies. He arrived in Melfort in the morning, and had to wait until sundown to start the return trip. Otherwise, the oxen would get too hot. "They'd just stick their tongue out, and first damned thing, you go slower and slower, and first damned thing they lay down on you, and that's it, you can't get them up." There were also stories told about oxen being used for ploughing, and deciding to cool off in the nearest slough. In one case, the oxen pulled the plough, the informant (a young boy at the time) and his mother after them.

Because of their advantages, then, most early homesteaders started with oxen. Some homesteaders were able to make a little money out of them, by putting the team and themselves up for hire. One informant made about \$7.50 per day breaking and ploughing for neighbours when he homesteaded on the prairies. There was a general shortage of power (a situation explained in MacFwan 1971). The neighbour of one informant had only three oxen, but he also had a milk cow. He harnessed his milk cow to make a four-animal team for breaking. When it was time for the wife to milk the cow, she had to take a pail out to the field. Ploughing was interrupted for the milking operation.

Mules were also used, though rarely. One informant drove mules belonging to neighbours. He declared that they were tough, but "mean as the devil".

After some years of farming with oxen, the homesteader would

purchase horses. The general consensus was that "horses were better". Since, as I have shown, oxen had distinct advantages, it must be concluded that the primary advantage of horses, the meaning of "better", was that they carried more prestige. As MacEwan (1971:4-7) has shown, nobody developed an affection for oxen, the way they did with horses. Oxen in the Canadian West were considered to be adequate, but only just, and usable only until horses were within reach.

Horses did have the advantage that they were faster. When the pioneer was in a hurry, they could be induced to trot or even run, particularly when they were heading home, unlike oxen which, for the most part, could not. (MacEwan [1971] reports an ox from southern Alberta, which enjoyed running. It was entered in trotting races against horses, and often won.) Horses had the further advantage that they could be left to forage on their own for the winter, while cattle (including oxen) could not. Horses will paw through snow to get at the grass, and will eat snow for water. Cattle can do neither of these.

Considering the relative merits and demerits of horses and oxen, one can only conclude that the primary reason for purchasing horses was their higher status. Horses cost more, more were required to do the same work, they had to be fed grain, and they could not (or would not) be eaten when they were too old for work. This prestige was based on their greater speed and their kinder disposition. The daughter of a pioneer, who, among other things, broke oxen to harness when she was a teenager, said, "Oxen are such ornery cussed critters and didn't help the pioneer's disposition one iota. They had disappointments and frustrations on every hand, and didn't need more."

Some pioneers were able to bring horses with them, particularly

those who came from farms on the prairies. One such pioneer, for example, brought three cows, two horses, a walking plough, and a Ford Model T when he came in the Thirties. The Model T was not much good, since the trails were usually mud. It took him all summer to get the buildings and feed to shelter his animals for the winter. Another pioneer, who worked as a hired man for a few years, had three horses by the time he bought his first quarter. He borrowed another horse from his father-in-law in order to make a team. A third pioneer brought twenty-one head of cattle and three oxen when he came from Minnesota. His brother brought a team of horses.

For those who were purchasing horses, there were two sources: neighbours, and travelling horse dealers. Generally the neighbour would be selling a young colt which still had to be broken to harness. Quite often, the horse would be purchased by trade. One informant, who obtained his first radio by trading a young colt, said "they would trade their wives if they didn't want to beat somebody". This, of course, is an hyperbole.

The horse dealer often sold horses which were properly trained, but this source required more caution. A neighbour would be available for complaints if the horse was no good, but the horse dealer would not. One informant lost one of his two horses to "swamp fever" (infectious anemia) in an epidemic in 1935 or 1936. He bought a replacement, a big Clyde, from a travelling dealer for \$85--a particularly low price. However, this Clyde died, too. The informant had to make do with just one horse for a couple of years. He said that it was a mistake to buy from a travelling dealer, particularly when the sickness was common. Another informant told of horse dealers bringing in horses to sell to

"greenhorns". His father bought some, but they died. Again, the accusation was made that the dealers had purposely brought in and sold horses with swamp fever.

I have already shown in previous sections how hours of work, amount of work done, and other aspects of pioneer life were affected by horses. Perhaps a summary would be in order.

The hours of work in summer were structured around the hours that horses could reasonably be put to work. Generally, this was about five hours in the morning, and the same in the afternoon. In five hours a team of horses should be able to plough a furrow ten miles long, moving at the rate of two miles per hour. They would have to be fed and watered at noon, and given enough time to digest their lunch. Thus, farmers usually took a long lunch break, one and one-quarter or one and one-half hours. Further, the farmer had to feed and water the horses in the morning, feed, water and brush them in the evening, and clean the barn regularly. Therefore, his work day was something like 6 a.m. to 7 p.m.

On the prairies, fields were cultivated by the full quarter section, or even larger units. This meant that each field was at least one half mile long. After each trip, the horses had to be allowed to rest for a few minutes, to catch their wind. It was often a simple matter for two neighbours to work it so that they were "winding" their horses at adjacent parts of their field for five minutes every half-hour or so. This provided just one more of the many opportunities for a little gossip or discussion of the weather. In the study area, fields were much smaller and quite irregular, but this type of visiting was still common enough.

A standard team was four horses when using a breaking plough, or two or three horses on a single bottom stubble plough. Four were the minimum on a cultivator, but more could be used. One informant had a hired hand and two implements on the field, one with a team of ten and one with a team of eight. These would be harnessed in two rows of four or five. Six abreast were too many, he felt, since some horses would then have to walk on the cultivated land. However, some pioneers did use six horses abreast, and some used twelve horses harnessed in three rows of four. The advantage of more horses in a team was that the work could be done faster since a wider cultivator could be used, and rest breaks would not have to be so frequent. The easiest method of increasing production, therefore, was obtaining more horses and more or larger machines. This usually meant hiring a hand, unless a son was old enough to help. One pioneer had twenty-two horses, with two hired hands. Another had thirty-three horses, also with two hired men. Most pioneers had somewhat fewer horses than these (see Table 4.2).

That horses had an effect on the timing of seasonal activities has also been explained. Since horses can pull machinery on land that is too wet for tractors, pioneers could seed their crops fairly early in the spring. Some had crops seeded by the end of April. This was of benefit since the varieties of wheat available were slow maturing, and might get frozen out in the fall. With crops generally seeded by a specific date (varying from farm to farm), the date of maturity was also predictable. With tractors, seeding dates were more varied, and so too were harvesting dates.

Horses were the first consideration in the spring decision regarding what to seed and how many acres in each crop. The pioneer

Table 4.2. Horses, Tractors and Trucks per Farm, Saskatchewan^a, 1911-1971.

	1911	1921	1931	1941	1951	1961	1971
No. of Farms	96,372	119,451	136,472	138,713	112,018	93,924	76,970
No. of Horses	507,468	1,091,507	997,426	800,693	303,853	110,314	65,123
Horses per Farm	5.27	9.14	7.31	5.77	2.71	1.17	0.85
No. of Tractors	-	19,243	43,308	54,129	106,664	126,613	132,632
Tractors per Farm	-	0.16	0.32	0.39	0.95	1.35	1.72
No. of Trucks	-	36,098 ^b	10,938	21,285	52,626	82,669	116,600
Trucks per Farm	-	0.04 ^c	0.08	0.15	0.47	0.88	1.51

^aThese figures are for Saskatchewan as a whole. The study area was some years behind the rest of the province in the switch to tractors and trucks, as will be detailed in the next chapter.

^bTrucks and automobiles combined. Approximately 10% to 12% were trucks.

^cUsing 12% of 36,098.

Source: Census of Canada: Agriculture, 1911 through 1971.

had to be sure of feed for his horses, and consequently required enough oats to provide about one hundred bushels per horse. While this did not mean many acres in a period of large yields, still the eight or ten acres did represent a large part of the farm since fields were generally quite small.

In addition to field traction, horses also provided transportation, hauling produce to market, bringing back supplies, and taking the pioneer and his family to social events. The standard load for a wagon was sixty bushels of wheat, at sixty pounds per bushel. With oxen, the trip to Melfort or Watson would take two days, and the oxen were only able to haul forty bushels of wheat. Furthermore, the wheat sold for about 70¢ per bushel. So the pioneer had a long, slow trip, and did not make much money for it. Generally, the only reason to haul in that period was the necessity of getting supplies, or money to buy supplies.

With horses, the round trip could be made to Watson or Melfort from most parts of the area in one day, or perhaps one and one-half days. The wagon was unloaded at the elevator with a manually-operated grain scoop. It was then weighed and graded, and a receipt was issued for it. The operation took ten or fifteen minutes. While there was often a line-up at the elevator of farmers waiting to unload, it was not usually the unloading that took the time. It was the actual trip, and loading the wagon by hand from the granery, that made the operation a slow one. Hauling only when the weather was good, it might take a farmer all winter to empty a thousand-bushel granery.

The speed of horses somewhat limited the range of social contacts that a pioneer family might have. For informal social visits, such as a winter evening playing cards, trips would be limited to perhaps

three or four miles. For some major events, such as a Sunday picnic in summer, or a Christmas concert at the school, the family might go a little farther, eight or ten miles. Longer trips could not be taken lightly. For example, auction sales were held in the early days just as they are now, and were social events attended by everyone in the district, again as they are today. But then a person could not travel very far to attend one, so there were only a few each year in any given district. In the 1970's, farmers travel long distances, even hundreds of miles, in order to attend auctions. This increased range means that he can attend three or four auction sales each week throughout April and May, if he is so inclined.

There was a suggestion that some families did not take part in social activities because they lacked transportation. However, there was a report of one young man who owned a team of horses, at a time when most people had oxen, going from farm to farm picking up people to hold a dance. There were also reports of farm people taking their teams and wagons into town to pick up town folk (who generally were without horses) and driving them to country dances.

Horses formed an important part of the pioneer value system. One aspect of this was that a man was measured by the way he treated his horses. An informant related a story about renting some land from an army cook who did not even know how to harness or drive a team of horses! (As he said this I could hear the exclamation marks.) The reader will recall that the handling of horses was the major skill to be learned by greenhorns. Another informant said he was glad to see machinery replacing horses, because a lot of farmers did treat their horses poorly. They fed them improperly, whipped them, or used poorly

fitted harness which rubbed sores on their backs. A third informant told about a neighbour who had bought land through the Soldier Settlement Board. This man knew nothing about farming. He bought a very nice team, but they died within six months: he starved and worked them to death. He would work them until supper time, leave them standing while he had his supper, then work again until dark. My informant said that he thought animals should be treated as well as humans. He was particularly upset at seeing horses kicked around. The neighbour was nice enough, he said, he just did not know any better. The informant criticised him some, but did not force criticism on him because they worked together quite often. One time they were pulling stumps with the informant's team. The neighbour gave the horses a crack with the traces (i.e. similar to a light whipping), and the informant got mad at that. He told his neighbour that his horses were not used to being "clubbed around", and he did not want them "buggered up".

Another role that horses played in the system of values concerned the ability of a team to haul a load. For example, one informant was talking about how families endured the depression. He said that some hauled cordwood at \$1 per cord, but others had to take relief because they did not have a team that could haul a load of cordwood. It was a "bear cat" to haul, he said. Others talked about hauling grain to Watson or Melfort, comparing slow oxen to much speedier horses. Different teams of horses varied in the time it took to haul a load. While nearly all horses were faster than oxen, some horses were faster than other horses. One informant, for example, said that some pioneers in his area could make the return trip to Watson in one day, but only very few. Others had to stay overnight in Watson. Those that had

inferior horses were lucky to get there in one day.

Horses were the objects of much affection. Such sentiments were seldom felt for oxen. One pioneer said, "people got attached to horses, but some did and some didn't with oxes (sic)." One reason why oxen were not venerated the way horses were was that they were too aggravating: lying down on the job, going into a slough if they felt like it, and walking too slowly. MacEwan (1971:4) has described this very well:

Nobody admitted to a fondness for oxen. Nobody wrote slushy songs about them. Nobody shouted: "An ox, an ox, my kingdom for an ox". In thoughtful moments, a homesteader might acknowledge a debt to those uninspiring brutes that did much of the heavy pioneer slugging but he could not bring himself to a demonstration of affection the way he might with horses. Instead of loving them, he cursed them and kept them busy.

This attachment to horses has already been seen in the pioneer who thought horses should be treated like humans. It can also be seen in the pioneer who tried to cure his horses of "sleeping sickness" (Equine encephalitis). He went to a veterinarian in Melfort, who recommended an injection. The pioneer purchased the medicine from the druggist in Melfort, and administered it to his horses, but two of them died anyway. The significant aspect of this is that other animals, such as pigs or cattle, were not likely to be treated in this way. With these others, nature was allowed to take its course.

The attachment to horses can be seen in the pioneers who refused to make the switch to tractors. One pioneer and his partner bought a tractor, using it as a back-up for the horses. They retired only a decade or so ago, in part because their horses and their horse-drawn machinery was too old. They never did buy a car. Their wives used a horse and buggy to go into town. Another pioneer was still using

horses at the time of the study. He was not working much land, and his horses were old (twenty-seven, twenty-eight and twenty-nine years). He said that tractors are dead things. Horses are living things, and you can become friends with them. He admitted that a young person going into farming today cannot make a go of it with horses. He would have too much trouble keeping the (old) machinery in operation. Furthermore, these days a farmer needs at least a section of land (640 acres) to make a living. He would need a lot of horses for that much land, and that many horses would require a lot of work and time. So a farmer pretty well needs machines now. Horses, he said, are a thing of the past.

This emotional attachment to horses has survived, and in recent years has spread among people who were too young to have used horses for work. Bennett (1964, 1969:92-93) has discussed this revival of the horse as a "recreation device" and its role as a "prestigious and nostalgic" reminder of the pioneer era.

A less obvious, but perhaps more pervasive way in which horses affected the value system concerned the attitude toward work. There were many references to this, each a little different but all pointing to the same conclusion. For example, one informant said that people are not less hospitable now, they are more individualistic. With horse- and man-power, a person depended more on his neighbours. Machines, however, allow for individual work. "Machinery has taken over", he said. Another informant said that changes came when farmers got "into power" (i.e. bought tractors). Now they are too busy at home to visit or help. In the horse-and-buggy days, people always had time to visit. But with power machines, people felt they needed to keep the tractor

busy all the time. They "keep the tractor running as long as they can sit on it." The conclusion to be drawn from these and other references is that when farmers used horses for traction, work had to proceed at the pace of horses, and no faster. With tractors, work can be speeded up to suit the habits, values and goals of the farmer. One result of this change, felt by many pioneers, is that with this speeding up of farm work the time available for helping neighbours or for social visits has decreased significantly. This aspect of changing conditions will be explored in more detail in the next chapter.

Chapter 5

POST-PIONEER CHANGE

Pioneer society began to change as soon as it came into existence. The general goal of most pioneers was to build a farm which would provide a comfortable living. It is to be expected that, given these goals, the people would work to improve their farms, increase the size, and increase the return from the farm.

Strictly speaking there was no clear-cut "pioneer period", and no "post-pioneer period". Rather, there was a slow but (more or less) steady immigration, a steady stream of pioneers taking out homesteads, or buying land under the Soldier Settlement Board, or buying land on their own. There was a gradual improvement in these farms. Earlier ones would have a large acreage under cultivation while later ones would still be clearing land for a garden. As an individual homestead was built up, the financial pressure would ease a little--although the financial pressure never did disappear, and remains to this day.

One major trend in Saskatchewan farms has been an increase in size (See Table 5.1). This increase has been fairly steady, from an average of 285 acres per farm in 1901 to 845 acres per farm in 1971. Until 1941, the number of occupied farms in Saskatchewan was increasing, from 13,445 in 1901 to 138,713 in 1941. After 1941, the number of occupied farms decreased, to 76,970 in 1971. The 1971 figure is down somewhat from 1966, when the total farm acreage was 65,409,363. However, the 1976 acreage (65,316,454 acres) is up from 1971. The 1971

Table 5.1. Number of Occupied Farms, Total Acreage, Average Acreage per Farm, and Population, 1901-1976.

Saskatchewan	1901	1911	1921	1931	1941
Number of Farms	13,445	95,013	119,451	136,472	138,713
Acreage per Farm	285	296	369	408	432
Total Acreage	3,831,825	28,123,848	44,077,419	55,680,576	59,924,016
Rural Population	73,729	361,067	538,552	561,407	514,677
Saskatchewan	1951	1961	1966	1971	1976
Number of Farms	112,018	93,924	85,686	76,970	69,578
Acreage per Farm	550	686	763	845	939
Total Acreage	61,609,900	64,431,864	65,409,363	65,039,650	65,316,454
Rural Population	399,473	305,740	281,089	233,792	(not available)

Table 5.1. (continued)

Study Area	1901	1911	1921	1931	1941
Number of Farms	data	data	417	515	581
Acreage per Farm	not	not	215	253	263
Total Acreage	available	available	89,609	130,417	155,816
Rural Population			1,516	2,018	2,004
Study Area	1951	1961	1966	1971	1976
Number of Farms	457	352	data	308	data
Acreage per Farm	362	486	not	580	not
Total Acreage	165,466	170,956	available	178,547	available
Rural Population	1,692	1,164		976	

Note: Rural population reached a maximum in 1936: 573,894 (Sask.) and 2,276 (Study Area).

Source: Census of Canada: Agriculture, 1901 through 1976.

and 1976 figures indicate that the total farm acreage in Saskatchewan may have stabilized.

The average acreage per farm has shown a steady increase, however. In 1901, the average acreage per farm was 285 acres. In 1976 it was 939 acres. While farms have been getting bigger, farm population increased to a peak in 1936, and has been decreasing since then. The study area shows the same trend, although on a smaller scale. The study area is also some years behind the rest of Saskatchewan in the trend to larger acreages per farm, the lag being about thirty years in the early years, with a reduction to about fifteen years in 1971. Table 5.2 shows the distribution of farms by size, and clearly shows the gradual trend to larger farms.

This trend is usually a result of farmers quitting the farm and moving into a town or city to get a job. It sometimes involved moving back east or wherever they came from. There have been many pioneers who tried farming and found that it did not suit them. These sold out. There was a second group who started farming, and did not have the energy, the drive, the knowledge, or the luck to build a large farm, and have scraped by with small farms. Often they hold jobs to supplement income, such as operating a road patrol to maintain municipal roads. A third group consists of farmers who were able to expand their farms to a viable size. The second and third groups are not clear-cut, they only exist as ideal types. In reality there is a continuum, with many variations from it. Some small farmers do not hold off-farm jobs, for example, and some large farmers do.

One informant's land deals provide an example of the homesteader attempting to build what he considers to be an adequate farm (see

Table 5.2. Farm Size, R.M. 398, 1921-1971^a.

	1921	1931 ^b	1941		1951	1961	1971
Under 10	0	0.3	0.2	Under 10	0.7	0.9	0
11-50	0.5	0.8	1.2	10-69	1.8	1.1	1.6
51-100	0.7	1.2	2.9	70-239	29	18	13
101-200	70.3	60	51.6	240-399	35	32	25
201-299	3.1	3	6.9	400-559	15	20	18
300-479	25.4	24	24.6	560-759	14	14	13
480-639	0	6	6.5	760-1119	4	10	14
640 & up	0	4	5.9	1120-1599	0.7	3	6
				1600-2239	0.2	1.7	3
				2240-2879	0	0	0.3
				2880 & up	0	0.3	0.6

^aFigures as per cent of total farms.^bEstimated.

Source: Census of Canada: Agriculture, 1921 through 1971.

Figure 5.1). This man came to the area with his parents in 1910. He started farming on a rented quarter in 1928. He lacked the money to buy land, and there were no homesteads available in the area. He made his home on that rented quarter, at location A. In 1931 he bought a quarter nearby, a quarter that was quite stoney. In 1936 he bought a quarter at B, eight miles south of A. He bought this because he wanted more land, and it was better land that he had at A. In 1940, he bought two quarters at A to get a home place of his own. In 1943 he bought a quarter at A because it joined the 1940 quarters. In 1944 he bought two quarters at B which joined the 1936 quarter. This land was mostly unbroken, and was cheap. In 1947 he bought another quarter beside the two 1944 quarters, to make another full section. This was also raw, cheap land. In 1961 he sold the section at B, because he was tired of moving his equipment eight miles, and he needed the money in order to buy some land beside his land at A, which came up for sale. Therefore, in 1961 he bought five quarters at A. In addition, he has also rented land all through the years, when it was available.

This man's wife commented that he bought land "just because he liked farming". He would buy if he could, but if he did not have the money, or land was not for sale, he would rent. The reason he gave for buying land was to make a better living off the farm, and to put his bigger machinery to work. In the early days, there was always good labour around. He had had hired help since 1930, as well as his three sons. During the Thirties, jobs were scarce and the men were glad to get the work. However, many of these men went into the army in 1940. After that, he tended to buy bigger machinery to replace labour. Particularly since 1965, he said, good hired help has been hard to get.

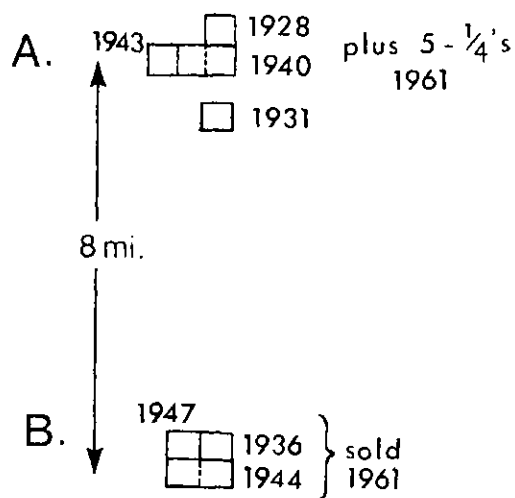


Figure 5.1. Land Transactions of One Individual.

While this man was one of the more ambitious farmers, the same trend can be seen in most operations. On the other hand, there are many exceptions. Another informant bought a quarter in 1923 with the help of the Soldier Settlement Board. There were forty-five acres broken on this quarter, and he broke another twenty. He farmed that quarter until the forties, when he rented a second quarter with one hundred acres broken. For some years he held a job in town, and hired a man to work his farm. The rest of the time he worked it by himself. He said he was unable to buy more land because he lacked the money. If he had had the money, he likely would have bought more--"That's more or less nature", he said. He was unable to rent because he had neither the equipment to work more land, nor the money to buy the equipment.

Some farmers were able to start with very little and build up large, successful farms, while others remained small or sold out. One of the more obvious, and probably more important factors was the attitude with which a pioneer approached farming. Some had ambition, others had less. Some were willing to take chances, others were very cautious. John Bennett (1963b) has discussed risk-taking behaviour of southern Saskatchewan farmers. He has characterized decision-making in terms of long range goals ("long term risk behaviour") and short range objectives ("short term risk behaviour"). He suggested that farmers must strike a balance between high risk-taking or gambling, and caution. As I have shown earlier, however, Bennett's study was predicated on a particular habitat, characterized as "arid variable", and the Naicam study area is quite different. Behaviour that constitutes an adaptive strategy in the arid southwest may not be required in the much wetter north central part of the province. A farmer in our study

area may be able to survive with behaviours that would spell disaster in the southwest.

I queried one pioneer whether there was any reason to worry about crop failures. "No, not too much," he said. "In forty or fifty years we've been here, I don't think we've had a crop failure more than once or twice." One of these failures was due to drought in 1924, but "we figured we had a crop failure if it [wheat] only went twenty-two bushels to the acre" (cf. Figure 3.4). One year, 1920 or 1921, there was hail, and the crop only went twelve or fifteen bushels to the acre. I asked if there was ever so much rain that it would ruin the crop. "I don't think so. Not on that clear land, we needed all the rain we could get." Early snow in the fall could cause trouble, but the stooks could stay out all winter and be threshed in the spring. Were there grasshoppers? "No, you never get grasshoppers. You see the odd one." I said it sounded like pioneers never had to worry about their crops, but I was told they did worry. "You plant it in the spring, you don't know what you're going to get by fall . . . You're not too damn sure of that crop until it's in the granery."

A pioneer in the study area had a much greater margin for errors than the farmer in the southwest. Therefore, definitions of risk-taking and gambling behaviour, and the whole process of decision-making were quite different. However the long-range goals that Bennett found (1963b: 184) are very much the same as those of the Pleasantdale pioneers:

. . . planning ahead for a more stable and certain enterprise, a higher level of living, and for the future of one's home and kin.

A second major trend in Saskatchewan agriculture has been the increasing use of powered machinery. The number of horses on Saskatchewan

Farms reached a peak in 1921, and has been declining steadily since then (see Table 5.3). Meanwhile, the number of tractors has been increasing, as has been the average number of tractors per farm. In 1921, the first year for which statistics are available, only one out of six farms had a tractor. By 1931 it was one out of three. By 1971, an average three out of four farms had two tractors. As can be seen from Table 5.4, the study area was somewhat behind the rest of Saskatchewan. It was not until 1941 that one out of three farms had a tractor. However, by 1951 the study area had quite caught up. On the other hand, the number of horses was declining, as in the rest of the province.

I have shown in the previous chapter that oxen were often used in the early stages of a homestead. While statistics are not available, it may be that in some areas of Saskatchewan, oxen at one time outnumbered horses. MacEwan (1971:4) also makes this assertion, while noting the lack of statistics. At any rate, horses were much preferred to oxen, and soon replaced them. However, even as horses replaced oxen, tractors and trucks were replacing horses. This switch to tractors and trucks ("power machinery") was made over a number of years.

Steam engines first appeared on the prairies in July, 1874, in Manitoba (MacEwan 1971:41). These were stationary engines, used to drive threshing machines by belts. They were intended to replace the horse-powered tread mill or sweep system (horses attached to long shafts, trudging in a circle around a capstan, with power transmitted to the threshing machine by rods and gears). It was not long before steam engines were made to provide their own locomotion. A steam tractor, equipped with eight ploughs, was brought to Regina in 1883 (MacEwan 1971:42). These units were expensive in comparison with other prices

Table 5.3. Horses, Non-Draught Forage Animals, and Tractors, Saskatchewan, 1911-1971.

	1911	1921	1931	1941	1951	1961	1971
No. of Non-Draught Animals	747,854	1,508,444	1,469,897	1,572,167	1,410,985	2,311,060	2,790,396
No. per Farm	7.8	12.6	10.8	11.3	12.6	24.6	36.3
No. of Horses	507,468	1,091,507	997,426	800,693	303,853	110,314	65,123
Horses per Farm	5.3	9.1	7.3	5.8	2.7	1.2	0.8
No. of Tractors	-	19,243	43,308	54,129	106,664	126,613	132,632
Tractors per Farm	-	0.16	0.32	0.39	0.95	1.35	1.72
No. of Farms	96,372	119,451	136,472	138,713	112,018	93,924	76,970

Source: Census of Canada: Agriculture, 1911 through 1971.

of the period, and few farmers could afford them. Those who did purchase them usually hired the outfit out to neighbours for breaking or threshing.

The first steam tractor in the Pleasantdale area was used for threshing about 1908 or 1909. This outfit came from Humboldt, and travelled from farm to farm. Since each farm had only ten or fifteen acres in crops, one outfit could thresh many farms. Steam engines were used for some breaking in the area, but this was not common. Not only were they too expensive for a beginning pioneer, there was also the task of clearing the land to be carried out first. By the time a man had cleared an acre of land with an axe, and grubbed out the stumps, he might as well put in three or four hours more on a horse-drawn breaking plough.

Table 5.4. Horses, Cattle, and Tractors, R.M. 398, 1921-1971.

	1921	1931	1941	1951	1961	1971
No. of Cattle	(3351) ^a	3107	3932	2927	5054	6704
Cattle per Farm	(8.0)	6.0	6.8	6.4	14.4	21.8
No. of Horses	(1865)	2319	2574	1026	363	233
Horses per Farm	(4.8)	4.5	4.4	2.2	1.0	0.8
No. of Tractors	b	(115)	(196)	(465)	505	533
Tractors per Farm	b	(0.22)	(0.34)	(1.02)	1.43	1.73
No. of Farms	417	515	581	457	352	308

^aParentheses indicate estimated from data for Census Division No. 14.

^bData not available.

Source: Census of Canada: Agriculture, 1921 through 1971.

Once the land was broken, steam tractors were still not used much for routine cultivating, as they were on the prairies, because they were much too big and unwieldy. Turning a 30,000 pound steam engine, pulling fourteen ploughs, each of which had to be lifted individually at the start of the turn and lowered again when the turn was complete, was not something to be taken lightly. Operators wanted to have large square fields. On the prairie, a quarter section was almost considered the minimum. A successful farmer, with a lot of land, may have the tractor do three or four quarters at once. In the Naicam area, the fields were much too small and irregular to use these first, large machines.

Steam engines, stationary units mounted on skids and used for beltwork, gained acceptance more readily. According to one informant, these were purchased by "rich" (i.e. established) farmers first, with "poor" farmers buying them later. This informant estimated that the region was about ten years behind other districts in adopting steam power, an estimate that is roughly supported by census data (see Table 5.4). He also suggested that machinery was not purchased to replace men, since there were usually men available that could be hired, but rather to get more work done in the same time. With oxen, a man could plough perhaps one acre per day. With a team of horses, he could plough perhaps three acres per day. With a large tractor, as many as four acres could be ploughed in one hour!

One informant's parents bought a Stanley Jones gas engine for threshing in 1915. With it they threshed for others, charging by the bushel. The informant could not remember the price, but a common figure was one-twelfth bushel per bushel. Most customers withheld

payment until after the wheat was sold. Sometimes the bill ran on for two or three months. The owners were not concerned as long as they made enough money to pay for gasoline and other supplies.

While some farmers were purchasing steam-powered threshing outfits, and others were hiring them, many were using horse-powered threshing outfits, and a few were still threshing by hand. One informant, for example, recalls harvesting the first crop of wheat on three acres, three years after he came. He used a sickle to cut it, and threshed it by flailing and winnowing. This was about 1909 or 1910.

One informant bought a second-hand Case tractor for six hundred dollars in 1937. His horses were inadequate, and the tractor was worth six horses for the work it could do. It was just as cheap to get the tractor, and it required less care than the horses. A few years later he moved to a smaller place, where he no longer needed the tractor. He sold it, and returned to using horses.

Another informant, working as a hired hand on a farm on the prairies, used a Fordson tractor in the late twenties. This tractor was used only if they were getting behind in the work; otherwise, horses were used. This was because horses ate straw and hay, but tractors required purchased gasoline.

One informant built himself a saw mill and sold cut lumber. Often he was unable to sell it for cash, so traded it for "something I didn't need". One year, in the early Thirties, he traded fifty thousand board feet of lumber (worth about \$450) for an old steam engine. When he tried to use it for breaking, it just got stuck.

One man purchased a tractor in the forties. He felt it was easier to work with a tractor, since he did not have to get up at 5 a.m.

to feed it, and he did not have to look after it all winter. He said he was glad to see machinery take over from horses, because a lot of people treated their horses poorly. They fed them improperly, or they whipped them, or they used poorly-fitting harness which rubbed sores on the horses.

Trucks and cars, like tractors, replaced horses only gradually. One informant said that some people with more money felt they "had to buy new cars" in the early twenties. He said the price of a Ford car at that time was \$514. Another informant brought his car, a Ford model T, with him when he moved from the prairie in 1934. But the car was useless on the mud trails.

Using a car in winter was inconvenient, if not impossible. After each use, the water had to be drained from the radiator to prevent freezing. To start it, the water was warmed up before putting it back in. However, the roads were usually covered with too much snow for cars to be of any use, so most people blocked up the car and used horses after the first snow. This situation remained until the provincial government consolidated the rural schools, and started bussing children to larger centres. Then roads had to be kept open for the school buses. This school consolidation has taken place over the last twenty-five years or so. Many farmers kept a team of horses for winter transportation even in the early sixties.

There are some who never did switch to cars, trucks, and tractors. One informant had owned a tractor, but used it as a back-up. His primary power was his horses. His wife used a horse and buggy to go to town. This man retired in the early sixties. Another informant still uses horses to do the small amount of farming that he carries on.

And horses carry a mystique such that many people keep them although they are not needed for work. Bennett (1964) has discussed the role of horses as recreational devices and objects of prestige in southwestern Saskatchewan. The same is true, although on a much smaller scale, for the Naicam area.

The examples of the use of tractors given above should indicate that tractors were considered to be favourable because they could do more work, and for longer hours, with less maintenance, than horses. One man and his partner bought a small tractor, which was not powerful enough to do heavy fieldwork, but with which they could work any hours. Another pioneer built up his farm to the point where he had thirty-three horses. He had three outfits on the land all the time. This meant that he had to have two hired hands. He had to get up at 4 a.m. every day to clean the barn and feed, brush, and harness the horses. He said, "It was a treat to have tractors . . . Now after we got the tractor it was paradise." He could go into the field with a tractor, he said, and do as much in one day as an outfit of horses could do in three or four days.

When asked why farmers have purchased larger machinery and tractors, various answers were given. One man admitted that he has purchased bigger machinery to replace labour, since good hired help has been hard to get in the last few decades. But then he needs more land to put the bigger machinery to work. In the early days, he said, there was usually lots of good help available, mostly young men from the area. Another suggestion was that bigger and newer machinery was faster not just because it was bigger, but also because it was newer. Then the operator did not need to stop for repairs, like he did with older

machinery. However, this is not true in all cases. Some new machinery is more elaborate or poorly made, and is more subject to break-downs.

One informant who came in the late twenties, said he had always bought big enough machinery that he did not have to hire people. However, he also had three sons who helped him, one of whom took over the farm. This man admitted that he bought machinery to replace people. Another informant said that this was not the reason why most farmers bought machinery. He owned a threshing outfit that required ten men. During World War II, there were not many good men available, but machinery was not purchased for that reason. Farmers today buy big machinery for prestige, he said. They buy "to keep up with the Joneses". It is easy because credit is easier to get. With big machines, however, the farmer needs more land to pay for it. This drives up land prices, so young people cannot get into farming. He felt it would be better to have more and smaller farms, to keep the young people from drifting around.

E. G. Grest (1936) undertook an analysis of farm power in selected areas of Alberta and Saskatchewan. I think his findings are worth reporting at length because they provide an interesting contrast to the approach of Naicam pioneer farmers. As one might expect of a study supported by the Division of Farm Management, Agricultural Economics Branch of the Canada Department of Agriculture, the study used a highly analytical and quantitative point of view. For example, Grest concluded that the cost of keeping a horse for the year ending April 1, 1931, was \$46.99, and for the year ending April 1, 1933, it was \$32.78. This latter figure included an average of 40.9 hours of care per horse (an average of 6.7 minutes per day) calculated at an average of 34.9

cents per hour. The cost of horse power was calculated at 11.5 cents per hour in 1930-31, and 8.3 cents per hour for 1932-33. It was found that the cost per hour of horse power went up as the number of hours a horse was worked went down, or as the value of the stable and the cost of caring for the horse went up. The cost also went up as the cost of feed went up. The first variable was found to be the most important factor affecting the cost of horse power. The ways to increase the number of hours worked per horse are to decrease the number of horses per farm, to do custom work, or to farm more land. The figure of 650 hours of work per horse per year was taken as the minimum for efficiency and low cost. For the Davidson, Saskatchewan, area, 49.2 acres of cropland were required to work a horse for 650 hours in 1930. In other words for efficiency and economy, a farmer should work about 50 acres per work horse.

The cost of tractors was considerably greater (keeping in mind that at that time tractors were used primarily for belt work and many were used in the field only as supplementary to horses). The cost of the more common three-plough tractor was \$1.38 per hour (149 tractors operated an average of 417 hours each in 1930). Of this, interest and depreciation (i.e. fixed costs) made up 36%. Thus, the more the tractor is used, the less the cost per hour. Grest concluded (1936:38): "It is doubtful if a tractor is a wise investment on a farm unless at least 500 hours of effective work are available for it on the owner's farm". For efficiency, the tractor should be operated at least 600 hours. In the Davidson area, approximately 610 acres of cropland are required to furnish 600 hours of tractor use. If, as was common, horses and a tractor are both used on a farm, there should be even more cropland.

With the common six-horse team and the common three-plough tractor, a Davidson area farmer should have over 900 acres of cropland in addition to rough pasture and woodland. An "average" farm in the Olds, Alberta, district (in the black soil park belt) is perhaps more similar to the Naicam region than the Davidson area. An Olds farm needs 31.4 acres of cropland per horse to provide 650 hours of work. A six-horse team, therefore, requires about 190 acres. A three-plough tractor needs 380 acres. Therefore, a farm with both horses and a tractor should work about 570 acres.

Grest used these data to calculate the conditions under which tractors become more economical than horses. Recognizing that various factors are involved, such as the purchase price of tractors or the cost of hired help, he calculated that the total cost of most field operations will be slightly less using tractor power "when feed and grain prices are such that approximately two bushels of oats will purchase fuel to operate a three-plow tractor for one hour and the farm is large enough to permit making efficient use of the tractor" (1936:67). But tractors have other advantages. They allow a saving when farm labourers are scarce and wages are high. They also make it possible to accomplish work at the most advantageous time. On the other hand, to take advantage of this second benefit, it may be necessary to hire help to keep the tractor working or to look after other livestock.

Horses have their advantages, too. The amount of power can easily be adjusted to the task or to the size of farm. With tractors, some operations are inefficient because the tractor is over-powered. With tractors, the size of the farm must be adjusted to the quantity of power available. Also, horses required much lower cash outlay than

tractors, and replacement was on a more continual basis.

Grest's analysis is probably sound agricultural economics. However, such detailed analyses are not the bases for a farmer's decisions. Where such factors as relative costs are taken into account, it is usually on a much more impressionistic basis, as can be seen in some of the examples cited earlier. For example, one pioneer said that on the prairie farm where he worked before coming into the area, a tractor was used only when they were getting behind with the field-work since the tractor required purchased gas. One of the most analytical and "rational" (i.e. in agricultural economical terms) of my informants told me about his first tractor. He had ten or twelve horses, and used a twelve hundred bushel granery of oats to feed them. When he bought a tractor, he felt that twelve hundred bushels of oats should pay for gas and oil for the tractor. At the end of a year, he still had about six hundred bushels of oats left. In addition, he was able to do all the work himself with the tractor, while with horses he needed hired men. This man was thinking in the same terms as Grest, but he did not quantify his data and include as many variables.

Grest, like other agricultural economists before and since, took as his assumption that the farmer's objective was to make a profit:

As power is one of the important costs of farm operation any power cost reductions would help to increase profits or decrease losses (1936:35).

He did not appear to be concerned with the role of horses as objects of affection:

In order to work horses steadily during the season they must be properly cared for at all times but any additional time spent on the care of horses which could be profitably used in doing other work on the farm is wasteful of man labour and increases the cost of horse power. (1936:36)

But horses were objects of affection, and many pioneers lavished quite a bit of attention on them. One informant, who still used horses, spoke for most when he said, "Tractors are dead things, but horses are living and you can become friends with them". While the long range goal was, as Bennett has said (1963b:184), to build "a more stable and certain enterprise, a higher level of living, and (to plan) for the future of one's home and kin", certainly making the most economical and efficient use of one's time was not uppermost in the pioneer mind. Recall the comments cited in the previous chapter to the effect that "a person was never so busy that he couldn't stop to visit."

One aspect of Grest's analysis that is applicable is his comment that farm size must be adjusted to the size of tractor. I have given some explanations for the trend toward larger machinery, but probably the more accurate explanation has to do with matching farm size and machinery. One informant gave an explanation for how the trend can get started:

" . . . I had a homestead, one quarter of land . . . You can't hardly make a living out of one quarter. Lots of homesteads, like my homestead, wasn't worth nothing. You'd starve to death out there. Therefore you accumulate a little bit of money and you buy more horses and so on, and then go to buy more land. You say, 'Well, if I got them horses I might as well try to get another quarter of land or something.' Or you could rent it. . . . If you got a quarter or if you got a half . . . and you want to rent it, well I'm going to rent it because I want to make a little extra money if I can. I got the horses, and the hired man, and I should make a little extra money there.

. . . if you get too much land, you got to get more horses. But then after that, around 1920, tractors [came in] . . . then [in the twenties] we had to buy machinery, too. We ended up we had so much land we had to buy . . . horses, ploughs, all that stuff. . . . We used to buy that [tractor] so we wouldn't have to have so many hired men. But you see, before the tractor came, we had to have hired men whether you liked it or not. The horses were there. And the harness. That's an awful lot of money."

Another informant said that farmers felt they had to keep their tractors busy. They have bought more land in order to keep the machinery busy, then they buy bigger machinery in order to work the land faster. Then they have to buy more land again.

Over the years, farms have grown larger, and machinery has replaced people. One result of these trends, which stood out clearly in the minds of the informants, was the decrease in community interaction. It was expressed in different ways, but the idea was the same: in the horse-and-buggy days, people always had time to stop and visit. With tractors, they feel they have to keep the machinery busy. One informant said that people were friendly in the pioneer days because everyone was the same, they were all working to make a living and a home. Now farms are getting too big, and it spoils the district. There are nice big fields, but there is nobody living out there. It spoils the community and destroys the stores. Another informant said that people are not necessarily less hospitable now, but they are more individualistic. In the pioneer days, a person depended more on his neighbours. However, machines allow for individual work. "Machinery has taken over,"

he said. A third said that in the early days, everybody was the same, no one had any money, so people were friendlier. They held house parties, played cards, held dances. There was no radio or television, which have reduced friendliness because everyone stays at home to listen and watch. A fourth informant, who homesteaded prior to 1910, and was well established by 1920, said, "People weren't as friendly in the twenties as they had been earlier. In the twenties some had a little more than the others. As soon as some get more than others, they get less friendly. They are that way yet. They were pretty friendly in the Thirties."

R. A. Stutt, in his study of the pattern of mechanization and the effects of World War II, has pointed to the effects of mechanization on social and recreational activities (1950:1):

Gone are the large hired labour crews, especially at harvest time; transportation has speeded up and the general level of living has taken on a very much different face. Mechanization has allowed the swing to larger and fewer farms. In the 1939-45 period, this generally meant larger incomes and allowed many to improve the farm home, to get more home conveniences, plan for more leisure and an opportunity to keep up with what is going on in the world.

Unfortunately, this publication is short (twenty-nine pages) and this is the only reference to such effects. But I think it has already been shown that the swing to larger and fewer farms was already in existence before power machinery became common. Machinery just exacerbated the process and allowed the farms to grow larger and fewer than otherwise might have occurred. The larger incomes likely allowed many to improve their homes, but that was as much a result of the end of the depression, the onset of World War II, and the attendant high prices, as a result of mechanization. The last phrase implies that pioneers were ignorant of world events, whereas many already had radios, and most subscribed

to newspapers and magazines. And it has also been shown that the increased mechanization did not automatically bring more leisure time. In fact, the opposite was more usual.

While the anthropological literature on the effects of mechanization is not overwhelming, there are a few scattered examples. One early study of a much earlier technological innovation concerns the effects of the introduction of wagons to the Papago Indians about 1900 (Bliss 1952). Various changes resulted, such as a shift in the emphasis of local industries, a change in the appropriate roles of men and women and the development of a market economy.

Margaret Mead (1955:251) has suggested that the mechanization of agriculture can "release time for which there is no provision." She recommended the development of village industries to utilize this time and raise the standard of living. But the provision of more leisure time is not the only possible result of mechanization. Mechanization may enable farmers to put in longer hours of work than they could with animal power. Mead (1955:193) recognized that the direction which change takes, such as a decrease or an increase in leisure time, is at least in part a product of aspirations:

In cultures such as those of the Middle East and Greece and of Latin America, where desires and aspirations have limits, mechanization will probably mean not that man will cultivate more land, but that he will work less, and at a less satisfying occupation at that.

Other effects of mechanization mentioned briefly by Mead (1955:192-194) include a change in the jajmani relationships of rural India, and a reduction in the emotional ties to the land in South East Asia.

More recent studies of the effects of mechanization are included in Moerman (1968) and Hanks (1972), both of which are studies of rice-

growing peasants in Thailand. When Moerman first studied the village of Ban Ping, the villagers used a few tractors for ploughing those fields which depended on rainfall or seasonal flooding rather than irrigation. The tractor changed the relationships between village people and the townsmen who owned the tractors and hired them out to villagers. In addition, work with a tractor is solitary and tedious, while manual tasks are usually performed with a group and are therefore more enjoyable. However, the tractor was seen as a logical development of plough agriculture, and was readily adopted. When Moerman returned to the village in 1965, after an absence of four years, the villagers were no longer using tractors. The fields in which tractors had been used were now completely cleared and levelled, and brought under irrigation. Flooding was no longer a danger and there was no pressure to complete work in a certain time, so work could be done by hand and animal power. Therefore, the villagers dispensed with the expense of hiring tractors. They regarded the tractor as "apparently little more than a larger ox for clearing land and a stronger carabao for tilling it" (1968:186). The people of Ban Ping, Moerman wrote (1968:192), are not hide-bound conservatives; rather they are content to improve their situation little by little.

The village of Ban Chan (Hanks 1972) turned to tractors when the slow movement of population to the cities reached the point that labour was insufficient. Hanks noted (1972:158) that mechanization may be a poor solution, though:

For insufficient input the temptation lies in reaching for greater mechanization in order to 'save labor', though in fact mechanization alleviates the symptom while aggravating the cause. Indiscriminately used, it draws labor from low to high energy input enterprises with resulting declines in production.

The Naicam pioneer farmers, and Saskatchewan farmers in general, have not mechanized solely because of a labour shortage. The labour shortage as a result of World War II merely accelerated an already existing trend. From the data presented earlier, it would appear that the Naicam pioneer-farmers turned to machinery for the "peripheral" benefits: fewer horses to look after, longer hours of work possible, more work per unit time, and greater prestige.

One significant anthropological study of the social and cultural effects of mechanization concerns the adoption of snowmobiles by the Skolt Lapps (Pelto 1973). A major result has been the "de-localization" (1973:166) of the society and the economy. In particular, the people have lost their traditional independent means of transportation, and have become dependent on outside forms of energy (i.e. gasoline). This ties them into a national and international social and economic system, and they would be unable to return to using reindeer for transportation should gasoline supplies be cut off.

A second effect of the adoption of snowmobiles and other technological innovations is what Pelto called (1973:168) "techno-economic differentiation". This refers to the development of economic differences (potential classes) based on technology. Those families with snowmobiles and chainsaws have an economic advantage over those without. The "have-nots" feel they have to hire the "haves" to get tasks done, instead of using the traditional low-cost methods such as reindeer sleds and handsaws. This economic advantage is also a social advantage, since the "haves" can dictate schedules and relationships. They are able to build larger houses, and purchase modern furnishings.

Pelto has suggested (1973:177-178) a general hypothesis on the

effects of powerful technological innovations in small, modernizing societies. An important technological innovation will lead to de-localization and techno-economic differentiation within the community. In time, visible socioeconomic stratification will develop, which will have a marked effect on the ability of an individual to adapt to new opportunities. Pelto has proposed this hypothesis as a process that will occur not just as a result of snowmobiles, but "when any major contemporary technological innovation transforms a local economic system" (1973:178, emphasis Pelto's).

I believe that Pelto's hypothesis does not apply to the effects of mechanization in Saskatchewan. While farmers have become dependent on outside sources of machines and repair parts, this dependence does not appear to have changed the internal relationships. (Substantiation of this, if it is true, should emerge from the larger research project.) Second, while tractors have somewhat accelerated the trend toward larger farms, that trend was already in existence when horses provided the power. There has been a trend toward "techno-economic differentiation", with some farms becoming large and some farmers well-to-do and influential, while other farms have remained small and marginal. However, that trend was only accelerated and emphasized by the adoption of tractors.

One reason that Pelto's hypothesis does not apply may be that Saskatchewan farmers do not constitute a small society in the same sense as the Lapps. The Lapps were pastoralists, with less historical involvement in the national society of Finland or Russia. While there has been contact, and even mass movement as a result of international treaties (Pelto 1973:18), still their economy was a subsistence economy

based on fishing and herding. In contrast, the Saskatchewan pioneer-farmers had a dual economy, producing both for subsistence and for sale. In this, they were more like traditional peasants, who are definitely part of a national society and economy (discussed in Chapter 2). At any rate, farmers became more dependent on the national economy, manufactured goods, and marketing system, but the difference was a matter of degree since they already were involved.

There were some effects of tractors and trucks on social interactions within the pioneer-farming community. I have already shown that, in the opinions of informants, there has been a decrease in visiting and other forms of community interaction. In part, this is because there are fewer people per square mile. During the Thirties, when the population reached its peak, there were many more farms and people than there are today. The expression "a settler on every quarter" was a common one, though somewhat of an exaggeration. According to Statistics Canada data, the population density for Pleasantdale rural municipality reached a peak in 1936, at seven persons per square mile. The 1971 density was three persons per square mile. Part of the decrease is due to the reduction in number of farms; part is also due to the trend toward farm families living in towns such as Naicam. The net result is that there are fewer people in rural areas to have interaction with.

The other effect, due to the use of cars and trucks, is that rural people are going farther afield for shopping and entertainment. The very fact that many farm families now live in towns, and the farmer commutes daily, is an example of this. Small towns have been declining in part because farm families can now travel to larger centres for

groceries, machinery purchases, or for an evening of entertainment. Stores in these small towns lose the business and close out, thereby giving farmers further encouragement to travel to larger towns.

Farm auctions are very common in Saskatchewan, particularly in the early spring. Farmers attend from many miles around, and some will go over one hundred miles if they see an advertisement for a machine that they require. Farm wives often attend with their husbands. The auction becomes a social event, the men and women standing around (in separate groups), visiting and gossiping. Auctions were held in the early days, and have always been social events attended by most people in a district. But in the early days they were infrequent. There were fewer farmers selling out, and a family could only attend local auctions. The distance a farmer can travel to attend an auction is much greater with cars and trucks than it was with horses.

When a farmer was going to a neighbour's to lend a hand or borrow a tool, he would expect to be there for a while and stay for a meal. A Sunday afternoon visit would involve the whole family and would likely include Sunday dinner. Travel of any distance was slower, and took longer, so it usually implied more than just a five minute stop. With a truck, though, a farmer can go to a neighbour's to borrow a tool, and return home again in a very few minutes. He can leave for the neighbour's two miles away at 11:30, have a short visit, and still return home in time for lunch. Thus, cars and trucks have extended the range of networks to include larger towns and even cities. Relationships with neighbours at one time were "multiplex" (Gluckman 1955:19, Swartz 1968:1,10), involving farm business transactions and social and recreational interactions. They are now tending to be less multiplex,

although not yet "simplex". A farm family may have only farm business relations with one neighbour, or only social relations with a family in town.

Saskatchewan farms have become larger in size and fewer in number, and the Naicam area is no exception. A direct contributor to this development was the increasing mechanization, which allowed a farmer to work more land in less time. Behind the mechanization, though, was the basic goal of the pioneer: to build a viable farm to provide a reasonable living for himself and his family. However, this goal was not expressed through the operation of the farm as a business. I heard little to suggest that expectation of profit (in capitalist terms) was the major decision-making factor. The model of peasant economy suggested by Chayanov (1966) and Franklin (1965) can clarify these developments.

Chapter 6

CONCLUSIONS

This thesis is a first step in the anthropological study of pioneers in Western Canada. The emphasis has been on a description of the process of setting up a farm, the methods used in operating that farm, and the subsistence activities by which the pioneer family wrested a living from the land. It cannot be a complete ethnographic description, since many data are lost forever. Also, much information that was collectable was not collected due to the limitations of the study. It is hoped that this thesis will provide the basis for future research. Suggestions for this future research will be outlined below.

In this thesis the major changes from the earlier "pioneer" phase to the later "post-pioneer" phase are described and analysed. The most obvious elements of these changes were the change in traction power (from horses to tractors) and the growth in farm size. Using the model of peasant economy outlined in Chapter Two, these changes can be related to each other, and to such other changes as the labour required to operate a farm. These relationships will be made more explicit in the following discussion.

The theoretical orientation guiding the ethnographic description was cultural ecology. With this orientation, attention was drawn to those environmental and technological aspects which influenced the nature of the pioneer farm. The three primary aspects were the climate, the vegetation, and traction power. With these three limitations, the

pioneer farm was not as risky as farms in other regions of Saskatchewan where drought, hail and grasshoppers were more frequent, but still farming in the study area was not without risks. The most notable risk was the problem of a short growing season, caused by rainfall in the spring which prevented early seeding, and early frosts, rain or snow in the fall. In general, however, judging from the reports from informants who had farmed on the prairies and the reports of Bennett's (1963a, 1963b, 1969) research on the southwest corner of the province, farming in the study area appears to have been subjected to less risk, a situation which allowed the operator to make more mistakes, or required less concern for efficiency. An example of this was the poor land management practices noted by some informants. The result has been smaller farms, and more generalized operations. On the other hand, this situation of less risk may have resulted in a greater leeway for experimentation with crop varieties and methods. These trends are indicated by the data in this thesis, but to be able to make firm assertions one would require more comparative data for the prairies.

While pioneer farming in the study area was less risky, it also took longer for a pioneer to develop his farm. This was a direct result of the native forest cover, but it was also affected by the technology of land clearing. When large machines came into use, clearing forest became much easier and faster, but it was (and is) expensive. The results were that the study area was settled after the open prairies, and farms remained relatively small for many years. They are still smaller than the provincial average.

Horses had other effects on pioneer society in addition to limiting the rate of clearing land. They limited the load a farmer

could haul to the elevator, and the speed for the trip. They limited the hours of fieldwork each day. They restricted the range of social interactions, and so on. Studies of horses or other animals, and their role in a society, are common enough (Roe 1955, Ewers 1955, Harris 1965, for examples). Perhaps the role of the horse in pioneer life deserves special study. Such a study could be modeled after ecology-oriented studies of cattle (Harris 1965, Odend'hal 1972) and pigs (Rappaport 1968). It could include the numbers of horses used on particular farms, the hours each horse was used, the ages at which a horse was put to work and retired from work, the exact amount of feed a horse requires, an estimate of the value of fertilizer provided by the horse, the method of disposal of old or lame horses, and so on. In addition, the study could focus more directly on the role of the horse in defining and limiting social relationships and influencing world view and values.

Throughout this thesis, the term "pioneer" has been used quite freely. The question naturally arises whether there exists a theory of pioneers, or a precise definition of the term. In light of the discussion in Chapter Two, and the description in Chapter Four and Five, I do not think a precise definition can be suggested. This thesis has assumed a working definition of "pioneers": a people who enter a region as part of a colonizing movement, usually as members of an agricultural society. This movement has often involved the displacement or extermination of the indigenes. A characteristic typical of pioneers is that they must be ready to try new methods. They may not be able to fall back on the resources of the parent society, so they must find their own solutions to the many problems they face. Therefore, pioneers usually have a strong individualistic tendency. On the other hand,

the nature of pioneer life is such that they must be able to call on each other for assistance. Pioneers, then, have elements of two apparently contradictory attributes: individualism and co-operation. Saskatchewan farmers have developed a stereotype of doing things for oneself, and getting things done. On the other hand, there is in Saskatchewan a dominant theme of co-operation and community assistance. This assistance makes some tasks more pleasant, but more importantly it is a form of social insurance.

The literature on peasant societies suffers from an overabundance of descriptions, definitions, and formulations of theories. For the purposes of social science, the term has come to mean little. There are, however, some characteristics commonly attributed to peasant societies: they are agricultural, they exist in some kind of relationship with a larger society, and the production is for subsistence as well as for the market. According to these general attributes, it is possible to include pioneers among peasant societies. The simple fact of inclusion, however, means very little.

To say that Saskatchewan pioneers were peasants in Franklin's (1965) terms might carry more meaning. Recalling the criteria for peasants, capitalists and socialists (Figure 2.1), and recognizing the simplification of the scheme, it is possible to say again that Saskatchewan pioneers were peasants. The institutional basis was the family, control and direction was by the family, the media of distribution was both kind and money, and so on. It is more difficult to suggest that the labour commitment was "total", since this is one aspect of pioneer life on which data are rather lacking. The last characteristic, the regulator of the enterprise, was the labour supply, and it is on the

basis of this characteristic that one can analyse later changes.

For a pioneer farmer, the amount of work he could perform in a given unit of time was the factor that regulated the growth of the farm. Under some circumstances he placed a monetary value on his time (working for distant farmers, for example) but more frequently the pioneer felt his time had no direct monetary value. Therefore, he could trade work with neighbours without keeping a strict account, or he could stop to visit when the opportunity arose.

An ambitious pioneer would work harder and for longer hours, shifting the utility-drudgery curve (see Figure 2.2) with an expectation of future utility. A less ambitious pioneer would feel the present drudgery outweighed the future utility. Other than working a little harder, however, the pioneer could do little to change the amount of work he could perform in a given unit of time. If he had oxen, he could purchase horses, since they were a little faster. He could add a horse or two to the team, and purchase a wider cultivator or a plough with another bottom, but this option was limited. The only other choice was to add another team, with a son running it, or lacking a son of suitable age, a hired man. The hired man was paid a wage, but often he was a more recent homesteader to the area, or the son of a neighbour. Often he was treated like a member of the family, living with the family, eating with them, going to social activities with them, and so on. Therefore, I think it is fair to suggest that he functionally became a part of the family as far as Franklin's scheme is concerned.

In the early years, most pioneers did not have the resources to add teams or hire extra labour. During the twenties and thirties, those who wanted extra labour found a good supply. However, the outbreak of

World War II brought that to an end, with this pool of labour being drawn into manufacturing or into the armed forces. Farmers who wanted to increase the utility, that is raise the standard of living, turned to tractors and the larger machines which tractors would pull. They increased the utility by increasing the work performed per unit of time. Not inconsequentially, they were also able to increase the hours of work, since tractors could be used for longer periods than horses.

A farmer who had labour that was not being fully utilized in the form of sons or hired hands with teams of horses, or in the form of his own labour or a son or hired hand with a tractor, could put this labour to work by clearing more land or purchasing more land. In this way, he could balance the drudgery and utility, and pay a higher price for the additional land than it would be worth to the capitalist. This trend has continued. Farmers have continued trying to raise the standard of living of their families, and so have sought to increase utility without increasing drudgery. Since 1940, this has been done primarily through purchasing larger tractors and equipment and purchasing additional land. Therefore, tractors have replaced hired hands. Purchasing a tractor can be compared to having a few sons reach maturity.

In recent decades, many farmers in Saskatchewan have moved away from the "family farm" approach, with decisions based on a peasant rationale, toward a more capitalist enterprise (see Figure 2.1). These farms are similar to the ones Goldschmidt (1947) studied, where farming was seen as a business and decisions were based on the market. The efforts of federal, provincial and university agencies appear to be directed toward encouraging this trend, although the issue is not clear-cut. For example, the Saskatchewan Department of Agriculture (Barber

n.d.) has published an information pamphlet for farmers, explaining how to establish a value for land based on its productivity. The Extension Division of the University of Saskatchewan (1975:21) provides information on farm practices, including, for example, a method for determining the cost of processing feed on the farm. This cost analysis includes values for "Set up and distribution time", and "Labour cost". Both of these calculations assume a capitalist orientation in Franklin's (1965) and Chayanov's (1966) terms. On the other hand, the recent move by the provincial government to eliminate succession duties on farm land was ostensibly aimed at preserving the family farm.

Those programs and the published information intended to encourage farmers to think capitalistically may be incompatible with the basic values and aspirations of many Saskatchewan farmers. Certainly, if the trend toward "farming as a business" becomes widespread, rural life will change quite significantly. In the past, family farms have set the tone of rural life in Saskatchewan. Corporate "agribusiness" farms will likely bring great changes.

There are, of course, other factors which are important in an analysis of the increasing size of Saskatchewan farms and the increasing use of large machines. For example, Fowke (1957) has argued that the settlement of the Prairies was part of a national policy directed toward the development of a political and economic unit out of a group of separate entities. This was also the driving force behind Canadian confederation. The railway and settlement policies, which had a tremendous effect on the development of the Prairies, were instruments for the development of an economic empire centred in Southern Ontario. The relations between Prairie farmers and Eastern businessmen initiated

in the early days of settlement have continued to the present. Farm organizations, such as the National Farmers' Union, object to federal policies which protect manufactured goods (thus raising prices of these goods) but provide little protection for farm produce (resulting in lower returns to farmers).

Farmers are also subjected to cycles of "boom" (higher cash returns) and "bust" (lower cash returns). During periods of "boom", they have more cash available for the purchase of machinery and so on; during periods of "bust", spending must be curtailed. On the other hand, during periods of "bust", farm machinery sales go down and machinery salesmen respond by making purchases more attractive: lowering prices, offering longer periods for interest-free loans, and so on.

The result of these forces is that farmers must contend with a "cost-price squeeze". The cost of purchased goods, such as machinery, parts, land, and, in recent years, fuel, has gone up, while the price farmers receive for produce has not kept pace. Mitchell (1975) has argued that, after 1945, farmers used the new technology of machinery, fertilizers, insecticides, etc., to increase the volume of production and thereby increase revenues and escape this squeeze. However, this can become a circular explanation, for, as Mitchell (1975:14) admits, "The major factors forcing up costs of production in all commodities after 1950 were the capital costs of land and machinery." One might justifiably wonder why farmers would get themselves into this situation in the first place. This question, I think, can be answered through an examination of the rationale for decisions at the individual level.

This thesis has not been concerned with these national policies

and economic trends. This subject has been studied at length by economists, rural sociologists, and even Royal Commissions. These are elements of the structure of Canadian agriculture in which an individual farmer must operate. One aspect of the processual orientation in anthropology is the assumption that, while an individual must work within the limitations of a structure, a particular response is not precisely determined by the structure. The individual farmer may take these structural elements into account in some situations, as did the informant who stopped growing Garnet wheat because it was down-graded at the elevator and he received a lower price. He said "they discriminated against it". However in other circumstances he may not consider these structural elements. In any case, there are many farmers who have been able to maintain their small farms in the face of national trends and economic problems. Some of them have made a commitment to farming that is popularly expressed as "farming as a way of life" rather than "farming as a business". While they may not make a profit (in capitalist terms) which would justify their continued existence as farmers, they take the lower standard of living, the longer hours, the off-farm jobs, or whatever else they must do to remain in farming. And this is just the point. It may be that one thing they must do is buy larger machinery and more land, but they may do this not so much as capitalists but as peasants.

Unfortunately, the situation is complicated by the variation in farm sizes, farmers' attitudes, and so on. Mitchell (1975:14-15) has pointed out two general "types" of farm, small and large, and two associated political orientations, left and right. While large farmers tend to be right-wing or conservative, he suggests there are some

left-wing large farmers and right-wing small farmers. Therefore, there is a two-dimensional matrix. A third dimension could be added, peasant and capitalist production. Again, there may be more large farmers who are capitalist producers than peasant producers, but there is not a one-to-one correspondence.

Whyte (1966:44-47) claimed that labour is the most flexible input in agricultural production. However, if the analysis presented in this thesis is correct, the individual peasant-oriented farmer may not have as much flexibility with regard to labour as Whyte suggested. However, Whyte also pointed out that the amount of labour available to a farmer is influenced by the non-agricultural sector of the economy. This is quite likely true. Again, the concern in this thesis is not the economic or other trends which affect the labour supply (such as World War II) but with the effects of this labour supply at the level of the individual farm. The farmer purchases machinery to do the work formerly done by men and horses.

I believe that initially the expansion of farms and the trend toward mechanization was primarily (although not exclusively) a result of production in peasant terms. It may be that these trends have created a situation for the farmer where he must think more and more in capitalist terms. Perhaps this is one reason for the increasing concern with "farming as a business". However, there are still many farmers, even some operating on a large scale, who do not include calculations for their own labour, and return on investment, and so on. For these farmers, models of economics which assume "maximizing" and other formal economic categories, are not applicable. Other models, such as that suggested by Chayanov and Franklin, must be used.

There are, inevitably, many topics arising from this research that bear further study. The role of horses in pioneer society is such a topic. I have explained that Franklin's (1965) and Chayanov's (1966) theories did not come to my attention until late in the project. Some data that might support the interpretations suggested here were not gathered. These include the role of kinship in the operation of the family farm, and the patterns of inheritance and succession of these farms. Another topic discussed briefly in this thesis, but which bears more concentrated study, is the question of the effects of mechanization. Pelto's (1973) study of mechanization among the Lapps could serve as a model.

In addition, there is much detail that has not been presented here, which might be considered necessary for a more complete ethnographic description and analysis of pioneer life. Any society or culture is a complex phenomenon, and requires a great deal of study for full understanding. It is hoped that this thesis lays the groundwork for future research, but it has not touched on (for example) the ways that rural communities ("districts") were defined and the interactions between these communities. This thesis only very briefly mentioned political activities within these rural communities. A study of local politics, the choice of leaders, political issues, and so on, within these rural communities could be fruitful. It appears that these rural communities still persist today, although the adoption of automobiles and trucks has decreased their importance as focal points. However, because they persist, such a study could cover the time span right into the present.

Similarly, I have not discussed religious activities or the

role of the churches in organizing and unifying communities. Rural schools were also important focal points. The communities of Dahlton and Byng (see Figure 3.2) were essentially rural communities with a church (in the former) and a school (in the latter) as the focal points. Similarly, Chagoness is a rural community centred on a general store. These rural communities were an important part of pioneer life, being the centre of social activity as well as religious, economic and/or educational centres.

Pioneer life, and Saskatchewan rural life in general, is a fertile area for study. However, if these topics are to receive more attention, research should be initiated without delay. Those who saw the pioneer period firsthand are now getting old. And, if the present trend continues, Saskatchewan rural life may change quite significantly over the next few decades.

APPENDIX

INTERVIEW GUIDE

The following is a generalised guide for the interviews concluded in this research. In practice, no interview followed this outline exactly. Some topics were used in all interviews, but unworkable topics were revised or eliminated and new topics were added as the research progressed. Also interviews were allowed to wander somewhat, as informants volunteered information that they considered important.

1. Background

- 1.1 Location and dates of farming.
- 1.2 Date of homesteading, origins, with a family, partner, or by oneself, reasons for coming, reasons for choosing Pleasantdale.

2. Subsistence

- 2.1 Sources of food, clothing, other items.
- 2.2 Portion of food from hunting, fishing, farm, elsewhere (were there changes from one season to another, or through the years).
- 2.3 Who purchased items from store, and what was purchased--harness, horseshoes, clothing, furniture, other.

3. Farming

- 3.1 First activities on arrival.

- 3.2 Size of farm--amount of land bought, sold, rented, costs, reasons for buying or not buying, renting or not renting (changes through years).
 - 3.3 Crops grown--when, amount seeded, acreages, yields, method of disposal.
 - 3.4 Order of seeding, and differences if early or late spring.
 - 3.5 How much land in summerfallow each year?
 - 3.6 Ever hear of and try other crops? Why or why not?
 - 3.7 When did you start improving cattle and pig herds? Why? (Are some breeds better than others?)
 - 3.8 Did you ever farm in a way that you knew was not proper? Why?
 - 3.9 Machinery--when purchased, where from, new or used, reasons for buying or not buying? Was there group buying? Was there borrowing and lending with neighbours?
 - 3.10 Annual cycle of chores, time on each (changes through years).
 - 3.11 Hours of work in a day (changes in seasons, through years).
4. Labour
- 4.1 How much time spent on other farms (changes in seasons, years)? Was it for pay, exchange of labour, or other?
 - 4.2 Who worked on your farm--family, neighbours, hired help (changes through years)? How much hired help did you need? Cost?
 - 4.3 What did your wife do on the farm? Children (particularly sons when they grew older)?
5. Hazards
- 5.1 What were the problems in farming (sources of worry)--

grasshoppers, drought, frosts, other?

5.2 Was there any year when the haying was not done? If so, what was used for feed?

5.3 If wheat was frozen, how was it disposed of? How did you get seed for next year?

6. Group Activities

6.1 Was there a beef ring? (details).

6.2 Was there a telephone company? (details)

6.3 What were other group activities--harvesting, clearing land, building houses and barns, other?

6.4 Were there some who never participated? Were there some who asked for help too much? Or who gave help too much?

6.5 What were the social activities--place, who attended, variations for days of week, seasons, years?

6.6 How much contact did you have with people outside the area? Where, what for, how much contact (changes through years)?

7. Attitudes

7.1 Attitude toward farming (ever want to quit?)

7.2 Toward animals, cattle, horses, pigs, dogs, wild animals, pests.

7.3 Towards neighbours--were there some who were not liked, some highly respected? Reasons.

7.4 Toward those who tried new methods (innovators).

7.5 Toward those who displayed wealth.

7.6 Toward those who did not participate in community activities or co-operative efforts.

- 7.7 Toward various crops (were some better than others?)
- 7.8 Toward types of food (wild, domestic).
- 7.9 Who were respected farmers? Who did you ask for advice? Why?
- 7.10 Were there some who tried to get ahead? How did this affect others? (storekeepers, produce buyers, salesmen, other farmers).

8. General

- 8.1 Did you notice much difference between this area and the prairies?
- 8.2 To what extent were homesteaders in debt? To whom?
- 8.3 Why did you go to all the trouble of clearing and breaking the land?
- 8.4 How did "big" farmers of today get to be big? Did they hurt others on the way?
- 8.5 To what extent did you make use of government programs? (e.g. Soldier Settlement Board, Sask. Relief Commission, Experimental Farm).
- 8.6 When did you get a radio? Newspapers? Magazines? What was the source of news and information?
- 8.7 Marriages of sons and daughters--to whom, what ages, where was spouse from, where do they live?

REFERENCES

- AGRICULTURE CANADA
1973 "Number Years Townships Paid 1939-1972". Unpublished map, under Prairie Farm Assistance Act 1939.
- AGRICULTURE CANADA
1974 "Alfalfa in Canada". Publication No. 1377. Ottawa: Queen's Printer.
- ANONYMOUS
1967 "Railway Branch Lines". Saskatchewan History 20:64-70.
- AUSTENSON, H. M.
1976 Personal Communication.
- BARBER, S. H.
n.d. Farm Land Prices in Saskatchewan. Regina: Saskatchewan Department of Agriculture.
- BARRAU, Jacques
1958 Subsistence Agriculture in Melanesia. Bulletin 219. Honolulu: Bernice P. Bishop Museum.
- BARTH, Frederik
1967 "On the Study of Social Change". American Anthropologist 69:661-669.
- BENNETT, John W.
1963a "Synopsis of a Cultural Ecology Research Program in Saskatchewan". Plains Anthropologist 8:86-90.
- 1963b "Risk and Rationality: Aspects of Behavioral Adaptation in an Arid-Variable Habitat". Plains Anthropologist 8:182-188.
- 1964 "Attitudes Toward Animals and Nature in a Great Plains Community". Plains Anthropologist 9:37-47.
- 1967 "Microcosm-Macrocosm Relationships in North American Agrarian Society". American Anthropologist 69:441-454.
- 1969 Northern Plainsmen: Adaptive Strategy and Agrarian Life. Chicago: Aldine.

- BILLINGTON, Ray Allen
1967 "The American Frontier" in Beyond the Frontier: Social Process and Cultural Change. Edited by Paul Bohannan and Fred Plog. Garden City, New York: The Natural History Press. Pp. 3-24.
- BLISS, Wesley L.
1952 "In the Wake of the Wheel: Introduction of the Wagon to the Papago Indians of Southern Arizona" in Human Problems in Technological Change: A Casebook. Edited by Edward A. Spicer. New York: Russell Sage Foundation. Pp. 23-32.
- BOCK, Kenneth
1956 "The Acceptance of Histories: Toward a Perspective for Social Science". University of California Publications in Sociology and Social Institutions 3:1-132.
- BODLEY, John H.
1975 Victims of Progress. Menlo Park, California: Cummings.
- BOGUE, Allan G.
1958 "Pioneer Farmers and Innovation". Iowa Journal of History 56:1-36.
- BOHANNAN, Paul
1967 "Introduction" in Beyond the Frontier: Social Process and Cultural Change. Edited by Paul Bohannan and Fred Plog. Garden City, New York: The Natural History Press. Pp. xi-xviii.
- BOWMAN, Isaiah
1931 "The Pioneer Fringe". American Geographical Society Special Publication No. 13.
- BRACKEN, John
1920 Crop Production in Western Canada. Winnipeg: The Grain Growers Guide, Ltd.
- BRAROE, Nels W.
1963 "Reciprocal Exploitation in an Indian-White Community". Southwestern Journal of Anthropology 21:166-178.
- BROWN, Jacob A. and Robert J. BENS
1971 Farm Tenure in Saskatchewan: An Economic Evaluation of Present Situation and Future Prospects. Saskatoon: University of Saskatchewan.

- BURLING, Robbins
1968 "Maximization Theories and the Study of Economic Anthropology" in Economic Anthropology: Readings in Theory and Analysis. Edited by Edward E. LeClair, Jr., and Harold K. Schneider. New York: Holt, Rinehart and Winston. Pp. 166-187.
- CANADA, STATISTICS CANADA (DOMINION BUREAU OF STATISTICS)
1901-1976 Census of Canada: Agriculture. Ottawa: Queen's (King's) Printer.
- 1912 Fifth Census of Canada, 1911, Volume I: Area and Population. Ottawa: King's Printer.
- 1924 Sixth Census of Canada, 1921, Volume I: Population. Ottawa: King's Printer.
- CARMACK, Robert M.
1972 "Ethnohistory: A Review of Its Development, Definitions, Methods, and Aims" in Annual Review of Anthropology, Volume I. Edited by B. J. Siegel, A. R. Beals, and S. A. Tyler. Palo Alto, California: Annual Reviews, Inc. Pp. 227-246
- CASAGRANDE, Joseph B., Stephen THOMPSON and Philip D. YOUNG
1964 "Colonization as a Research Frontier: The Ecuadorian Case" in Process and Pattern in Culture: Essays in Honor of Julian H. Steward. Edited by Robert A. Manners. Chicago: Aldine. Pp. 281-325.
- CHAKRAVARTI, A. K.
1969 "The Climate of Saskatchewan" in Atlas of Saskatchewan. Edited by J. H. Richards and K. I. Fung. Saskatoon: University of Saskatchewan. P. 60.
- CHAYANOV, A. V.
1966 The Theory of Peasant Economy. Edited by Daniel Thorner, Basile Kerblay, and R. E. F. Smith. Homewood, Ill.: R. D. Irwin.
- CLARKE, William C. and Eugene OGAN
1973 "Assumptions and Alternatives: Recent Research by Social Scientists in Papua New Guinea" in Foreign Values and Southeast Asian Scholarship. Edited by Joseph Fischer. Research Monograph No. 11, Center for South and Southeast Asian Studies, University of California, Berkeley.
- COHEN, Ronald
1970 "Generalizations in Ethnology" in A Handbook of Method in Cultural Anthropology. Edited by Raoul Naroll and Ronald Cohen. New York: Columbia University Press. Pp. 31-50.

- COOTER, William S.
1976 "Roman Frontier Regions in Temperate Europe".
Comparative Frontier Studies: An Interdisciplinary Newsletter, No. 3, Pp. 1-3.
- CRAMPTON, Philip
n.d. "Early Days in the Carrot River Valley". Crampton MS, Archives of Saskatchewan.
- DALTON, George
1964 "The Development of Subsistence and Peasant Economics in Africa". International Social Science Journal 16:378-389.
- 1968 "Economic Theory in Primitive Society" in Economic Anthropology: Readings in Theory and Analysis. Edited by Edward E. LeClair, Jr., and Harold K. Schneider. New York: Holt, Rinehart and Winston. Pp. 143-167
- 1969 "Theoretical Issues in Economic Anthropology". Current Anthropology 10:63-102.
- 1972 "Peasantries in Anthropology and History". Current Anthropology 13:385-415.
- DEN HOLLANDER, A. N. J.
1960/61 "The Great Hungarian Plain: A European Frontier Area". Comparative Studies in Society and History 3:74-88, 155-169.
- DEY, B.
1973 "Synoptic Climatological Aspects of Summer Dry Spells in the Canadian Prairies". Unpublished Ms. Saskatoon: University of Saskatchewan.
- EIDT, Robert C.
1971 Pioneer Settlement in Northeast Argentina. Madison: University of Wisconsin Press.
- EWERS, John C.
1955 "The Horse in Blackfoot Indian Culture with Contemporary Material from Other Western Tribes". Bureau of American Ethnology Bulletin 159. Washington: U. S. Government Printing Office.
- FALLERS, L. A.
1961 "Are African Cultivators to Be Called 'Peasants'?" Current Anthropology 2:103-110.
- FIRTH, Raymond
1951 Elements of Social Organization. Boston: Beacon Press.

- FITCHEN, Janet M.
1961 "Peasantry" As a Social Type in Symposium: Patterns of Land Utilization and Other Papers. Proceedings of the 1961 Annual Spring Meeting of the American Ethnological Society. Edited by Viola E. Garfield. Seattle: University of Washington Press. Pp. 114-119.
- FOSTER, George M.
1953 "What is Folk Culture?" American Anthropologist 55:159-173.
- 1960/61 "Interpersonal Relations in Peasant Society". Human Organization 19:174-178.
- 1965 "Peasant Society and the Image of Limited Good". American Anthropologist 67:293-315.
- 1967 "Introduction: What is a Peasant?" in Peasant Society: A Reader. Edited by Jack M. Potter, May N. Diaz, and George M. Foster. Boston: Little, Brown. Pp. 2-14.
- FOWKE, V. C.
1945 "Economic Effects of the War on the Prairie Economy". Canadian Journal of Economics and Political Science II:373-387.
- 1957 The National Policy and the Wheat Economy. Toronto: University of Toronto Press.
- FRANKLIN, S. H.
1965 "Systems of Production: Systems of Appropriation". Pacific Viewpoint 6:145-166.
- 1969 The European Peasantry. London: Methuen.
- GEERTZ, Clifford
1971 Agricultural Involution: The Process of Ecological Change in Indonesia. Berkeley: University of California Press.
- GERHARD, Dietrich
1958/59 "The Frontier in Comparative View". Comparative Studies in Society and History 1:205-229.
- GLUCKMAN, Max
1955 The Judicial Process Among the Barotse of Northern Rhodesia. Manchester: Manchester University Press.
- GOLDSCHMIDT, Walter
1947 As You Sow. Glencoe, Illinois: The Free Press.

- GOVE, Philip B., ed.
1969 Webster's Third New International Dictionary of the English Language, Unabridged. Springfield, Massachusetts: G. & C. Merriam Company.
- GRAY, James H.
1967 Man Against the Desert. Saskatoon: Western Producer Prairie Books.
- GREST, E. G.
1936 "An Economic Analysis of Farm Power in Alberta and Saskatchewan". Canada Department of Agriculture, Agricultural Economics Branch, Division of Farm Management, Mimeograph Publication No. 1. Ottawa.
- HALPERIN, Rhoda
1977 "Introduction: The Substantive Economy in Peasant Societies" in Peasant Livelihood: Studies in Economic Anthropology and Cultural Ecology. Edited by Rhoda Halperin and James Dow. New York: St. Martin's Press. Pp. 1-16.
- HANKS, Lucien M.
1972 Rice and Man: Agricultural Ecology in Southeast Asia. Chicago: Aldine.
- HARRIS, Marvin
1965 "The Cultural Ecology of India's Sacred Cattle". Current Anthropology 7:51-66.
- 1968 The Rise of Anthropological Theory: A History of Theories of Culture. New York: Thomas Y. Crowell Co.
- 1975 Culture, People, Nature: An Introduction to General Anthropology. New York: Thomas Y. Crowell.
- HART, John Fraser
1974 "The Spread of the Frontier and the Growth of Population". Geoscience and Man 5:73-81.
- HIEMSTRA, Mary
1966 Gully Farm. Toronto: McClelland and Stewart.
- HILL, Douglas
1967 The Opening of the Canadian West. Don Mills, Ontario: Longman Canada.
- HOFFMAN, George
1975 "The Saskatchewan Farmer-Labor Party, 1932-1934: How Radical Was It At Its Origin?" Saskatchewan History 28:52-64.

- JOERG, Wolfgang L. G., ed.
1932 "Pioneer Settlement: Twenty-six Authors".
American Geographical Society Special Publication
No. 14.
- JOHNSON, Allen W.
1972 "Individuality and Experimentation in Traditional
Agriculture". Human Ecology 1:149-159.
- KATZMAN, Martin T.
1975 "The Brazilian Frontier in Comparative Perspective".
Comparative Studies in Society and History 17:266-285.
- KNAPP, Ronald G.
1976 "The Frontiers of China". Comparative Frontier
Studies: An Interdisciplinary Newsletter, No. 4,
pp. 3-4.
- KOHL, Seena B.
1976 Working Together: Woman and Family in Southwestern
Saskatchewan. Toronto: Holt, Rinehart and Winston
of Canada, Ltd.
- KROEBER, Alfred L.
1935 "History and Science in Anthropology" American
Anthropologist 37:539-569.

1948 Anthropology. New York: Harcourt, Brace & World.
- KURELEK, William and Abraham ARNOLD
1976 Jewish Life in Canada. Edmonton: Hurtig.
- LATTIMORE, Owen
1968 "The Frontier in History" in Theory in Anthropology.
Edited by R. A. Manners and David Kaplan. Chicago:
Aldine. Pp. 374-386.
- LEEDS, Anthony
1977 "Mythos and Pathos: Some Unpleasantries on
Peasantries" in Peasant Livelihood: Studies in
Economic Anthropology and Cultural Ecology. Edited
by Rhoda Halperin and James Dow. New York: St.
Martin's Press. Pp. 227-256.
- LEWIS, Carolyn
1977 "Agricultural Experimentation in Nineteenth Century
Florida: Toward a Model of Frontier Agriculture".
Comparative Frontier Studies: An Interdisciplinary
Newsletter, No. 5, p. 3.
- LEWIS, Oscar
1960/61 "Some of My Best Friends are Peasants". Human
Organization 19:179-180.

- LIPSET, S. M.
1971 Agrarian Socialism: The Cooperative Commonwealth Federation in Saskatchewan: A Study in Political Sociology. Berkeley: University of California Press.
- LOEGERING, W. Q., et al.
1967 "Wheat Rusts" in Wheat and Wheat Improvement. Edited by K. S. Quisenberry and L. P. Reitz. Madison: American Society of Agronomy. Pp. 307-335.
- MacEWAN, Grant
1952 Between the Red and the Rockies. Toronto: University of Toronto Press.
- 1971 Power for Prairie Plows. Saskatoon: Western Producer Prairie Books.
- MANGIN, William (ed.)
1970 Peasants in Cities: Readings in the Anthropology of Urbanization. Boston: Houghton Mifflin.
- MARGOLIS, Maxine
1977 "Historical Perspectives on Frontier Agriculture as an Adaptive Strategy". American Ethnologist 4:42-64.
- MARTIN, Chester
1973 "Dominion Lands" Policy. (Reprint of Section of Morton and Martin, 1938. Edited by Lewis H. Thomas). Toronto: McClelland and Stewart.
- McCLUNG, Nellie
1976 Clearing in the West. Toronto: Thomas Allen and Son.
- MEAD, Margaret
1955 Cultural Patterns and Technical Change. New York: The New American Library.
- 1971 Personal communication reported by Clarke and Ogan 1973:268.
- MEGGERS, Betty J.
1971 Amazonia: Man and Culture in a Counterfeit Paradise. Chicago: Aldine.
- MINER, Horace
1952 "The Folk-Urban Continuum". American Sociological Review 17:529-537.
- MINTZ, Sidney
1953-54 "The Folk-Urban Continuum and the Rural Proletarian Community". American Journal of Sociology. 59:136-143.

- MITCHELL, Don
1975 The Politics of Food. Toronto: James Lorimer and Company.
- MOERMAN, Michael
1968 Agricultural Change and Peasant Choice in a Thai Village. Berkeley: University of California Press.
- MORAN, Emilio F.
1975 "The Brazilian Colonization Experience in the Transamazon Highway". Papers in Anthropology 16:39-57.
- 1976 "Predicting the Performance of Homesteaders". Paper presented at 75th Annual Meeting of American Anthropological Association, Washington.
- MORGAN, E. C.
1968 "Soldier Settlement in the Prairie Provinces". Saskatchewan History 21:41-55.
- MORTON, Arthur S.
1939 A History of the Canadian West to 1870-71. London: Nelson.
- MORTON, Arthur S., and Chester MARTIN
1938 History of Prairie Settlement and Dominion Lands Policy. Canadian Frontiers of Settlement Series, Vol. II. Toronto: Macmillan.
- NEATBY, Blair
1950 "The Saskatchewan Relief Commission, 1931-34" Saskatchewan History 3:41-56.
- NETTING, Robert McC.
1968 Hill Farmers of Nigeria: Cultural Ecology of the Kofyar of the Jos Plateau. Seattle: University of Washington Press.
- NORTHWEST CROP IMPROVEMENT ASSOCIATION
1933 Dictionary of Spring Wheat Varieties. Minneapolis, Minn.
- ODEND'HAL, Stewart
1972 "The Energetics of Indian Cattle in Their Environment". Human Ecology 1:3-22.
- PELTO, Pertti J.
1973 The Snowmobile Revolution: Technology and Social Change in the Arctic. Menlo Park, California: Cummings Publishing Company.

- RAPPAPORT, Roy A.
1968 Pigs For the Ancestors: Ritual in the Ecology of a New Guinea People. New Haven: Yale University Press.
- REDFIELD, Robert
1930 Tepoztlán: A Mexican Village. Chicago: University of Chicago Press.
- 1939 "Introduction" in Horace Miner, St. Denis: A French-Canadian Parish. Chicago: The University of Chicago Press. Pp. xiii-xix.
- 1941 The Folk Culture of Yucatan. Chicago: University of Chicago Press.
- 1947 "The Folk Society". American Journal of Sociology 52:293-308.
- 1953a "The Natural History of the Folk Society". Social Forces 31:224-228.
- 1953b The Primitive World and Its Transformations. Ithaca: Cornell University Press.
- 1956 Peasant Society and Culture. Chicago: University of Chicago Press.
- ROE, Frank Gilbert
1955 The Indian and the Horse. Norman: University of Oklahoma Press.
- RUSSELL, E. T. (ed.)
1968 What's In a Name? Saskatoon: Western Producer Prairie Books.
- SAARINEN, Thomas F.
1966 Perception of the Drought Hazard on the Great Plains. University of Chicago Department of Geography Research Paper No. 106. Chicago: University of Chicago.
- SANDERS, William T. and Joseph MARINO
1970 New World Prehistory: Archaeology of the American Indian. Englewood Cliffs, New Jersey: Prentice-Hall, Inc.
- SASKATCHEWAN DEPARTMENT OF AGRICULTURE
1976 "Varieties of Grain Crops for Saskatchewan: 1976".
- SASKATCHEWAN DEPARTMENT OF AGRICULTURE STATISTICS SECTION
1918-1959 "Average Yield of Wheat, Oats, Barley, Flax and Rye by Municipalities". Unpublished MS.

- SHANIN, Teodor
1971 "Peasantry: Delineation of a Sociological Concept and a Field of Study". European Journal of Sociology 12:289-300.
- SHEPHERD, George
1965 West of Yesterday. Toronto: McClelland and Stewart.
- STEADMAN, L.
1971 "Neighbors and Killers: Residence and Dominance among the Hewa of New Guinea". Unpublished Ph.D. Dissertation, Australian National University. Reported by Clarke and Ogan 1973:268.
- STEWART, Julian H.
1955 Theory of Culture Change: The Methodology of Multilinear Evolution. Urbana, Illinois: University of Illinois Press.
- STUTT, R. A.
1950 The Pattern of Mechanization and Wartime Changes on Farms in the Elrose-Rosetown-Conquest Area of Central and West Central Saskatchewan, 1944. Canada Department of Agriculture, Marketing Services-Economics Division. Ottawa.
- SWARTZ, Marc J.
1968 "Introduction" in Local-Level Politics: Social and Cultural Perspectives. Chicago: Aldine Publishing Company. Pp. 1-46.
- 1969 "Processual and Structural Approaches in Political Anthropology: A Commentary". Canadian Journal of African Studies 3:53-59.
- SWARTZ, Marc J., Victor W. TURNER, and Arthur TUDEN
1966 "Introduction" in Political Anthropology. Edited by Swartz, Turner and Tuden. Chicago: Aldine Publishing Co.
- THOMAS, L. G.
1973 "Historiography of the Fur Trade Era" in A Region of the Mind. Canadian Plains Studies Vol. I. Edited by Richard Allen. Regina: University of Saskatchewan. Pp. 73-85.
- 1975 "Introduction" in The Prairie West to 1905: A Canadian Sourcebook. Edited by L. G. Thomas. Toronto: Oxford University Press. Pp. 1-17.
- THOMPSON, Stephen I.
1973 "Pioneer Colonization: A Cross Cultural View". Addison-Wesley Modules in Anthropology No. 33.

- 1977a Personal communication, February 28, 1977.
- 1977b "The 'Safety Valve' on the Mammalian Frontier".
Comparative Frontier Studies: An Interdisciplinary
 Newsletter, No. 6, p. 1.
- THORNER, Daniel
 1966 "Chayanov's Concept of Peasant Economy" in A. V.
 Chayanov, The Theory of Peasant Economy. Edited by
 Daniel Thorner, Basile Kerblay and R. E. F. Smith.
 Homewood, Illinois: Richard D. Irwin. Pp. xi-xxiii.
- TURNER, Frederick Jackson
 1920 The Frontier in American History. New York: Henry
 Holt.
- UNIVERSITY OF SASKATCHEWAN EXTENSION DIVISION (ed.)
 1975 Guide to Farm Practice in Saskatchewan, 1975.
 Saskatoon: University of Saskatchewan.
- VAN VLIET, Hadley
 1941 "Land Tenure Problems". Scientific Agriculture
 21:388-394. Quoted in Brown and Bens 1971:2-3.
- WALLACE, Ben J.
 1970 Hill and Valley Farmers: Socio-Economic Change
 Among a Philippine People. Cambridge, Massachusetts:
 Schenkman.
- WELLS, Robin F.
 1973 "Frontier Systems as a Sociocultural Type". Papers
 in Anthropology 14:6-15.
- WHYTE, Donald R.
 1966 "Rural Canada in Transition" in Rural Canada in
 Transition. Edited by Marc-Adélaïd Tremblay and
 Walton J. Anderson. Ottawa: Agricultural Economics
 Research Council of Canada. Pp. 1-113.
- WILLMOTT, Donald E.
 1964 Organizations and Social Life of Farm Families in a
 Prairie Municipality. Saskatoon: University of
 Saskatchewan Centre for Community Studies.
- WILLS, Morris
 1977 "Sequential Frontiers: The California and Victorian
 Experience, 1850-1900". Abstract of paper presented
 at third Oklahoma Symposium on Comparative Frontiers,
 March 10-11, 1977. In Comparative Frontier Studies:
 An Interdisciplinary Newsletter No. 5, Winter, 1977.
 Pp. 3-4.

WOLF, Eric R.
1969

Peasant Wars of the Twentieth Century. New York:
Harper & Row.

WOOFF, John
1975

Harbinger Farm: 1906-1920. Regina: Government of
Saskatchewan Department of Culture and Youth.